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The Caspian States and Energy Wealth: New Threats to Growth and Stability

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The Caspian States and Energy Wealth: New Threats to Growth and Stability

Summary

According to CIA baseline projections derived from resource estimates and expected investment, oil production for the Caspian as a whole will quadruple by 2015, from less than 1 million barrels per day to almost 4 million per day. Gas production, although less certain, is projected to quintuple from 30 bcm (billion cubic meters) to 160 bcm.

The "conventional view," espoused by planners in the Caspian states and by other observers, is that these energy-rich new nations—Azerbaijan, Kazakhstan, and Turkmenistan—will experience a rapid increase in economic growth and that whatever economic difficulties they now face will be overcome by energy wealth. This positive picture rests on two assumptions: first, that these states will continue and even accelerate broad-based economic reforms; second, that energy wealth can be absorbed smoothly into the economy and will make reform easier. Based on our own econometric modeling and on extensive consultation with private-sector energy experts, we believe both assumptions are questionable. An "alternative view" that we judge equally or perhaps more likely is that the Caspian states' coming energy wealth will create new economic and political strains that could hinder their transformation into stable and democratically oriented nations. *Since the longer term prospects will be largely determined by decisions over the next several years, what regional leaders do now—and what they don't do—is critical in shaping future economic growth and political stability.*

The Downsides of Energy Wealth

Experience shows that, contrary to most expectations, large natural resource revenues frequently undercut economic growth and make economic reform and restructuring more difficult. Nigeria, Venezuela, and Kuwait are only a few examples of oil-rich states whose per capita GDP actually fell in the 1970s and 1980s despite huge increases in oil prices and oil export revenues. The Caspian states, especially Azerbaijan and Turkmenistan, appear vulnerable to many of the damaging effects of energy wealth since oil and gas will constitute such a large share of their total exports.

Impact of Energy Wealth on the Economy . . .

The Caspian states, like other energy-rich developing countries, are likely to allocate a considerable portion of their expected earnings for infrastructure—transportation, communications, power, and water—and social needs such as education and health. Despite these positive investments, there are several reasons why energy-rich countries often do not prosper but instead stagnate or even regress economically.

"Dutch Disease". (Named for the experience of the Netherlands developing North Sea gas in the 1950s.) As the energy sector grows, the non-energy economy often shrinks, largely due to an appreciating foreign exchange rate that makes exports less competitive on world markets. *Underdeveloped financial markets in the Caspian states will make it particularly hard to channel oil and gas revenues into other sectors of the economy.* As Dutch disease effects squeeze out domestic industries and agriculture, imports of food and other necessities often increase.

- Nigeria, for instance, shifted from an exporter to an importer of food between 1960 and 1980.

Expanded Government Role. Rapid growth of oil-derived government revenues is likely to fuel economic centralization. *Just as the Caspian states are moving tentatively away from a government-run economy, intense pressure to spend their energy wealth on a backlog of unmet needs is likely to reinforce the role of the state. Azerbaijan, for instance, has to support some 750,000 refugees and is likely to use oil revenues to increase defense spending to strengthen its position in its conflict with Armenia over Nagorno-Karabakh.*

Distorted Economic Behavior. Oil revenues in other countries have diverted the economic focus from investment to distribution. This can greatly increase corruption—already a major problem in the Caspian region—and produce numerous "white elephant" projects. *Kazakhstan and Azerbaijan face strong pressure to prop up noncompetitive Soviet-era industries that still have considerable economic and political clout.*

Vulnerability to External Shocks. Changes in oil prices and export revenues are often unpredictable, rapid, and beyond the control of any one state. Government revenues can decline precipitously, because the tax base is typically restricted to the energy sector. *Both Kazakhstan and Azerbaijan have already experienced this effect and have had to cut their government budgets, due to drops in oil prices over the past year.*

. . . And on Economic Reform

To date, these countries have mixed performances on economic reform—Azerbaijan and Kazakhstan have made some progress, but Turkmenistan has barely started. The lack of reform will make it much harder to absorb energy wealth and, in turn, energy wealth will make further reform difficult by leading government and business leaders to believe that they can afford to postpone the difficult decisions on economic reform, making them less prone to accept outside advice.

- Dealing with oil windfall effects is difficult even for full-fledged market economies. Norway, for instance, experienced a sharp growth in government expenditures and Dutch disease effects in the late 1970s and 1980s.

Implications for Economic Growth. Historical experience and CIA economic models suggest that the interaction of these elements could dramatically reduce economic growth.

- Per capita GDP in Nigeria, Kuwait, and Venezuela stayed flat or actually fell in the 1970s and 1980s, despite large increases in oil export revenues.

Our models suggest that the negative impact of energy wealth on economic reform could similarly limit economic growth in the Caspian states. According to the models, growth in Azerbaijan could be so slow—about 2 percent—that it would not have recovered its 1992 GDP level by 2015. In Kazakhstan, GDP would be only 15 percent above the 1992 level. *For either country these would be disastrous performances that would not even keep up with forecast population growth.*

- Turkmenistan is likely to be especially hard hit by the negative effects of energy wealth—even more than Azerbaijan—because it does not have the economic institutions or leadership in place to effectively manage energy wealth.

The message is clear—*a poor transition coupled with Dutch disease and other negative effects can easily overwhelm most, if not all, of the potential benefits of oil wealth.*

Can These Problems Be Avoided?

In principle, many of these difficulties can be mitigated by correct policies. Government and nongovernment specialists agree that the relative success of countries that coped more effectively with oil windfalls in the 1970s and

1980s—such as Indonesia, Malaysia and Norway—suggests steps that a strong, competent government could take. These include adhering to tight fiscal and monetary polices, encouraging privatization, setting aside part of the energy windfall by saving abroad, encouraging diversification of the economy, keeping expectations low, and bringing in foreign equity and advice.

Azerbaijan and especially Kazakhstan have shown some capacity to adjust policies in ways needed to offset the negative effects of energy wealth. All the Caspian states, however, face deep-seated political and cultural obstacles to reform, including limited elite acceptance of market mechanisms, weak states and high levels of corruption, traditional cultures that do not distinguish between public and private interests, and the absence of reliable mechanisms for peaceful transfer of power.

If the Caspian states were to improve their progress on economic transition as well as take steps to counter the negative effects of oil wealth, both historical experience and our models predict substantial GDP growth rates. If we assume in our modeling that exchange rates appreciate less, oil windfalls are invested productively, reinvestment is higher, and there is strong progress on economic reform, then Azerbaijan's GDP in 2015 could be more than two and a half times its 1992 level and Kazakhstan's almost three times as large.

Promoting Political Instability

No matter how effectively the Caspian states cope with these challenges, there will be fundamental political changes brought on by their oil and gas wealth. Leaders will want to use revenues both to shore up their own power and ensure stability and independence—not always compatible goals. These political pitfalls could exacerbate some of the more negative economic effects.

- *Income disparities and regime legitimacy.* Deepening perceptions that narrow family and regional interests are benefiting disproportionately from energy investments could help undermine the legitimacy of existing leaders and contribute to the growth of opposition groups.

- *Rise of a "rentier state."* The authoritarian Caspian governments are increasingly isolated from domestic interests and broad social and economic realities. Growing dependence on foreign-derived energy revenues would deepen this trend.

- *Exacerbating ethnic and regional tensions.* In all three Caspian countries, central leaders will see oil wealth as a way to maintain regional and clan-based coalitions, increasing the tendency to politicize spending decisions. [redacted]

Outlook for the Caspian States [redacted]

The three Caspian states differ significantly in their ability to handle the challenges ahead. *Given current trends and the relatively short time in which to set countries on the right course, medium- to long-term outlooks are gloomy for regional economic growth and stability.*

- *Kazakhstan's* policy course is likely to be mixed, but it will have somewhat more leeway in coping with problems than other Caspian states because of its relatively successful reform efforts and because its economy is relatively more diversified and will be less dependent on energy exports.

- *Azerbaijan* has a high dependence on energy exports, mixed progress on reform, and multiple sources of political instability—including a significant probability of a leadership succession crisis within the next several years, which will pose difficult challenges.

- *Turkmenistan* is also highly dependent on energy exports, has made minimal progress on reform, and has a rigid leadership that is unlikely to effectively deal with energy wealth. There is appreciable likelihood of an economic tailspin that Niyazov may be able to ride out but which could pose grave challenges to a less experienced successor. [redacted]

Implications for US Policy [redacted]

Rapid growth in energy wealth will challenge US interests in promoting regional independence, democratization, economic development, and global energy security. *Over the next several years, the region will move from a phase of developing energy resources and transporting them to markets to a new focus on investing energy wealth and building economic and political institutions.* [redacted]

This new phase will change the nature of the relationship between US and Caspian leaders. Up until now, Caspian leaders have tended to see their relationship with the United States as a bargain in which US support for investment and independence is weighed against US pressure on democratization, human rights, and rule-of-law. Once Western investment in development and export routes is locked in, however, regional expectations of US support will shift and the United States may discover it has diminishing leverage on the political or economic policies of these countries but faces increased expectations.

- Rising energy wealth is likely to make regional leaders more confident and less inclined to accept outside advice. At the same time, however, Caspian leaders may expect the West to protect these investments, including pipeline export routes—by military means if necessary—and to prop up increasingly unpopular political regimes.

Strong outside pressure for reforms from Western countries and financial institutions will be needed if the Caspian states are to take the difficult steps necessary to overcome the negative effects of energy wealth. Disappointment with the early results of energy development could lead to disenchantment with Western advice and an inclination to blame the Western governments and private companies for any negative outcomes.

- Development will not go smoothly even under the best of circumstances and the United States should be prepared for increasing social and political strains and periods of low economic growth.

- Instability, slow growth, and anti-Western sentiments could give more opportunity for meddling by regional powers such as Iran, Russia, or China.

