

Executive Summary Background

No. 1730
March 4, 2004



Published by The Heritage Foundation

Models and Policies for Oil Production, Revenue Collection, and Public Expenditure: Lessons for Iraq

Ariel Cohen, Ph.D.

Countries in both the developed and developing worlds rely on a stable and secure supply of oil. However, abuses and misallocations of oil revenues often lead to social and political instability and, at times, armed conflict. The broader the political cooperation and public consensus, and the greater the transparency in the management of oil revenues, the greater the chance that the supplier will remain stable.

The challenge of devising models and policies for oil production in developing or transitional economies is formidable. Resource-rich countries tend to fall behind non-oil economies in economic development, rate of growth in gross domestic product (GDP), GDP per capita, and human development. Oil often derails democratic development, causing civil strife and civil war. Other problems such as graft and “rent-seeking behavior” regularly accompany oil exploration and exploitation.

A private and transparently managed international oil and gas sector is vital to global energy security and, thus, in the national interest of the United States. Returning Iraqi oil to the international oil markets is important for the Iraqi people, the United States, other Western countries, and the global economy.

Creating the New Iraqi Oil Industry. The Coalition Provisional Authority and the Iraqi Governing Council should:

- **Initiate** a public debate about development of the rule of law and property rights, including

mineral rights. This should include Western economists, Iraqi officials, and the public and should cover the future of oil production, taxation, and the distribution of income. As part of the debate, the CPA and IGC should conduct a comprehensive public campaign aimed at privatization of oil and gas industry assets and reserves as well as broad institutional reform. Many Iraqi officials and other members of police and media elites are not aware of the macroeconomic factors that support privatization. It keeps the oil revenue out of government’s hands and institutes publicly accountable and transparent decision-making processes on oil production.

- **Bolster** property rights and the rule of law, including enabling legislation and regulations on oil and gas production that allow private ownership of all productive assets and minerals. This also involves fostering an independent judiciary, training judges to handle complicated civil litigation such as energy law, and allowing international arbitration as well as enforcement of arbitral awards.
- **Conduct** a comprehensive audit of state-of-the-art techniques of oil privatization, revenue

This paper, in its entirety, can be found at:
www.heritage.org/research/middleeast/iraq/bg1730.cfm

Produced by the Kathryn and Shelby Cullom Davis
Institute for International Studies

Published by The Heritage Foundation,
214 Massachusetts Ave., NE, Washington, D.C. 20002-4999
(202) 546-4400 heritage.org

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

generation, and management. This information should then be disseminated to the Iraqi political leadership, management of the oil and financial sectors, and broader elites. U.S. institutions (e.g., the CPA and U.S. Agency for International Development), major oil companies, nonprofit organizations, the International Monetary Fund, and the World Bank should all be involved in this undertaking.

- **Ensure** that privatization is both transparent and perceived as being in the interest of the Iraqi people.
- **Develop** safeguards to prevent smuggling and diversion of oil and refined products from “well to wheel” and create a law enforcement climate in which the diversion for private use and theft of crude oil, refined products, or revenue is reported, prosecuted, and punished.
- **Improve** revenue collection, such as taxation of oil sales, by establishing independent audit procedures, supporting public supervision by bona fide non-governmental organizations (NGOs), and developing an independent media.
- **Assist** in creation of a national, private, professionally and independently managed oil fund. This could be a modified version of the Alaska arrangement, allowing for direct deposits of revenues into the private bank accounts of the Iraqi people, and would go a long way toward legitimizing the future Iraqi government and privatization of oil assets.

- **Develop** open budgetary and legislative processes for oil revenue. As part of the open budgetary process, budgetary drafts must be prepared by legislative and governmental budgetary offices and publicly available before the final vote. NGOs should be allowed to participate in such discussions, thus enhancing the development of civil society in Iraq.

Conclusion. Privatization should be undertaken only after a public education campaign and good-faith effort to build a consensus among the Iraqis that private ownership of industrial assets, including commodities, is economically more efficient than a government-owned system.

Oil revenue from Iraqi oil should be transparently managed, adequately taxed, and protected from government abuse and corruption. To facilitate this process, a professionally managed oil fund should be seriously considered. Such a fund would protect oil revenues from the long hands of the Iraqi politicians. As in the Alaska model, part of the revenue should be distributed directly to the bank accounts of every Iraqi.

These are only some of the answers and challenges facing state oil revenue management. Those tasked with solving these problems owe the people of Iraq their best efforts not to repeat the abuses of the past.

—Ariel Cohen, Ph.D., is Research Fellow in Russian and Eurasian Studies and International Energy Security in the Kathryn and Shelby Cullom Davis Institute for International Studies at The Heritage Foundation.