Contents

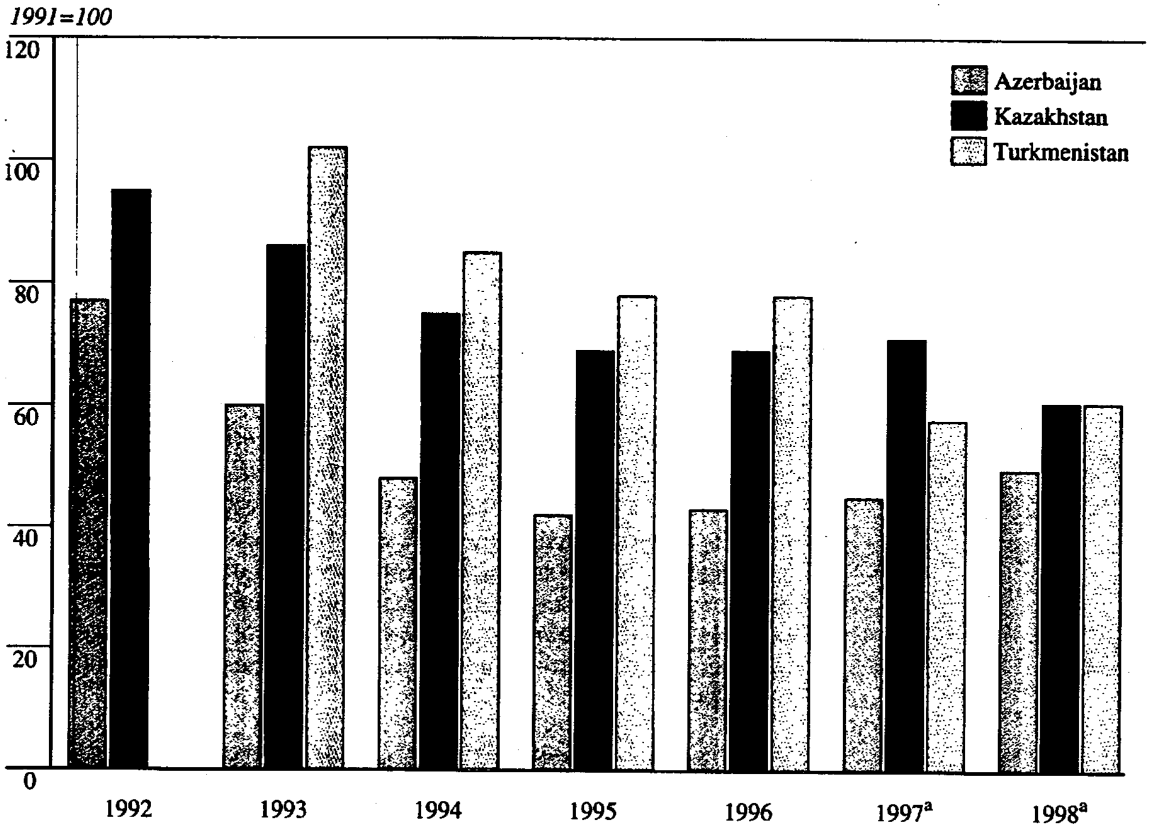
Preface

This paper was written as part of a project in the Directorate of Intelligence's Strategic Perspective Series—The Caspian Region: Its Future Strategic Significance. It draws on extensive consultations with outside experts, starting with two conferences in 1997 on the economic and political impact of oil wealth, and two workshops in 1998, one on the economic future of the Caspian states, and another on the strategic culture of the Caspian region. The project envisions a final paper sometime in the third quarter of 1999.

The purpose of this paper is to examine the long-term economic future of the key Caspian states, and especially the impact of energy wealth. Analysts used econometric modeling, incorporating separate models of oil and gas production, to outline different options and identify critical factors. Many variables are discussed qualitatively and also incorporated quantitatively into the economic models. For instance, the model assumes that high levels of corruption would reduce foreign investment and lower rates-of-return. Political instability was postulated to reduce investor confidence, increase the cost of capital, and encourage movement of capital offshore. In other sectors, economic reform and rule-of-law helped attract foreign investment and improve rates-of-return, largely by ensuring property rights and reducing risk.

While it is clear that energy will exert a powerful and sometimes decisive influence on internal economic and political development, energy wealth alone will not determine the future of these states. The appendix, for example, outlines several significant external variables that may affect future development. These include world oil prices, the rate at which new oil is discovered, political and economic developments in Russia, Turkish energy demand, the Nagorno-Karabakh conflict, and the evolution of Iranian politics. Many of these issues will be addressed in the final paper in this project.

Figure 1
Gross Domestic Product



[a]1997 and 1998 Turkmen values estimated from EBRD data.

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The Caspian States and Energy Wealth: New Threats to Growth and Stability [redacted]

Difficult Economic Tasks [redacted]

The Caspian states of Azerbaijan, Kazakhstan, and Turkmenistan—like all the other newly independent states—have faced tremendous economic challenges since the dissolution of the Soviet Union. They have had to achieve some measure of economic stability while making progress on the transition to market-based economies. [redacted]

Achieving Macroeconomic Stabilization . . .
Azerbaijan, Kazakhstan, and Turkmenistan have worked to reverse the dramatic economic declines that followed the dissolution of the Soviet Union.

- Azerbaijan and Kazakhstan are slowly recovering from the precipitous falls in GDP in the early to mid-1990s, according to official CIS statistics. However, Turkmen GDP fell by almost 25 percent in 1997 due primarily to the loss of its export route through Russia for natural gas, according to the IMF (see figure 1).

- Industrial and agricultural output are growing slowly in Azerbaijan but are stable—at a much-reduced level from 1991—in Kazakhstan.

- Hyperinflation in the early 1990s is now under control in Azerbaijan and Kazakhstan. Consumer prices in Turkmenistan, however, rose over 80 percent in 1997.

- Turkmenistan has a large external debt, and all three countries have been hit by last summer's Russian financial crisis. Since then, Kazakhstan's currency has slowly depreciated, Azerbaijan's has remained relatively stable, and, although Turkmenistan's is greatly overvalued, the government has not permitted any depreciation. [redacted]

All three economies are still far below the economic levels they had attained on the eve of the dissolution of the Soviet Union. Kazakhstan and Azerbaijan are suffering from the effects of the global economic crisis, especially falling prices for oil and other commodities, and the outlook for Turkmenistan is uncertain. [redacted]

. . . But Making Slow Progress on Economic Reform
Among the major tasks facing the three governments are privatizing state-owned enterprises, enacting legal reforms, reforming the banking sector, ending government subsidies, and liberalizing foreign trade. According to recent evaluations by the EBRD (European Bank for Reconstruction and Development) and Freedom House, Azerbaijan and Turkmenistan fall well below the NIS average for economic reforms, while Kazakhstan is close to average (see figure 2). [redacted]

Azerbaijan has been slow to implement a program of economic reform but has recently become more aggressive.

- Azerbaijan does have a privatization program well under way but widespread corruption threatens to derail the process. According to the EBRD, 40 percent of Azerbaijan's GDP was produced in the private sector in 1997.

- Banking sector reform is not complete—despite a large number of commercial private banks, there are still large state-owned banks holding bad loans.

- Foreign trade has been liberalized with the simplification of tariff rates but some Azerbaijani trading organizations function as de facto monopolies.[1]

Kazakhstan has been more consistent in its reform strategy.

- Over 70 percent of all enterprises are privatized although privatization of the larger, and more prestigious "blue chip" enterprises has been delayed and much privatization is in name only. Fifty percent of its output was produced in the private sector in 1997, according to the EBRD.

- Legislation has been passed to improve the environment for foreign investment but implementation remains poor.

- The banking sector has also undergone substantial reform, including the consolidation of small unsound banks.

In contrast, *Turkmenistan* has generally shown limited interest in economic reform and that has been reflected in its poor economic performance.

- In 1996 Turkmenistan adopted a comprehensive economic reform package that included measures to partially liberalize the exchange system and further decontrol prices, but the program has not been implemented.

- By the end of 1997, less than half of small state enterprises and practically none of the medium- and large-scale state enterprises were privatized. Only 25 percent of its GDP was produced in the private sector.

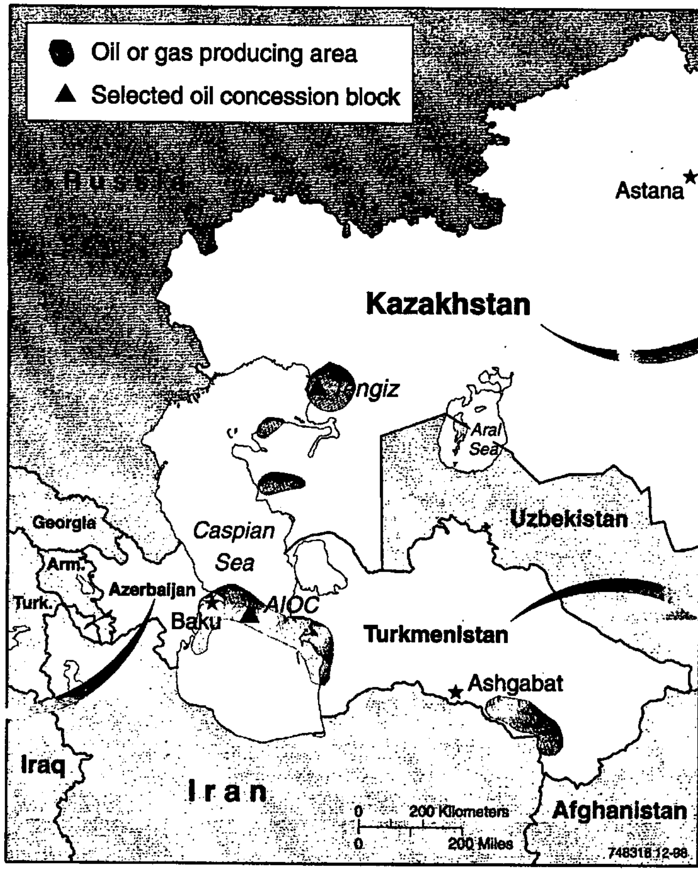
Testing Conventional Wisdom About Energy Wealth

Although still struggling, the three Caspian states share a critical asset not found in other transitioning states: large potential oil and gas resources, whose export potential (unlike that of Russia, for instance) is only beginning to be tapped. To varying degrees, all three states have brought in foreign investors to explore for and develop energy resources (see figure 3).

Energy exports are beginning to increase (after dropping sharply in the early 1990s) and—assuming reasonable progress in developing export routes—the states will begin to receive significant export earnings in another three to five years. The Caspian states have already begun to receive significant revenues from the sale of oil and gas rights and from direct foreign investment.

Conventional wisdom assumes that energy earnings will boost economic performance and growth, increasing the prospects for social and political stability and progress toward democracy. The historical example of other energy-rich countries, however, suggests that energy wealth could have the opposite effect. To test these propositions for Azerbaijan and Kazakhstan we have developed two economic models: one that

Figure 2
Caspian States: Key Characteristic



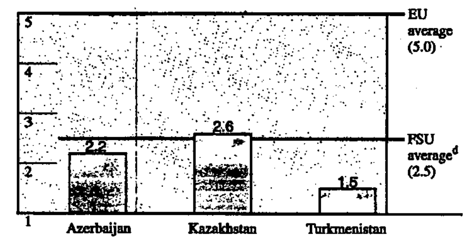
Population: 7.8 million (1997)
GDP per capita = $1,600[a]

Population: 16.0 million (1997)
Kazakh: 46%
Russian: 35%
GDP per capita = $3,300[a]

Population: 4.6 million (1997)
GDP per capita = $1,500[a]

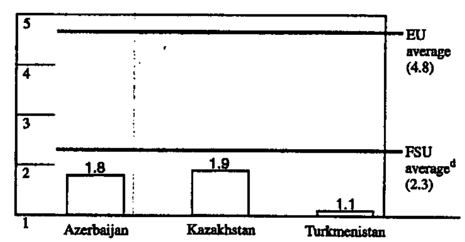
[a] GDP for 1997 in PPP (purchasing power parity) from USAID *Monitoring Country Progress*, October 1998.

Economic Policy Reforms (EBRD)[b]
As of September 1998



Democratic Freedoms (Freedom House)[c]
As of April 1998

1 to 5 scale where 5 is most advanced

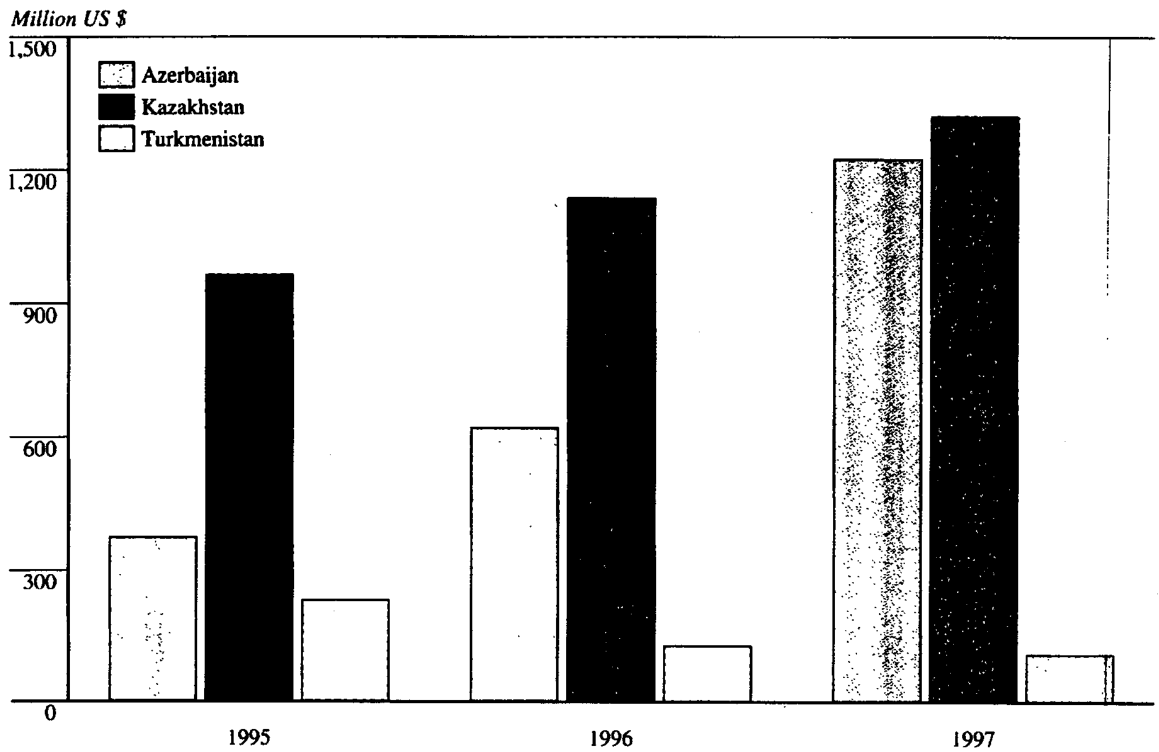


[b] The EBRD economic reform ranking is an average of scores for nine categories: price liberalization, trade and foreign exchange, small-scale privatization, large-scale privatization, enterprise restructuring, banking, capital markets, competition policy, and commercial law framework.

[c] The Freedom House democratic reform ranking is an average of scores for six categories: political process, civil society, independent media, government and public administration, rule-of-law, and corruption.

[d] Includes 12 countries of the former Soviet Union (excluding the Baltic states).

Figure 3
Foreign Direct Investment



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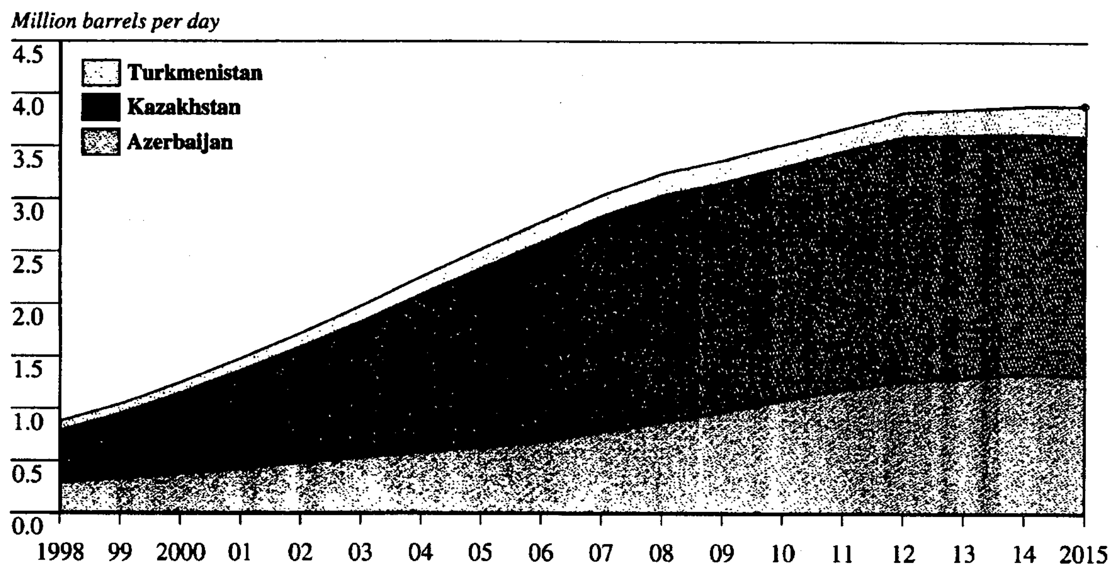
projects investment inflows and resulting oil and gas exports for both of these economies and another that incorporates the revenue stream these energy exports produce into a general model of the entire economy. There is insufficient data available to produce a similar model for Turkmenistan.

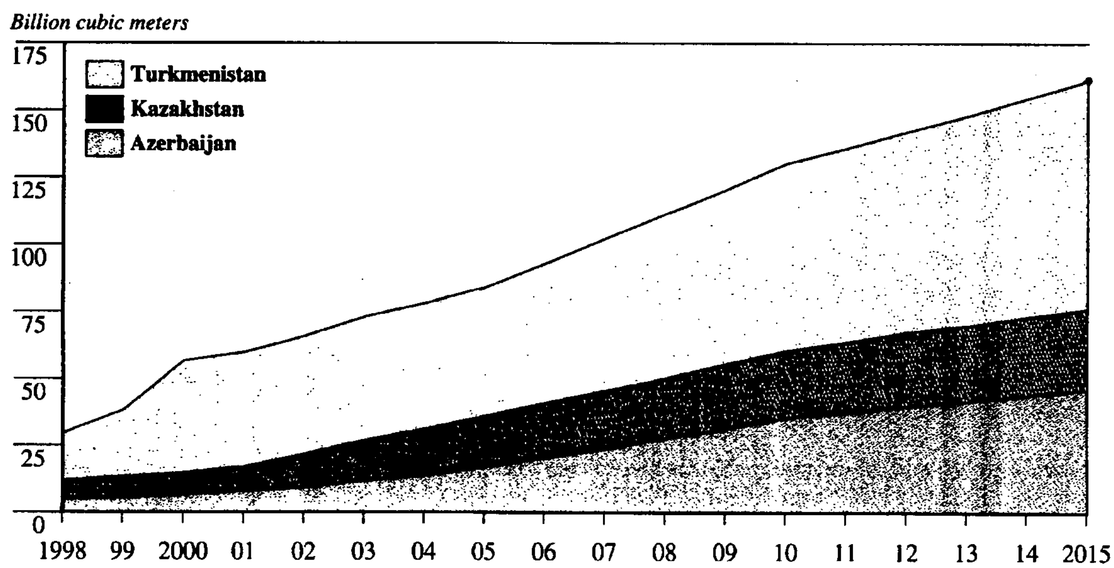
Our model projects oil production for the Caspian as a whole quadrupling by 2015, from less than 1 million barrels per day currently to almost 4 million per day. The rise in production is driven by $170 billion in investments from international oil companies. Gas production, although less certain, is projected to quintuple, from 31 bcm (billion cubic meters) to 160 bcm (see figure 4).

Figure 4
Caspian Energy Production, 1998-2015

Oil Production by Country



Gas Production by Country



Source: CIA and industry estimates.

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Caspian Oil and Gas Production Set To Expand

Predictions of long-term oil production vary widely and depend most importantly on the success of future exploration and the pace of foreign investment. Gas production will depend on the availability of export routes from Turkmenistan and the pace of oil production in Azerbaijan and Kazakhstan.