Background

No. 1730
March 4, 2004



Published by The Heritage Foundation

Models and Policies for Oil Production, Revenue Collection, and Public Expenditure: Lessons for Iraq

Ariel Cohen, Ph.D.

Countries in both the developed and the developing worlds rely on a stable and secure supply of oil. However, abuses and misallocations of oil revenues often lead to social and political instability and, at times, armed conflict. The broader the political cooperation and public consensus, and the greater the transparency in the management of oil revenues, the greater the chance that the supplier will remain stable.

The challenge of devising optimal models and policies for oil production in developing or transitional economies is formidable. Resource-rich countries tend to fall behind non-oil economies in economic development, rate of growth in gross domestic product (GDP), GDP per capita, and human development.¹ Oil often derails democratic development and causes civil strife and civil war. Other problems such as graft and “rent-seeking behavior” regularly accompany oil exploration and exploitation.²

Many have noted that lagging institutional development, democratic deficiencies, and rampant corruption are the downside of the windfall profits from large-scale oil production. Political control of those natural resources makes political power paramount. Thus, politics becomes a competition for a near total control of wealth, resulting in a zero-sum game with devastating results for democratization and civil society.²

1. Svetlana Tsalik, “The Hazards of Petroleum Wealth,” in *Caspian Oil Windfalls: Who Will Benefit?* (New York: Open Society Institute, 2003), p. 1.

Talking Points

The Coalition Provisional Authority and the Iraqi Governing Council should:

- Initiate a public debate on the rule of law, property rights, and the production, taxation, and distribution of oil income.
- Bolster property rights and the rule of law.
- Disseminate information on privatization to the Iraqi political leadership and broader elites.
- Establish a transparent legal regime that allows all productive assets and minerals to be privately held.
- Create a national, privately, professionally and independently managed oil fund.
- Develop safeguards to prevent smuggling and diversion of oil and refined products.
- Improve revenue collection, such as taxation of oil sales.
- Develop political legitimacy and transparency of oil revenue expenditure through open budgetary and legislative processes.

This paper, in its entirety, can be found at:
www.heritage.org/research/middleeast/iraq/bg1730.cfm

Produced by the Kathryn and Shelby Cullom Davis
Institute for International Studies

Published by The Heritage Foundation
214 Massachusetts Ave., NE
Washington, DC 20002-4999
(202) 546-4400 heritage.org

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

Simply put, unstable countries make poor oil suppliers. The examples abound, from Iraq to Iran to Venezuela.

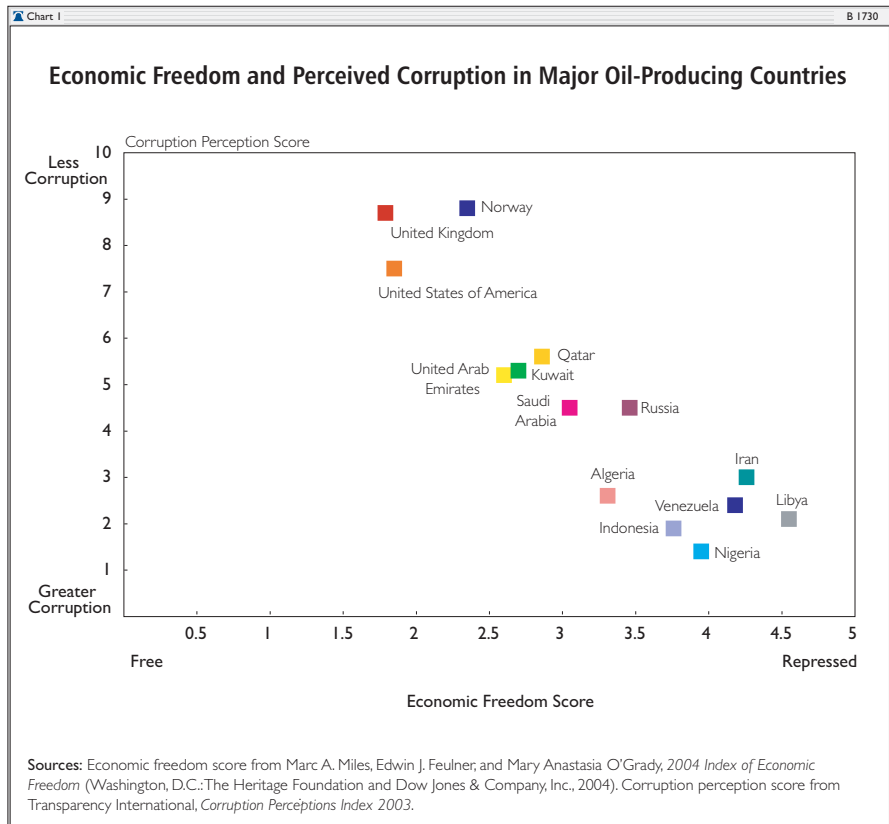
Moreover, experience and research demonstrate that private ownership of any industry increases production and reduces costs anywhere in the world.³ Thus, consumers of energy should advocate privatization of the oil and gas sector worldwide. However, because of the industrial economies' thirst for oil, it is likely that Western governments and international institutions will remain quiet on privatization while denouncing the excesses of producers and abuses of natural resource property rights and revenue.

This paper analyzes current models of ownership and revenue management in the hydrocarbon sector, as well as their political implications, and suggests policies on property rights, tax collection, and public expenditure. The achievements in making the rule of law and transparency a paramount public policy and business value in the oil and gas industry have been limited at best.

Finally, this paper addresses some challenges that the Coalition Provisional Authority (CPA) and the Iraqi Governing Council (IGC) face in restoring and managing Iraqi oil production. It also offers recommendations for the Iraqi oil industry and public sector.

Production Mode: Privatization Versus State Management

The Iraqi oil industry is a case in point. Saddam's predatory dictatorship succeeded in bankrupting the country with the world's second largest oil reserves (after Saudi Arabia). The oil sector formerly provided more than 60 percent of Iraq's GDP and 95



percent of its hard currency earnings. Yet Iraq's GDP for 2001 was estimated at only about one-third its 1989 level. Iraq is also hobbled by \$200 billion in foreign debt and reparation claims. This fiscal devastation is the result of a number of factors, including nationalization of the country's oil sector in the 1970s, extensive central planning of industry and trade, the 1982–1988 war with Iran, the 1990 invasion of Kuwait and subsequent Gulf War, and the U.S.-led war in 2003.

According to senior Iraqi Oil Ministry officials, Saddam ran the oil industry as his private kitty—with devastating results for the infrastructure and the treasury.⁴ Moreover, Saddam's disastrous policies led to Iraq's OPEC quota being taken over by other producers, primarily Saudi Arabia and Venezuela.

2. Benn Eifert, Alan Gelb, and Nils Borje Tallroth, "Managing Oil Wealth," *Finance and Development*, Vol. 40, No. 1 (March 2003), at www.imf.org/external/pubs/ft/fandd/2003/03/eife.htm (November 11, 2003). According to the authors, "Work on the theory of rent-seeking behavior illustrates how rent reorients economic incentives toward competition for access to oil revenues and away from productive activities, especially in nontransparent environments characterized by political discretion and unclear property rights."

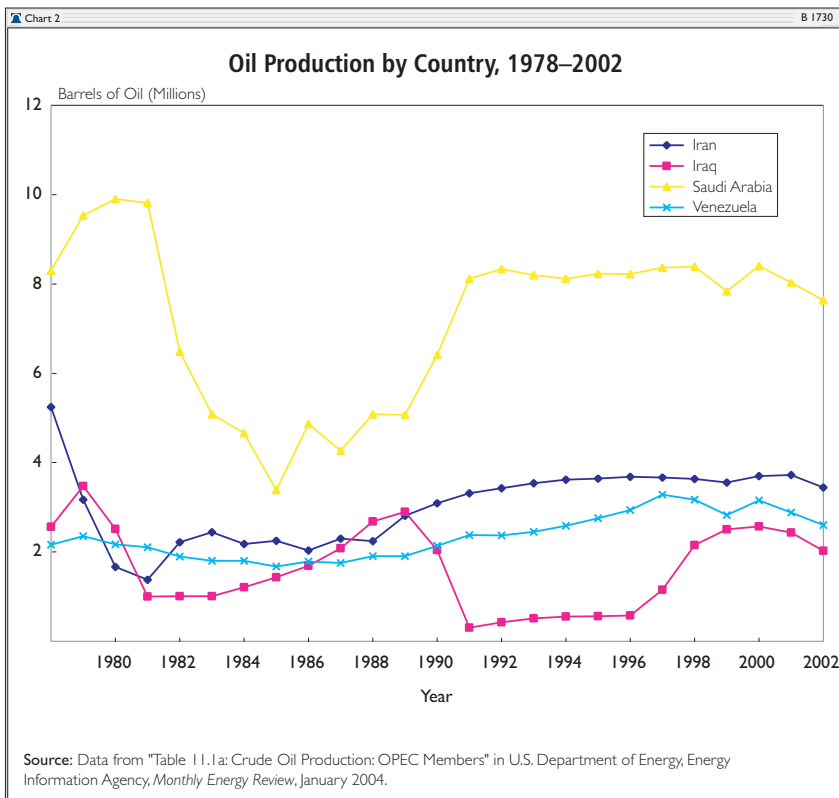
3. World Bank, "Privatization: Eight Lessons of Experience," *Policy Views from the Country Economics Department*, July 1992.