Oil Projections. *In our baseline projection, international oil companies will invest about $170 billion in Caspian projects by 2015, boosting regional oil output from about 900,000 barrels per day (b/d) in 1998 to 3.9 million b/d in 2015. This falls between the International Energy Agency's high case projection of 5.0 million b/d and low case projection of 3.6 million b/d and compares with an estimate of 4.5 million b/d by a major consulting firm. Production rises from about 250,000 b/d in 1998 to 1.3 million b/d in 2015 in Azerbaijan, from about 530,000 b/d in 1998 to 2.3 million b/d in 2015 in Kazakhstan, and from about 100,000 b/d in 1998 to 300,000 b/d in 2015 in Turkmenistan.*

- *This forecast—developed with the support of industry experts—is based on a model that combines geological information, oilfield cost figures, and production data with projections of annual investment that oil companies are planning for Caspian projects. Investors have already announced plans to invest about $100 billion in such projects.*

- *The model indicates that future production is highly sensitive to investment. A 25-percent increase in investment over the projected $170 billion would boost production to 4.8 million b/d by 2015, while a 25-percent shortfall would limit output to 2.7 million b/d.*

Investment in exploration over the next five years will be critical. Projects now under development will drive production until about 2010, but subsequent gains will depend on projects stemming from exploration ventures. The size of new discoveries will also have an impact on future production, most importantly after 2010.

- *The discovery of a field larger than Tengiz in the North Caspian or AIOC's structure in the South Caspian would push our production forecast significantly higher.*

Unpredictable variables such as oil prices and regional political stability also will influence investment flows and development. Our projections assume that world oil prices over the forecast period will average $15 to $18 per barrel in real terms—roughly the average of prices over the past five years.

Gas Projections. *Our gas production projections are linked, in the case of Turkmenistan, to the availability of export outlets. We project that Turkmenistan's gas output will rise from about 18 bcm per year in 1998 to about 85 bcm in 2015. This assumes that Ashgabat will be able to export 20 bcm per year to Turkey and a total of 45 bcm to Russia and Iran. In Kazakhstan and Azerbaijan, most gas production is associated with oil output and will be driven by oilfield development. We project gas production rising from about 5 bcm in 1998 to about 45 bcm per year in 2015 in Azerbaijan and from about 7 bcm in 1998 to 30 bcm in 2015 in Kazakhstan.*

energy exports. Most standard economic models would predict major economic gains for the Caspian, especially since there are several other drivers of economic growth besides oil and gas revenues.

- High levels of unemployment could be reduced, old and inefficient capital stock could be replaced, and the low levels of factor productivity could be increased.

The Caspian states are unlikely to reap full advantage of these factors, because, although the states have arrested their economic declines, they have not made the necessary progress on economic reform. Nevertheless, if we assume that they can take partial advantage of these factors, that foreign investment in the oil sectors continues to increase, and that energy production thereby increases—a proposition these states themselves believe—growth is likely as the oil and gas sectors pull the rest of the economy along.

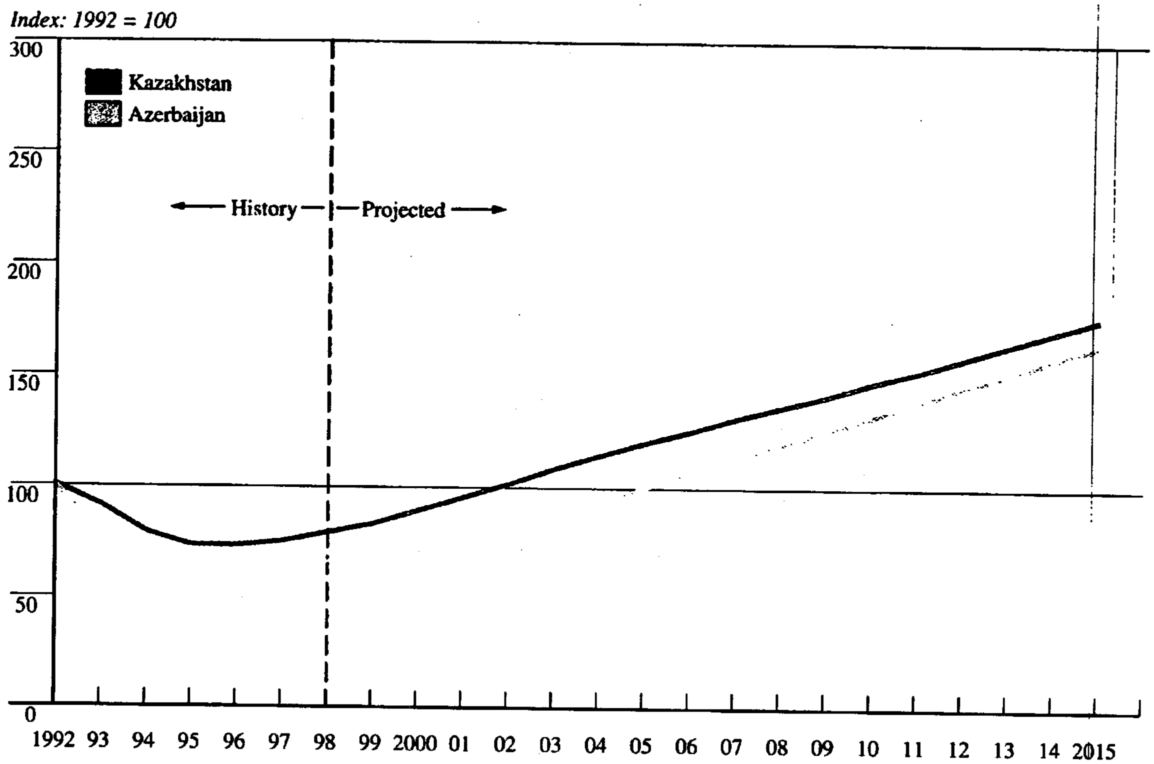
Under these assumptions our models predict substantial economic growth over the next decade and a half. Azerbaijan's GDP would grow at 5.4 percent a year over the next decade and a half; Kazakhstan's, at 4.7 percent (see figure 5). Much of this gain would represent a recovery from the decline both countries experienced from the early to mid-1990s—Kazakhstan's GDP would not exceed its 1992 level until 2002; Azerbaijan's not until 2005. By 2015, Azerbaijani GDP would be two-thirds more than its 1992 level; Kazakhstan's three-fourths more.

- Not surprisingly, the model confirms that the oil and natural gas sectors are the fastest growing parts of the economy in both countries. The oil sector grows at almost 11 percent per year; the gas sector in Azerbaijan grows at 15 percent per year, in Kazakhstan at 10 percent.

Case 1: The "Conventional View": Oil Helps Economic Growth

This case, which will be referred to as the "conventional view" in the following pages, is close to what many observers and planners in the Caspian states themselves see as the likely benefits from future

Figure 5
GDP Growth — Case 1: Conventional View



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- The model shows that the non-energy industrial sector also experiences substantial growth in both countries—6.0 percent in Azerbaijan; 5.5 percent in Kazakhstan. The agricultural and services sectors in both countries also grow.

As noted, we have no projections for Turkmenistan. It is likely, however, that its performance would fall somewhat below that of Azerbaijan's. Its 1997 per capita GDP (in purchasing power parity terms) and Azerbaijan's were about equal, although its population is significantly less. Gas exports, assuming Turkmenistan solves the problem of an export pipeline soon, would bring in considerable revenue but probably less than half the level Azerbaijan could anticipate from its energy. Turkmenistan is also likely to make considerably slower progress on economic reform.

Case 2: The "Alternative View": Energy Wealth Distorts Economic Growth

Lessons From Other Energy Producers
Empirical studies show that, contrary to most expectations and the predictions of most standard models, large natural resource revenues may actually undercut economic growth. The experience of countries rich in oil and gas over the past 30 years, particularly during the period of major oil price increases in the 1970s, shows that—depending on the magnitude of the damaging effects of oil wealth and the effectiveness of policy responses—it is possible that energy earnings may produce only sluggish growth, or lead to major economic and social dislocations that actually reduce growth from what it would otherwise have been. At three CIA-sponsored conferences in 1997-98 experts on the impact of oil wealth in a variety of countries identified a number of tendencies that explain why many oil-rich countries often do not prosper but instead stagnate or even regress economically.

"Dutch Disease". (Named for the experience of the Netherlands developing North Sea gas in the 1950s.) Large foreign exchange inflows and increasing tax revenues from resource exports frequently cause the nonoil economy to shrink, largely due to an appreciating foreign exchange rate that makes exports less competitive on world markets. The energy sector is typically an enclave that depends on imported technology and skills, has few economic linkages with the rest of the economy, and develops independently of it. As Dutch disease effects squeeze out domestic industries and agriculture, imports of food and other necessities often increase.

- Nigeria, for instance, shifted from an exporter to an importer of food between 1960 and 1980.

To offset Dutch disease effects, governments frequently increase tariffs or adopt other measures to protect and subsidize domestic industries. Often, they never become competitive on world markets.

Expanded Government Role. Rapid growth of oil-derived government revenues is likely to fuel economic centralization. Central government decisionmakers believe that they have so many resources at their disposal that they can solve any perceived economic problem rather than rely on market responses.

Distorted Economic Behavior. Oil revenues tend to divert the economic focus from investment to distribution and to fuel corruption—already a serious problem—as economic interests seek a piece of the government-controlled pie. External debt increases since additional money is likely to be readily available from international lenders, eager to make loans on favorable terms. Political considerations increasingly tend to take precedence over economic ones, leading to numerous "white elephant" projects.

Slowing of Economic Reform. Oil wealth tends to reduce the pressure on government to manage resources efficiently. Government leaders and bureaucrats may come to believe that they can easily afford to make some mistakes and postpone the difficult decisions on economic reform. They will be less prone to accept Western advice. Developing the correct economic policies to deal with oil windfall effects is a difficult task even for full-fledged market economies.

- Norway, for instance, experienced a sharp growth in government expenditures and Dutch disease effects in the late 1970s and 1980s.

Distorted Tax Structure. Developing states with limited ability to raise revenues through usual tax measures find it relatively easy to tax highly concentrated and foreign-owned energy assets. In 1975 Iran, Indonesia, Nigeria, and Venezuela received less than 5 percent of state revenues from taxes on goods and services, compared to an average of 31 percent for nonoil developing countries.