Importance of Privatization. Critics point out that centralized, state-owned industrial capacity in the oil sector is less successful than wholly owned private industry or public-private partnerships in attracting investment, integrating new technology, introducing international accounting standards and practices, boosting productivity, and observing environmental standards.⁵

Moreover, as many of the OPEC members exceed their production quotas, leading to a greater supply of oil and lower prices, it is not clear whether the countries that follow the centralized planning model are indeed maximizing their oil revenue.

Political Factors. Political underpinnings are crucial in forging a workable political model for oil exploration and exploitation. In the Iraqi case, the future model will probably need both to be popularly accepted and to be incorporated into the new constitution. Otherwise, civil strife may develop.

Oil disputes played a large part in the Biafra war in Nigeria in the 1960s, in which 1 million–3 million civilians were starved to death or bombed.⁶ Recently, tribal unrest in Nigeria resulted in Western and local oil workers being taken hostage.⁷ Secession movements in Indonesia parallel the dis-



tribution of oil, as the country's smaller and potentially oil-rich islands attempt to secede from overpopulated Java.⁸ Such conflicts should be avoided in Iraq, which is a relatively new political entity created by the British Empire after the defeat of the Ottoman Empire in World War I.

Since the creation of Iraq, relationships between the Kurds, the Sunni Arabs, and the Shi'a Arabs

4. Interviews with Mutasam Akram Hasan and Dr. Mussab H. Al-Dujayli, Istanbul, Turkey, January 29, 2004. Thus, for example, forcing high production levels without investment in modern technology and maintenance has resulted in massive penetration of water into the Kirkuk oil fields.
5. Ariel Cohen and Gerald P. O'Driscoll, Jr., "The Road to Economic Prosperity for Post-Saddam Iraq," *Heritage Foundation Backgrounder* No. 1633, March 5, 2003, at www.heritage.org/Research/MiddleEast/bg1633.cfm.
6. Federation of American Scientists, "The Biafra War," at www.fas.org/man/dod-101/ops/war/biafra.htm (November 11, 2003).
7. Oronto Douglas, Von Kemedi, Ike Okonta, and Michael Watts, "Alienation and Militancy in the Niger Delta: A Response to CSIS on Petroleum, Politics, and Democracy in Nigeria," *FPIF Special Report*, July 2003, at www.fpiif.org/papers/nigeria2003.html (November 16, 2003). See also "Hostages from 4 Countries Head Home from Nigerian Oil Rigs," *CNN.com*, August 5, 2000, at www.cnn.com/2000/WORLD/africa/08/05/nigeria.hostages.reut (November 11, 2003), and "Nigeria: Forces Head for Oil Rigs," *Africa Online*, May 1, 2003, at www.africaonline.com/site/Articles/1%2C3%2C52870.jsp (November 11, 2003).
8. "Aceh's Rebel Chief Demands Full Independence from Indonesia," *CNN.com*, November 10, 1999, at 216.239.41.104/search?q=cache:G-37xS6574wJ:www.cnn.com/ASIANOW/southeast/9911/09/indonesia.aceh.03+aceh+independence+oil&hl=en&ie=UTF-8 (November 11, 2003). See also Embassy of Indonesia (Ottawa), "Rebels Urge Mobil Oil to Leave Aceh Province for Safety Reasons," January 4, 2001, at www.indonesia-ottawa.org/news/Issue/Aceh/010401_IO_01.htm.

Table I						B 1730					
Classifying Oil Exporters¹											
The type of political system affects how oil revenue is spent.											
Political features	Institutional implications	Economic implications	Political features	Institutional implications	Economic implications						
<p>Mature democracy (Example: UK, US, Norway)</p> <ul style="list-style-type: none"> Stable party system Range of social consensus Strong, competent, insulated bureaucracy Competent, professional judicial system Highly educated electorate 			<p>Reformist autocracy (Example: Kazakhstan, Kuwait)</p> <ul style="list-style-type: none"> Stable government, legitimized by development Social range of consensus toward development Constituency in non-oil traded sectors Insulated technocracy 								
<p>Factional democracy (Example: Venezuela)</p> <ul style="list-style-type: none"> Government and parties often unstable relative to interest groups Political support gained through clientelistic ties and provision of patronage Wide social disparities, lack of consensus Politicized bureaucracy and judicial system 			<p>Predatory autocracy (Example: Iraq under Saddam Hussein)</p> <ul style="list-style-type: none"> Unstable government, legitimized by military force Lack of consensus-building mechanisms Bureaucracy exists as mechanism of rent capture and distribution; corrupt judicial system Little or no civic counterweight 								
<p>Paternalistic autocracy (Example: Saudi Arabia)</p> <ul style="list-style-type: none"> Stable government; legitimacy originally from traditional role, maintained through rent distribution Strong cultural elements of consensus, clientelistic, and nationalistic patterns Bureaucracy provides both services and public employment 			<p>Economic implications</p> <ul style="list-style-type: none"> Expenditure smoothing, stabilization State investment complementary to competitive private sector Active exchange rate management to limit Dutch disease 								
<p>Economic implications</p> <ul style="list-style-type: none"> Long policy horizon Policy stability, transparency High competitiveness, low transaction costs Strong private/traded sector, prostabilization interests vis-a-vis prospending interests 			<p>Economic implications</p> <ul style="list-style-type: none"> Short policy horizon Policy instability, nontransparency, high transaction costs Strong state role in production Strong interests attached directly to state expenditures; politically weak private non-oil sector and prostabilization interests 								
<p>Economic implications</p> <ul style="list-style-type: none"> Saving likely Expenditure smoothing, stabilization Rents transferred to public through government-provided social services and insurance or direct transfers 			<p>Economic implications</p> <ul style="list-style-type: none"> Saving very difficult Procyclical expenditure; instability Rents transferred to different interests and to public through subsidies, policy distortions, public employment 								
<p>Economic implications</p> <ul style="list-style-type: none"> Long horizon Policy stability, nontransparency Low competitiveness, high transaction costs Strong state role in production Strong interests attached directly to state expenditures Weak private sector 			<p>Economic implications</p> <ul style="list-style-type: none"> Procyclical expenditure, mixed success with stabilization Risk of unsustainable long-term spending trajectory leading to political crisis Little economic diversification 								

¹ These classifications are not exhaustive, and some countries have a blend of features from different categories. For example, fiscal federalism is one factor cutting across the categories. The aim is not to create a rigid classification of oil countries but to help provide insights into the policy options available to governments. Benn Eifert, Alan Gelb, and Nils Borje Tallroth, "Managing Oil Wealth," *Finance and Development*, Vol. 40, No. 1 (March 2003), at www.imf.org/external/pubs/ft/fandd/2003/03/eife.htm (November 11, 2003). For use of a similar classification, see D. Lal, "Why Growth Rates Differ: The Political Economy of Social Capability in 21 Developing Countries," in Bon Ho Koo and Dwight H. Perkins, eds., *Social Capability and Long-Term Economic Growth* (New York: St. Martin's Press, 1995).

have been uneasy at best and murderous at worst. The Sunni Arabs have dominated Iraq since the Ottoman and British eras.

Beyond ethno-religious strife, clans and families are the smallest political units, and their interests may need to be taken into account in devising a stable political solution that allows equitable and sustainable sharing of oil revenues. Thus far, the process involved in drafting an Iraqi constitution has been a painful one, and there is no date certain by which agreement will be reached and the document will be ready.⁹ As Iraq develops its own constitution, principles of protection of private property must be extended to the oil industry and oil reserves.

Property Rights in Iraq. The launch of the Iraqi oil industry in 1925 was undertaken by a private consortium, the Iraq Petroleum Corporation, owned in equal shares (23.75 percent) by British Petroleum and Shell, *Companie Francaise de Petroles*, and two constituent parts of Exxon Mobil. Nubar Gulbenkian, the famous “Mr. Five Percent,” owned the remaining 5 percent. The consortium was expropriated in 1964 and fully nationalized in 1972.¹⁰

Theoretically, if the property rights of the original consortium were restored, new companies would participate in bids for new field projects and the rehabilitation of existing oil infrastructure. In addition, the future government of Iraq might recognize some of the contracts concluded by the Saddam Hussein regime, such as the Russian Lukoil West Qurna concession, as valid. The Iraqi government could also examine other production-sharing agreements that Saddam’s regime signed with China, France, and other countries.

Economic Efficiency. Partial privatization, which the CPA and the Provisional Council are pursuing, and low taxation are the right policies to follow. However, more needs to be done to achieve eventual privatization of reserves and extraction. As Iraqi needs for reconstruction are high, one way to increase the cash flow up-front is to sell off the reserves and tax the future oil revenues. This would

better address the immediate needs of the Iraqi people without giving up natural resource royalties and rents.

The United States—through its senior representatives of the Departments of State and Defense in the CPA and its advisers on the ground, with the assistance of the International Monetary Fund (IMF), World Bank, and other international and non-governmental organizations (NGOs)—should begin advising the leaders of Iraq’s three primary ethnic groups to establish policies that would lead to a thriving modern economy. These policies should be based on “best practices” developed around the world during the largest government privatizations in history, during the 1980s and 1990s.

Institutional Development and Controls. One of the greatest challenges in privatizing Iraqi oil and attracting foreign investment (in addition to building political consensus and building the institutions to implement it) will be ensuring equity, transparency, and the rule of law. To accomplish these goals, Iraqi political and government institutions, donor representatives, and international agencies should coordinate their activities while each plays its distinct role.