Vulnerability to External Shocks. Changes in oil prices and export revenues are often unpredictable, rapid, and beyond the control of any one state. Commitments and indebtedness built up in boom periods become impossible to handle if oil revenues fall, often leading to a vicious cycle of increased foreign borrowing and declining income. Government revenues in particular can decline precipitously, since the tax base is typically restricted to the energy sector.

- Sharp oil price drops in the mid-1980s led to a buildup of foreign debt and in some cases contributed to rioting and civil unrest in a number of oil-rich countries, including Algeria, Nigeria, Mexico, and Venezuela.

- More recently, the price drop in late 1998 and early 1999 has exacerbated financial difficulties even in major oil producers such as Russia, Iran, and Saudi Arabia.

Vulnerability of the Caspian States

Historic examples of poor performance by oil-rich states show what could be in store for the Caspian region. Nigeria, Kuwait, and Venezuela are only some of the oil-rich states with varying political and economic systems whose per capita GDPs stayed flat or actually fell in the 1970s and 1980s despite large increases in oil export revenues (see figure 6). The extent of the impact on the Caspian is likely to vary, depending on differences in the structures of the economies and the size of the energy windfall. In general, the potential difficulties are greater when energy revenues are very large compared to overall GDP and exports, as appears to be the case with Azerbaijan and Turkmenistan.

- Our model shows that at their peak energy exports for Azerbaijan as a percent of total exports will be in the same range—above 80 percent—as some other states highly dependent on oil and gas in the 1970s and 1980s (see figure 7).

- Kazakhstan's economy is much broader based—our model shows that energy exports will be only slightly more than 50 percent of total exports—and therefore somewhat freer of the negative effects of oil wealth.

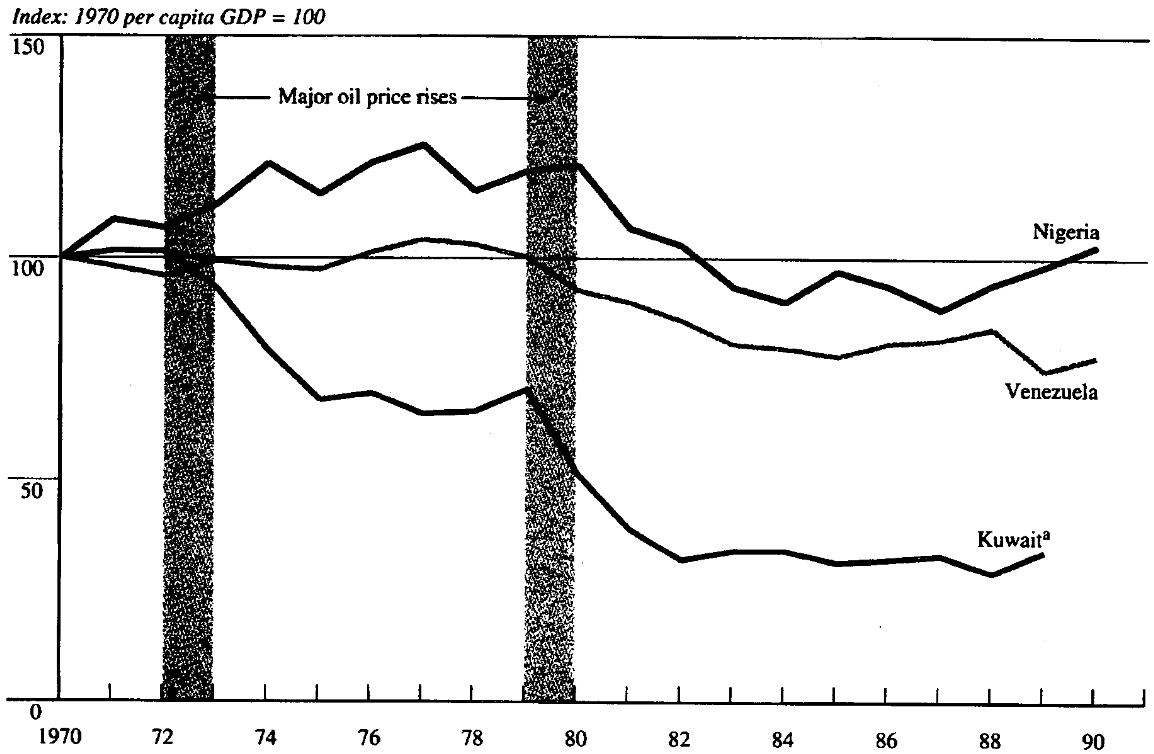
- A comparison of the ratio of energy exports to GDPs yield similar results: Azerbaijan will earn over 18 percent of its GDP from energy, according to our model; Kazakhstan's energy sector will only be half that large. Although we could not model Turkmenistan's dependence on gas exports, it has only one other major export—cotton—and its narrowly based economy likely puts it in the same category as Azerbaijan or even worse.

There are other reasons to believe that the three Caspian states could be vulnerable to Dutch disease and its related effects.

- Their energy sectors have few linkages with the rest of the economy. Even Azerbaijan, which was the center of the USSR's oil services industry, produces little that international oil companies are willing to purchase. Underdeveloped financial markets and lack of property rights in the Caspian states will make it particularly hard to channel oil revenues into other sectors of the economy.

- Just as the Caspian states are moving tentatively away from a government-run economy, all three states will face strong pressure to boost spending on infrastructure, social programs, and economic development. In addition, each state has specific needs. Azerbaijan, for instance, is likely to use oil revenues to increase defense spending, given the perceived threat from Armenia.

Figure 6
Historical Growth Paths for Poor-Performing Oil-Rich Countries, 1970-90



[a]Kuwaiti drop due in part to increase in guest workers.

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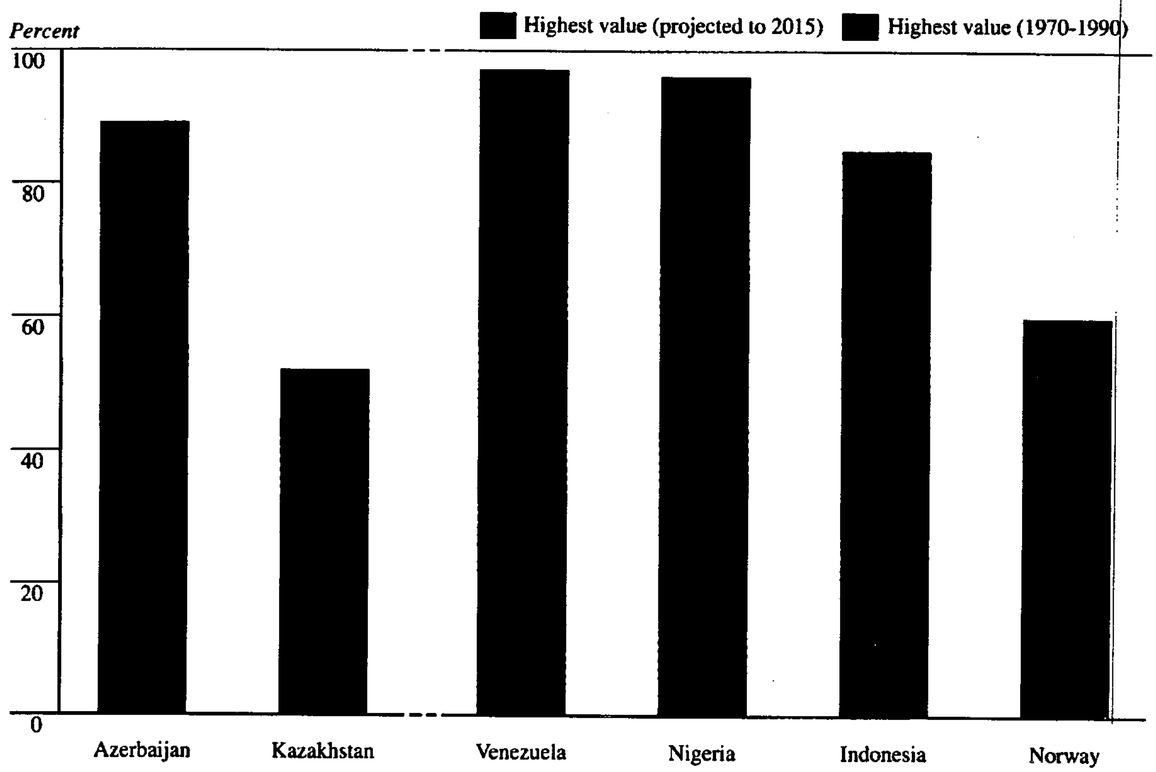
- Kazakhstan and Azerbaijan face strong pressure to prop up noncompetitive Soviet-era industries that cannot be made profitable but still have considerable economic and political clout. Kazakhstan has so far avoided major irresponsible investment projects with one important exception, the move of the capital to Astana and associated construction costs. Costs for this effort have not been made public but are estimated to be close to $500 million. In Turkmenistan, Niyazov has spent lavishly on Presidential palaces and personal luxuries.