Courts, parliamentary committees, commissions, government accounting offices, ombudsmen, and chief prosecutors’ offices may have competing jurisdictions on privatization. (Regrettably, this was often not the case in the great 1990s privatization in post-communist countries.) Legal and administrative challenges may increase public control while simultaneously miring the process in numerous court hearings and investigations. While such involvement, especially of Iraqi institutions, may increase transparency and public “buy-in,” it may also slow down the process and open it to frivolous challenges. Indigenous NGOs and media also have a role. However, it is all too easy for politicians and unprofessional journalists to denounce and undermine privatization through demagoguery.

The Eastern European experience demonstrates that a strong executive branch with political com-

9. “Iraqi Constitution Delayed,” BBC World, October 1, 2003, at newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk/2/hi/middle_east/3153732.stm (November 12, 2003).

10. Martin Hutchinson, “What to Do with the Oil,” United Press International, March 24, 2003.

mitment and a public mandate for privatization, combined with meticulous insistence on open and competitive bidding, can carry the day. In that respect, the process could be facilitated by inviting private foreign companies and officials with experience in the German Privatization Agency (Treuhandanstalt), Estonian Privatization Agency, and similar organizations to serve as advisers to the Iraqi government.

Revenue Collection and Distribution Mode

Best management practices and financial controls in the taxation and expenditure stages of oil revenue accrual and disbursement are essential. The history of oil-rich states, from Saudi Arabia to Nigeria, provides ample evidence of a cycle of high revenue/high expectations/high expenditure followed by an oil market slump, a decline in revenue, and social unrest caused by fiscal and budgetary adjustments.¹¹

These states, however, failed to use centrally managed oil revenues to jump-start development and prevent precipitous declines in their GDP per capita. Saudi GDP per capita peaked in 1981, when both the U.S. and Saudi Arabia had a per capita GDP of about \$28,600. In 2001, U.S. GDP per capita was \$36,000, while Saudi Arabia's was less than \$7,500. According to the U.S. Embassy, "Per capita income [in Saudi Arabia] will continue to decline unless economic growth increases significantly and/or the birth rate drops."¹²

Political Factors. Iraqi policymakers should be aware of a "dual hazard" in politics of revenue taxation and expenditure. On the one hand, Iraq has a large, growing, and impoverished population whose basic needs are still unmet. Their representatives are likely to press for higher tax rates and deficit budgets and to lobby for borrowing against future oil receipts. Even with projected increases in oil pro-

duction and revenue growth, Iraq will still be in the poor category or in the low end of the medium-income developing countries. However, if the Iraqi poor, especially the Shi'a, are excluded from budgetary decisions, such factions as Islamist Shi'a radicals (often connected to Iran), Sunni Islamists connected to al-Qaeda, and Ba'athists can be expected to use this exclusion as a pretext for agitation against the Iraqi Government Council and its pro-American successor.¹³

Iraq's challenge is to educate the political and technocrat classes, and the elites in general, on the dangers of high taxation and unbridled expenditure. Macroeconomic instability and a negative investment climate can be as damaging in the long term to a national economy as corruption.

Institutional Development and Controls. As Terry Lynn Karl wrote:

When states do not have to depend on domestic taxation to finance development, governments are not forced to formulate their goals and objectives and the scrutiny of citizens who pay the bills.... Excessive centralization, remoteness from local conditions, and lack of accountability stem from this financial independence.¹⁴

Under Saddam, Iraq was a good case in point. The dictator and the Ba'ath elites in Baghdad made all the economic decisions, such as nationalizing oil assets and using revenues to pay for the military, including programs to build weapons of mass destruction.

In post-Saddam Iraq, institutional controls on the revenue stream are vital. These should include creation of competent and independent central fiscal and budgetary bodies; a strong police force, including organized and white-collar crime divisions to prevent oil smuggling; and a tax collection agency sophisticated enough to prevent and investigate tax

11. Tsalik, "The Hazards of Petroleum Wealth," p. 7.

12. Embassy of the United States (Riyadh), "Saudi Arabia 2002 Economic Trends," May 2002, at riyadh.usembassy.gov/wwwwhet02.html (November 16, 2003).

13. Herbert Docena, "No Money, No Play: US on the Brink in Iraq," *Asia Times*, October 10, 2003, at www.atimes.com/atimes/Middle_East/EJ10Ak01.html (November 16, 2003).

14. Terry Lynn Karl, *The Paradox of Plenty: Oil Booms and Petro-States* (Berkeley: University of California Press, 1997), p. 190, quoted in Tsalik, "The Hazards of Petroleum Wealth," p. 7.

evasion. Such services need to be strong enough to stand up to the Iraqi national oil company and the international oil companies, which will handle an increasing number of exploration and extraction projects.