We incorporated into our economic model the key effects of energy windfalls: an appreciating foreign exchange rate, difficulty in transferring the oil windfall effectively to the other sectors, and excessive

Figure 7
Oil and Gas Exports as a Percent of Total Exports [redacted]



[redacted]

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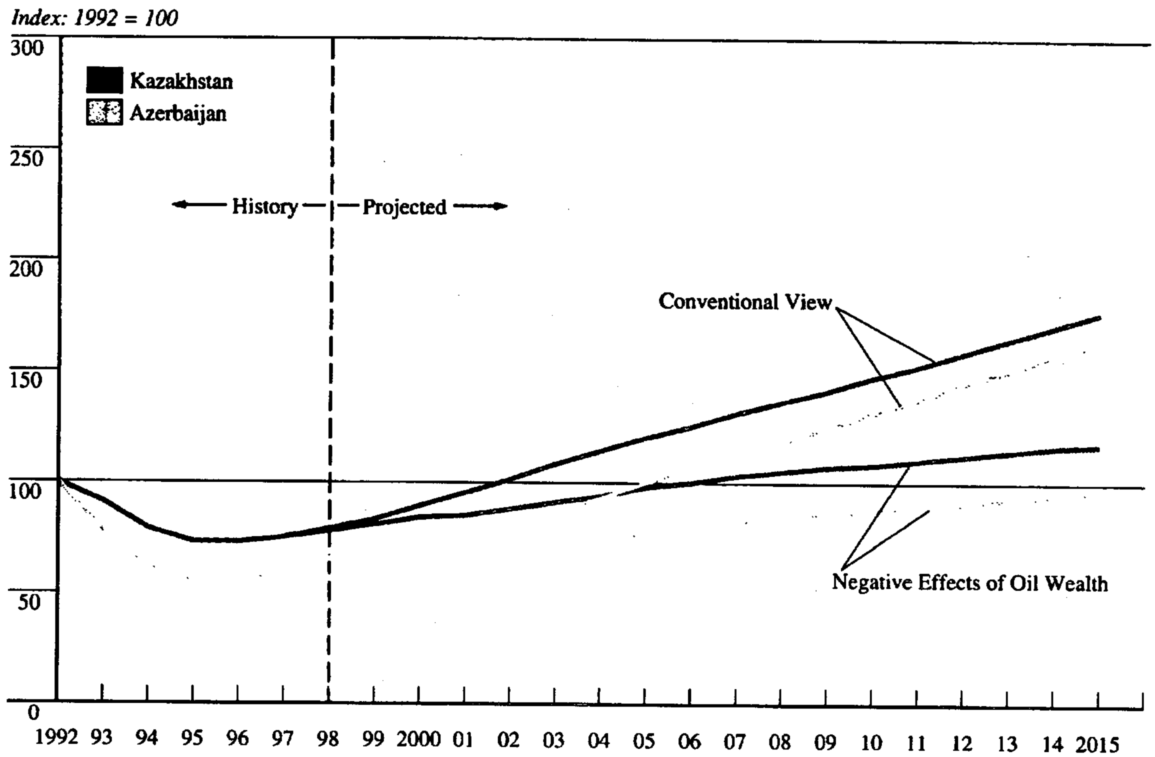
government consumption and investment. Complacency and corruption mean that the transition process is managed even less effectively than in the "conventional view" case presented above: unemployment remains high, factor productivity grows even more slowly, and there is little reinvestment in the nonoil sectors. [redacted]

Under these assumptions, our models predict the growth rate of GDP would be less than half that of the "conventional view" case (see figure 8). Growth in Azerbaijan would be so slow—a little over 2 percent—that it would not have recovered its 1992 GDP

Figure 8
GDP Growth — Case 2: The Alternative View



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level by 2015; in Kazakhstan, GDP would be only 15 percent above the 1992 level. *Given expected population growth, these would be disastrous performances that mean per capita GDP would actually drop, similar to some of the historic examples.*

- Our model shows agricultural output growing at only 1 percent in Kazakhstan and actually falling in Azerbaijan. Even in Kazakstan, the agricultural sector would produce only two-thirds of its 1992 output in 2015.

- Nonoil industry output would grow at 2.1 percent in Kazakhstan; only 1.3 percent in Azerbaijan.

- It seems likely that Turkmenistan would be especially hard hit by the negative effects of energy wealth. Turkmenistan does not have the economic institutions or leadership in place to effectively manage wealth from its gas resources.

These negative projections assume that the oil sectors continue to grow at almost 11 percent. Alternatively, as the negative effects of oil wealth become apparent, the business climate could become so poor that foreign investors would stretch out investments and, in some cases, withdraw altogether. In that case, the oil sector would not develop at the forecast pace and overall GDP growth would be even less than our model predicts. *A poor transition coupled with Dutch disease effects can easily overwhelm most, if not all, of the potential riches from oil wealth.*

Can These Problems Be Avoided?

In principle, many of these difficulties can be avoided or mitigated by correct government policies. Drawing on the experience of countries that coped more successfully with oil windfalls—such as Indonesia, Malaysia, and Norway—participants in CIA's workshops suggested a number of appropriate actions. *All agreed, however, that a strong, competent government is necessary—although not always sufficient—for success. Weak governments, whether democratic or authoritarian, are unable to resist intense pressures to spend oil wealth too quickly and unwisely.* Experts see the following steps as essential to avoiding Dutch disease and other negative economic consequences.

- *Get the macroeconomic fundamentals right.* Strong commitment to fiscal responsibility and a competitive currency are needed to counter the tendency of energy wealth to hike deficits and overvalue the exchange rate.

- *Privatize and allow rents to flow to the private sector.* The more economic decisions that are made by commercial rather than government decisionmakers, the better the quality of investments is likely to be.

- *Bring in significant foreign equity.* A significant equity stake helps impose financial and market discipline on business decisions and cushions some of the domestic blow if revenues decline.

- *Plan ahead and save abroad.* Governments should plan ahead for how to use energy revenues. Kuwait and other states, for instance, created mandatory funds for overseas investment to remove revenues from the domestic economy and slow the rate of spending.

- *Diversify the economy.* Investment in other areas of manufacturing, services, and agriculture can offer greater gains than the energy sector and cushion the economy against ups and downs in oil prices. Indonesia's relatively good response to oil windfalls, for instance, stemmed in large part from a strong focus on agriculture.

- *Keep expectations low.* Planners should use conservative forecasts for energy income. To reduce pressure for immediate spending, it is particularly important that leaders avoid raising expectations too high (see inset).

- *Develop a broad awareness of the problem and make use of foreign economic and policy advice and expertise.* Political, financial, and industry planners should be aware of the potential negative impact and be receptive to expert outside advice. Countries such as Indonesia relied heavily on outside advice in developing their economies and allocating oil wealth.

The Caspian Case

There are several advantages the Caspian states have in handling their energy wealth that may facilitate taking the above steps.

- *Low levels of political mobilization.* The population is politically passive, and there are few organized interest groups. Caspian governments may have more leeway to spend wealth deliberately and resist special interest pressures than those in countries with entrenched interests and established patterns of opposition.

Today's Caspian Leaders on Future Oil Wealth

Nazarbayev*—In his speech "Kazakhstan 2030," Nazarbayev called for increasing oil and gas production to improve people's lives, but also said "Our national resources represent vast wealth. However, paradoxical as it may seem, world experience shows that many countries possessing natural resources were unable to manage them properly and never got out of the category of poor [countries]." (October 1997)*

Aliyev*—"One should take a sober and objective view of this. The ordinary citizen of Azerbaijan is gradually benefiting. It cannot happen that one day an ordinary Azerbaijani citizen gets a parcel from the sky or from somewhere else with money and oil and so on . . . There cannot be any leaps forward in the economy." (Interview, 7 September 1998)*

Niyazov*—"It is not accidental that Turkmenistan is called abroad 'gas Kuwait.' The enormous reserves of natural resources. . . . and a stable political situation save us a lot of painful moments in the transition to a free market economy." (Interview, 20 October 1992)*

"We are the owners of resources for the world. The volume of Turkmen gas is about 21,000-23,000 billion cubic meters. These resources are quite enough for five generations . . . God willing, we shall extract from 30 million to 40 million tons of oil by 2000-2002. This will give Turkmenistan great wealth." (Speech, 19 September 1998)

- *Economic decline and pent-up demand.* The steep depression over the past eight years has created a tremendous backlog of needs coupled with great slack in the economy, as shown by high levels of un- and underemployment. Even if significant amounts are lost to corruption and inefficiency, the Caspian states could gain by using energy wealth to modernize transportation, communications, education, health, and other systems.

- *Lessons from previous oil windfalls.* The experience of oil-rich countries during the last 30 years of major oil price rises and falls provides some positive lessons, such as the steps outlined above to mitigate the impact of oil wealth. The negative examples—Nigeria, Iran, Venezuela—help to counter the natural tendency to believe that oil revenues will solve all problems. Recent low oil prices, the global economic downturn, and the economic problems Russia and other oil producers are now facing as a result are likely to reinforce this perspective with Caspian leaders.

- *Discrediting of statist economic solutions.* During the 1970s, when oil-rich states realized the steepest economic windfalls, socialism and economic nationalism provided a rationale for nationalizing oil industries and using oil revenues to expand the state sector. Today the consensus among the international financial institutions, aid donors, and other sources of economic and political advice has moved strongly to market-driven, private, decentralized solutions to problems of economic development.

However, there are also a number of obstacles rooted in political and cultural characteristics of the Caspian states that will make it difficult for them to effectively handle the challenges of energy wealth. These are deep-seated conditions that are likely to change slowly, if at all, in the near to medium term.

- *Poor understanding of and commitment to economic reform.* As our model and historical experience demonstrate, progress on economic reform is crucial to avoid the more negative effects of energy wealth, but today's Caspian leaders are all former Soviet officials with limited exposure to Western economic experience. Although nominally embracing free market principles, the ruling elites are uncomfortable with decentralized decisionmaking and private property and do not understand the international economic system or how commercial firms operate. Younger experts with Western training are beginning to emerge but do not have a major role in decisions. Of the Caspian states, Kazakhstan has the strongest commitment to reform; Azerbaijan, mixed acceptance; and Turkmenistan has only a handful of officials with an understanding or appreciation of Western economics.

- *Weak states and high levels of corruption.* The Soviet legacy (which encouraged disrespect for government and law), historical and cultural traditions, and the disruptions and weakening of government institutions during the transition have combined to produce very high levels of corruption in all three Caspian states.

- *Islamic peoples with traditional cultures.* Historically, Moslem states have had particular difficulty accepting and implementing economic modernization. In all three countries regional, clan, and family linkages play a major role in business and politics, often undercutting efforts to implement Western models of a rule-of-law based on formal equality of individuals. Distinctions between personal, political, and business spheres are vague, and there is little acceptance of Western notions of "conflict-of-interest."

- *Authoritarian leadership and absence of reliable mechanisms for a peaceful transfer of power.* While the relationship between economic growth and democracy is controversial (development-oriented authoritarian systems have achieved high growth rates, especially in Asia), many economists agree that political uncertainty can hamper economic growth by reducing investor confidence—especially for small and medium-size businesses—and encouraging capital flight. The lack of internal checks and balances increases the chance of unpredictable policy shifts and greatly increases the risk of instability when it becomes necessary to transfer power.