Since the Iraqi state most likely will remain weak and fractious after the U.S. transfers sovereignty on July 1, 2004, it should divest itself from providing most nonessential services, which can be delivered by the privatized non-government sector. Market demand, not government programs, is more likely to reflect the needs of the Iraqi people. Since government revenues can be generated up-front from privatization, keeping tax rates low (around the current 15 percent) is advisable.

The government can shift provision of services to the private sector while building a constitutional barrier to keep budget deficit spending below a certain level, such as 3 percent of GDP. Such a safeguard would keep the budget within reasonable limits, make the Iraqi dinar more stable, and instill both fiscal and budgetary discipline among the elite. Without such discipline, the state will attempt to use expenditures to buy its legitimacy.

Given the fragility of the Iraqi state—the combined result of Saddam's regime, the current conflict, and deep ethno-religious fissures—state dependence on oil revenues should be avoided. As in many other countries that have experienced cyclical oil wealth, windfall oil revenues can be stored in non-dinar, off-shore accounts—an Iraqi oil fund.

What Should Be Done

The Coalition Provisional Authority and the Iraqi Governing Council should:

- **Initiate a broad public debate about development of the rule of law and property rights, including mineral rights.** This debate should include Western economists, Iraqi officials, and the public and should cover the future of oil production, taxation, and the distribution of income. As part of the debate, the CPA and IGC should conduct a comprehensive public campaign aimed at privatization of oil and gas industry assets and reserves, as well as broad institutional reform. Many Iraqi officials and other members of police and media elites are

not aware of the macroeconomic factors that support privatization, keeping the oil revenue out of government's hands, and instituting publicly accountable and transparent decision-making processes on oil production.

- **Bolster property rights and the rule of law,** including enabling legislation and regulations on oil and gas production that allow private ownership of all productive assets and minerals. This includes fostering an independent judiciary, training judges to handle complicated civil litigation such as energy law, and allowing international arbitration, including enforcement of arbitral awards.
- **Conduct a comprehensive audit of state-of-the-art techniques of oil privatization, revenue generation, and management.** This information should then be disseminated to the Iraqi political leadership, management of the oil and financial sectors, and broader elites. U.S. institutions (e.g., the CPA and U.S. Agency for International Development), major oil companies, nonprofit organizations, the IMF, and the World Bank should all be involved in this undertaking.
- **Ensure that the privatization process is transparent** and perceived as being conducted in the interests of the Iraqi people.
- **Develop safeguards to prevent smuggling and diversion of oil and refined products from "well to wheel"** and create a law enforcement climate in which the diversion for private use and theft of crude oil, refined products, or revenue is reported, prosecuted, and punished.
- **Improve revenue collection,** such as taxation of oil sales, by establishing independent audit procedures, supporting public supervision by bona fide NGOs, and developing an independent media.
- **Assist in creation of a national, private, professionally and independently managed oil fund.** A modified version of the Alaska arrangement, allowing for direct deposits of revenues into the private bank accounts of the Iraqi people, would go a long way toward legitimizing the future Iraqi government and privatization of oil assets.

The Case for an Iraqi Oil Fund

Natural resource funds (NRFs), and oil funds in particular, are not a panacea. They do not guarantee that rapacious governments will not raid oil revenues or that the electorate will not demand spending for short-term gains. They are not immune from bad investment decisions, lack of supervision, or frequent rule changes. However, examination of a number of funds, from the successful ones of Norway,¹ Alaska,² and Chile to the less successful ones of Alberta (Canada), Oman, Iran, the Inuit state of Nunavut (Canada), and Venezuela indicates that creating an oil fund might provide a number of advantages to Iraq.

However, some commentators point out that the experience of small, sparsely populated states and provinces may not be relevant to Iraq.³ As Transparency International has noted:

[I]n a developing country, which often has weaker administrations and political institutions, the corruption problem can actually become part of the system... The casualties of corruption include the country's integrity system itself, and therefore reform of the national integrity system has to take place.⁴

Beyond that, public management, money, corruption, and transparency are highly culture-specific. Instilling higher standards of transparency and accountability in a stand-alone Iraq oil fund may be easier than reforming the whole revenue and budgetary system. Moreover, it will be easier to hire Arabic-speaking expatriates with international experience in NRF management or other accounting and financial professionals at competitive rates to guarantee appropriate expenditure of Iraq oil revenues.