Case 3: The "Best Case": Energy Wealth Harnessed to Economic Reform

If the Caspian States were to improve their progress on economic transition as well as take the difficult steps to counter the negative effects of oil wealth, both historical experience and our model predict GDP growth rates substantially above the "conventional view" case. Per capita GDP for strong performers such as Indonesia and Norway doubled between 1970 and 1990 (see figure 9). If we assume that foreign exchange rates appreciate less, windfall gains are invested more productively, reinvestment rates are higher, unemployment falls more, and capital is more productive—all of which could result from much improved performance on economic reform—our model would predict:

- GDP growth rates of 8 percent for Azerbaijan and over 7 percent for Kazakhstan. Azerbaijan's GDP would be more than two and a half times its 1992 level, and Kazakhstan's almost three times as large (see figure 10).

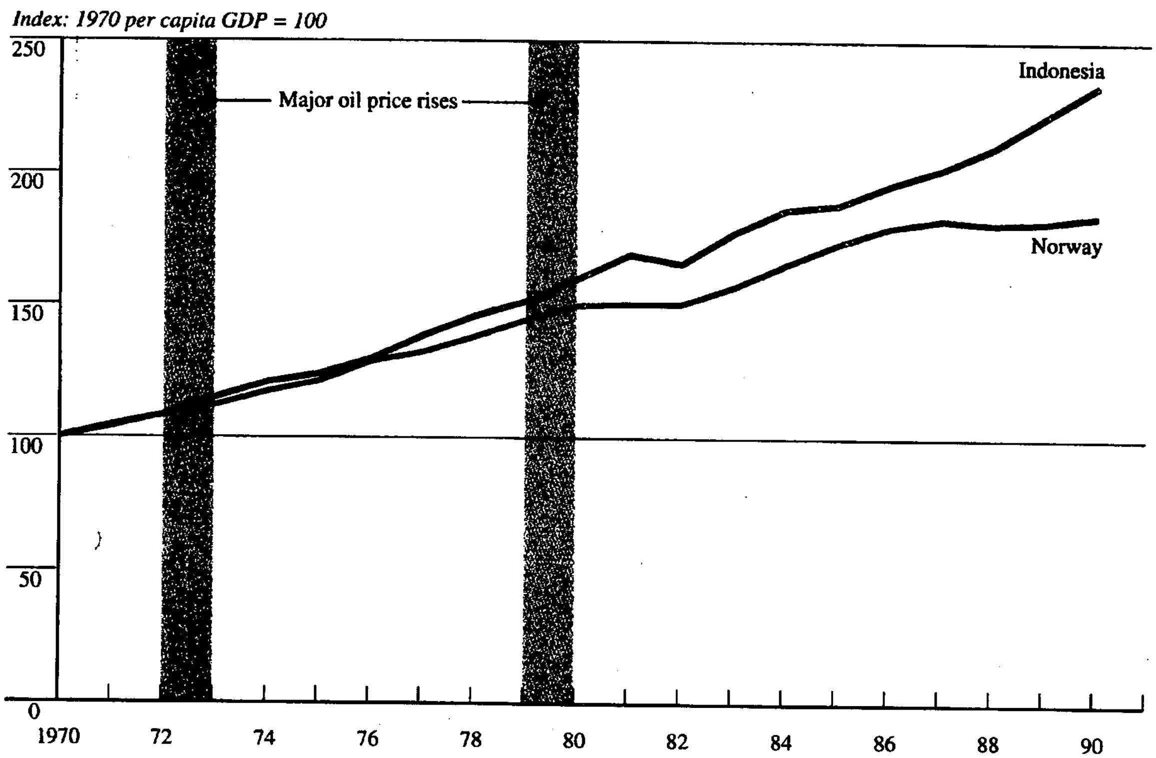
- All sectors would grow at rapid rates led by the oil industry. The nonoil industry sector would grow approximately 10 percent per year in Azerbaijan and 9 percent in Kazakhstan. Agriculture would grow at about 7 percent in both countries.

The cumulative effect of these high growth rates would outstrip population growth, thereby leading to substantial improvements in the standard of living in Azerbaijan and Kazakhstan. The gains might be even greater for Turkmenistan because it has the potential to do so much "wrong."

Impact of Oil Wealth on Political Instability and Democratization

Whichever of the three scenarios above—the "conventional view," the "alternative view," or the "best case"—most accurately describes these

Figure 9
Historical Growth Paths for Well-Performing Oil-Rich Countries, 1970-90 [redacted]



[redacted]

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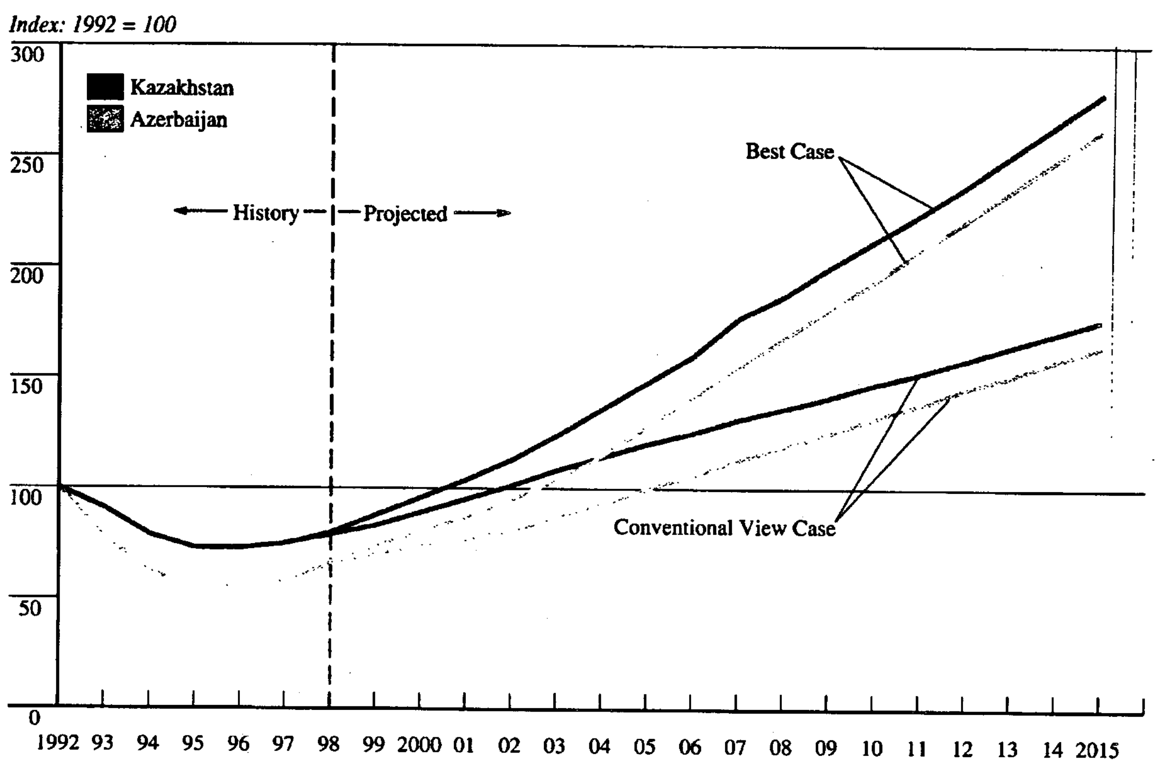
countries' economic futures, oil and gas wealth will have important political implications. A great deal will depend on the skill with which rulers distribute oil income. The more it is used to benefit the society as a whole and in ways that unite these new nations, the less likelihood of social and political instability. However, negative economic and political trends can easily reinforce one another in a damaging cycle. Leaders will want to use revenues both to shore up their own power and ensure stability and independence—not always compatible goals. While political change will depend on a multitude of factors, not all of which are considered here, we can identify a number of the most important likely effects of energy wealth. [redacted]

Growing Income Disparities

Income disparities, especially when visible and growing, can encourage social unrest and political instability. Although measuring the amount of change is difficult, the gap between rich and poor has widened in almost all the post-Communist states as part of the transition from central planning. In the Caspian states, privatization has given major wealth-producing assets

Figure 10
GDP Growth — Case 3: The Best Case



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to a small number of well-connected private owners. Poverty has dramatically increased (the share of the population in poverty, as defined by the UNDP, is close to 50 percent in all three Caspian states), and the social safety net is in tatters with governments no longer able to pay salaries and pensions on a regular basis.

- Oil windfalls are likely to exacerbate this trend. A small group of elite owners and officials could realize huge gains, along with a limited number of energy-sector workers, but the benefits to the bulk of the population will be limited and far below popular expectations. *This trend would deepen perceptions that narrow interests are benefiting disproportionately from energy investments. The resulting resentment could help undermine the legitimacy of existing leaders and provide fertile ground for the growth of opposition groups.*

Rise of a "Rentier State"
As a result of the government's dependence on foreign-derived energy revenues, it tends to become less and less answerable to domestic interests, more

isolated and insular in its decisionmaking, and less aware of broad social and economic realities. The experience of Iran under the Shah shows the dangers this can pose in states where the legitimacy of ruling elites is not well established.

- *This trend would further slow progress toward democracy and decentralization in the Caspian states. Turkmenistan is especially vulnerable.* [redacted]

Exacerbating Ethnic and Regional Tensions
In states with strong regional or ethnic divisions, fights over the fair allocation of oil revenues can deepen tensions. In Nigeria, for instance, control over oil wealth between competing ethnic groups played a central role in the civil war of the early 1970s and in subsequent political instability.

- On the other hand, central governments can use oil money to maintain stability by cementing allegiances and buying off potential challengers. This strategy can be effective as long as revenues continue, but means that a downturn in oil prices and revenues risks upsetting the political balance.