The goals of an oil fund remain permanent around the world:

- **Isolate the national economy from large influxes of oil revenues** to prevent them from driving up the exchange rates and thus protect non-oil sectors of the economy.
- **Create a compact between government and the citizens** to restrain the government from misappropriating natural resources revenues. Since these institutions have their own boards, mandates, and regulations, they are more difficult to raid than budgets.
- **Protect revenues from unrestrained government spending.** This is an enhanced level of protection, in addition to multiyear expenditure planning and saving a stock of liquid financial assets.⁵
- **Accumulate** revenue for periods when oil prices are low. The government should be prevented from raiding the funds, especially when revenues are high during periods of high oil prices.
- **Save** a portion for future generations after the oil runs out. Iraq has oil reserves second only to Saudi Arabia's, and even with a production rate of 4 million–5 million barrels per day, the oil will last for over 80 years. However, as time passes, an increasing percentage of the revenue should be saved.

1. Knut N. Khaer, "A National Strategy for Investing Resource Wealth," presentation to the BSI Gamma Foundation Conference on Global Asset Management, Lugano, Switzerland, November 15, 2001, at www.bsi.ch/gammaf/conference/kjaer.pdf (November 16, 2003).
2. Christian Bourge, "Alaska Oil Model Could Work for Iraq," United Press International, May 14, 2003.
3. Marego Athans, "Iraq's Oil a Dubious Balm for Ailments," *The Baltimore Sun*, June 2, 2003, at www.sunspot.net/bal-te.iraqoil02jun02.story.
4. Peter Eigen, "Message from Transparency International," April 1988, in United Nations Development Programme, "Corruption and Integrity Improvement Initiatives in Developing Countries," at magnet.undp.org/docs/efa/corruption.htm (November 16, 2003).
5. Svetlana Tsalik, "The Hazards of Petroleum Wealth," in *Caspian Oil Windfalls: Who Will Benefit?* (New York: Open Society Institute, 2003), p. 18.

- **Develop political legitimacy and transparency of oil revenue expenditure** through open budgetary and legislative processes. As part of the open budgetary process, budgetary drafts prepared by legislative and governmental budgetary offices should be publicly available and discussed openly in the legislature before the final vote. Budget-watching indigenous NGOs should be allowed to participate in such discussions, thus enhancing the development of civil society in Iraq. Once the security situation improves, both the government and non-government sectors should be provided international technical assistance on budgetary issues.

Oil Revenue Management and International Energy Security

A private and transparently managed oil and gas sector is vital to global energy security and thus in the national interest of the United States. Returning Iraq to the international oil markets is important for the Iraqi people, the United States and other Western countries, and the global economy. This would provide locally generated revenue to finance post-war reconstruction, provide an additional 2 million–4 million barrels per day to the oil market, and relieve the U.S. of the financial burden of Iraqi reconstruction.

Iraq's output prior to the Gulf War was 3.5 million barrels per day, while the oil discovery rates (50 percent to 75 percent) on new projects in the 1990s were among the highest in the world. Given Iraq's own output projections, it may be capable of pumping as much as 6 million barrels (by 2010) to 7 million barrels (by 2020) per day—more than double current production levels. In view of demand projections, especially increased demand from the large Asian economies such as India and China, the global market can easily absorb such an increase. The U.S. Energy Information Administration forecasts that oil consumption in Asia will grow by 55 percent from 2003 to 2025 and that natural gas consumption will increase by 100 percent.¹⁵

Generating, accounting for, managing, and expending this revenue for the Iraqi people is a huge responsibility that is complicated by the state-owned and state-managed infrastructure, poorly defined property rights, absence of a functioning legal system, a shattered public service, lack of consensus on how to own and exploit the oil reserves, and the large number of Iraqi poor with pressing needs.

Privatization should be undertaken only after a public education campaign and a good-faith effort to build a consensus among the Iraqis that private ownership of industrial assets, including commodities, is economically more efficient than a government-owned system.

Oil revenue from Iraqi oil should be transparently managed, adequately taxed, and protected from government abuse and corruption. To facilitate this process, creating a professionally managed oil fund should be seriously considered. Such a fund would protect oil revenues from the long hands of the Iraqi politicians. As in the Alaska model, part of the revenue should be distributed directly to the bank accounts of every Iraqi.

These are only some of the answers and challenges facing state oil revenue management. Those tasked with solving these problems owe the people of Iraq their best efforts not to repeat the abuses of the past.

—Ariel Cohen, Ph.D., is Research Fellow in Russian and Eurasian Studies and International Energy Security in the Kathryn and Shelby Cullom Davis Institute for International Studies at The Heritage Foundation. This paper is based in part on a paper presented by the author at the Seminar on Public Policy of Oil Finance and Revenues Management, CSIS/Baker Institute, in Washington, D.C., on November 20, 2003. The author would like to thank Heritage Foundation research assistant Will Schirano for his assistance in preparing this paper. He is also grateful to his colleagues Marc A. Miles and James Phillips for their helpful comments.

15. Indo-Asian News Service, "India, China Will Drive Global Energy Use Increase," *Asian Tribune*, May 2, 2003, at www.asiantribune.com/show_news.php?id=4059 (November 16, 2003).