- *In the Caspian, the division between ethnic Russians and Kazakhs in Kazakhstan is the most serious potential split. In all three countries central leaders need to maintain support from key clans and regions and are likely to see energy wealth as a means to ensure political allegiance.* These strategies will increase the tendency to make political rather than economic goals decisive in spending decisions. [redacted]

Complicating Transfer of Power
Increased economic centralization and government control of the economy would make it less likely that rulers will agree to voluntarily relinquish power. Without a well-developed private sector, ruling elites see control of the state as the only reliable way to accumulate wealth and status. The political scene continues to be dominated by clan-based politics. [redacted]

Outlook for the Caspian States [redacted]

In all of the Caspian states, oil and gas earnings will produce great wealth, some of which will be used in economically and socially productive ways. However, it will also intensify many negative trends and create new problems. Prediction is very complicated and policy choices and quality of leadership will make a great difference. The three Caspian states also differ significantly in their performance to date on the key steps identified by experts as essential for avoiding the negative consequences of energy wealth (see figure 11). *However, given current trends and the relatively short time in which to set countries on the right course, the medium- to long-term outlook for sustained economic growth is closer to Case 2 (the "alternative view") than Case 1 (the "conventional view"). The prospects for democratization and political stability are equally gloomy.* [redacted]

Kazakhstan
Kazakhstan's policy course is likely to be mixed but it will have some leeway in coping with problems and more ability than the other states to adjust to changing circumstances. Pluses are consistent forward movement on economic reforms, a relatively large and diversified economy, limited dependence on energy exports, a healthy and dynamic leader with a long-term perspective, macroeconomic stability, and widespread exposure to the West. Minuses are increasing corruption and nepotism, a narrowing political base for the regime, lack of true private owners and the prevalence of industrial dinosaurs, latent ethnic splits, deep poverty, and public pessimism on the economy. [redacted]

Azerbaijan
Baku will face much greater challenges in dealing with energy wealth. Pluses are rapid development of the oil sector, a growing Western presence, Aliyev's strategic vision and political skill, and macroeconomic stability. Minuses are a less diverse economy, a high degree of future dependence on energy exports, noncompetitive and value-subtracting heavy industry,

Figure 11

The Ability of the Caspian States To Deal With Energy Wealth: Performance So Far

	Macro Policy		Structural Changes		Energy Specific		Political	
	Fiscal	Exchange Rate	Privatization	Foreign Investment	Planning/Saving	Diversification	Expectations	Openness
Kazakhstan	Initial large deficits reduced, but tax collection problems and fluctuating oil revenues may raise deficit.	Strong commitment to stable rates shown by extensive 1998 intervention. Large Central Bank reserves.	Most small-scale firms privatized, but state retains large stake in "blue chip" firms, many not being privatized.	Extensive FDI in energy sector. Some success attracting FDI for metals, utilities, other nonoil industry. Slowed by global economic crisis.	No specific fund for energy revenues. Revenues accrue to Kazakhoil or directly to budget. Agency for Strategic Planning set up 1997 to guide investment, but role remains unclear.	No specific diversification policy. Economy has significant ferrous and nonferrous metal sectors, agriculture.	Leaders downplaying expectations.	Nazarbayev publicly acknowledges potential problems. Often solicits outside expertise.
Azerbaijan	Deficits brought under control, but poor tax collection and fluctuating oil revenues pose problems.	Strong commitment to stable rates, large Central Bank reserves.	Slow start but now well under way. Lack of transparency, corruption serious obstacles.	FDI mostly in energy, limited success attracting investment to textiles, other nonoil sectors.	Special oil account at Central Bank to separate funds from general revenues. Oil fund management group chaired by Econ Minister set up early 1999 at IMF insistence.	No specific diversification policy. Oil equipment, agriculture potential investment opportunities.	Leaders generally downplaying expectations.	Some internal recognition of oil wealth problems. Increasingly open to outside advice.
Turkmenistan	Budget officially in balance through 1997, but increasingly unrealistic revenue projections likely to fuel deficits.	Exchange rate fixed at an artificially high level.	Minimal steps taken. Few medium and large firms privatized.	Minimal investment outside energy sector.	No specific fund. Revenues accrue to budget.	No specific diversification policy. Cotton, gas only major sectors.	Leaders now lowering expectations somewhat after early "Kuwait" comparisons.	No real recognition of oil wealth problems. Often resists outside advice.

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Prepared to cope with energy wealth

Not ⟶ Well

Aliyev's age and probable decline coupled with lack of planning for succession, a large refugee population, an unresolved conflict with Armenia, limited progress on reforms, deep-seated corruption and nepotism, and a recent history of civil strife.

Turkmenistan

Turkmenistan is not in position to deal competently with energy wealth issues. Minuses are a very narrow economic base, a high degree of likely dependence on energy exports, a highly traditional and fragmented social structure, extreme concentration of power and suppression of opposition, limited capabilities of the leadership and ruling elites, Niyazov's questionable health, lack of economic reform, recent economic decline and balance-of-payment problems, and extreme corruption and ostentatious concentration of wealth.

- There is an appreciable likelihood that an economic tailspin will occur, posing a political challenge to whomever is in power. The almost complete absence of any organized political opposition could make it easier for Niyazov to weather any near-term challenges, but a less well-entrenched successor might be more vulnerable.

Implications for US Policy: More Challenges Ahead

Rapid growth in energy wealth will challenge US interests in promoting regional independence, democratization, economic development, and global energy security. *Over the next several years, the region will move from a phase of developing energy resources and establishing export routes to a new focus on investing energy wealth and building economic and political institutions.* The earlier that regional leaders recognize that they need to shift their focus and begin planning to use energy wealth wisely, the better their chances of success.

This new phase will change the nature of the relationship with the United States. Up until now, Caspian leaders have tended to see their relationship with the United States as a bargain in which US support for investment and independence is weighed against US pressure on democratization, human rights, and rule-of-law. Once Western investment in development and export routes is locked in, however, regional expectations of US support will shift and the United States may discover it has diminishing leverage on the political or economic policies of these countries, but faces increased expectations.

- Rising energy wealth is likely to make regional leaders more confident and less inclined to accept outside advice.

Western engagement, particularly that of the United States, has been crucial in helping the Caspian states find appropriate export routes. US companies have been in the forefront of efforts to develop Caspian energy resources, and the United States has taken the lead in promoting regional energy development projects such as the Baku-Ceyhan pipeline, the Turkmenistan-Turkey gas pipeline, and resolution of Caspian Sea boundary issues.

- Caspian leaders may expect the West to protect these investments, including pipeline export routes, by military means if necessary and to prop up increasingly unpopular political regimes.

Given the internal obstacles, the Caspian states will have a hard time taking the necessary steps on their own to overcome the negative effects of energy wealth. Western advice has already produced some appropriate actions—for instance, the IMF recently made Azerbaijan establish a planning group for future energy income as a condition for further assistance.

- To continue to be effective, outside advice on how to handle energy wealth should be coordinated and consistent. Western governments, international financial institutions, and major Western investors must send similar messages to reluctant Caspian elites.

Disappointment with the results of energy development could lead to greater criticism of the West as a model for development and specific disenchantment with the United States. It would be unrealistic to expect development to go smoothly even under the best of circumstances, and there are likely to be increasing social and political strains and periods of low economic growth.

- Given its heavy engagement in energy development, the United States will likely be portrayed as responsible for any negative outcomes.

- Disappointment with the results of Western investment could make leaders more reluctant to accept advice on other issues, including economic reform and democratization.

- US and other foreign investors could face political and popular pressure to re-negotiate contracts if the high expectations of energy development are not realized.

- Regional powers suspicious of Western involvement—such as Russia, Iran, or China—would be likely to try and exploit instability and any anti-Western sentiment.

A full assessment of the strategic implications of the development of Caspian energy wealth will be addressed in other papers to be produced in this Strategic Perspective Series (see preface). Such an assessment will depend on a host of exogenous factors (see the appendix) in addition to the factors analyzed in this paper.

Appendix

Exogenous Variables

The paper focused on factors that are internal to the Caspian states and largely under the control of domestic decisionmakers. A large number of factors outside their control could also affect their long-term economic futures.

Global Financial and Energy Markets
Poor global economic performance would lower energy demand and keep oil prices low. This would reduce revenues in two ways: by lowering the amount earned for energy exports and lowering the amount of energy available and, possibly, energy export capacity by reducing or stretching out the time for investments.

- Caspian oil is relatively inexpensive to develop and produce because of the large field sizes and high well productivities, but high transportation costs make investments there vulnerable to sustained low oil prices.

The return of Iraq as a major oil exporter or the opening by Saudi Arabia and other Gulf states to greater foreign participation in upstream oil development could also contribute to downward pressure on prices. Our baseline case assumes a recovery of oil prices and continued strong investment. However, the loss of revenue to the Caspian economies would be offset in part by a reduction in Dutch disease and other negative effects of oil windfalls.

Oil/Gas Discoveries
The model incorporates conservative estimates of future discoveries. Greater-than-expected discoveries over the next several years could accelerate the impact of energy wealth by fueling additional foreign investment and increasing public expectations. This would be reflected in our model by an increase in near-term investment and more rapid growth in production and export earnings. Lower-than-expected discoveries would work in the opposite direction.

Regional Demand for Gas
Gas demand in growing markets, especially Turkey, is the key driver for building major gas export lines. There are major uncertainties associated with projecting demand, however, and if it is lower than expected or Turkey enters a period of prolonged economic or political instability, prospects for gas exports, especially from Turkmenistan, could be reduced. Turkmenistan would face much-reduced exports and/or the need to accept less favorable terms for exports to Russia or Iran.

Russia's Economic and Political Future
Continued recession or economic collapse in Russia could negatively affect the economy of Kazakhstan but would have only a minimal direct impact in Azerbaijan or Turkmenistan given their limited economic ties to Russia. A weakened Russia would have less political and economic leverage in the region. If Yel'tsin is replaced by a more aggressive and nationalist leadership, regional leaders would be more interested in maintaining Western/US support and as a trade-off might heed Western pressure on political and economic reforms.

Regional Conflicts
A resumption of fighting in Nagorno-Karabakh could result from an Armenian desire to disrupt pipeline plans and prevent a wealthier Azerbaijan from building up its military, or as a result of miscalculation by either side during a period of increased instability in post-Aliyev Azerbaijan. Economic development in Azerbaijan and the region generally would be set back as Azerbaijan diverted resources to security, investor confidence fell, and pipeline and transportation projects throughout the Caucasus were canceled or delayed.

More Moderate Iran
A continuation of moderating trends in Iranian politics would make it easier to reach solutions to oil and gas export problems but could shift some investor interest away from the Caspian to Iran. Tensions between the Caspian states, Turkey, and Russia over pipeline routes could increase if obstacles to Iranian export routes are removed.