Energy Security: Meeting the Growing Challenge of National Oil Companies

by Matthew E. Chen and Amy Myers Jaffe

Last February, Hugo Chavez decreed a staged nationalization in a drive to take over large segments of the Venezuelan economy as part of his revolutionary vision for the country. Specifically, the Chavez government set its sights on the oil industry, giving notice to foreign oil companies—including US firms—that they had until June 26 to reduce their ownership in Venezuelan Orinoco Belt heavy oil field projects so that the state could take at least a 60 percent share. This year alone, the Venezuelan government has already formed the Venezuelan Electricity Corporation, comprised of all state electricity utilities, to ensure state control of the electricity sector. It has also initiated the takeover of CANTV, the country's biggest telecommunications operator. Chavez also has threatened to nationalize Venezuela's banking sector unless banks "give priority to financing [the country's] industrial sectors."[1] Commenting on his drive for "21st century socialism," the president said that "I'm not deceiving anyone. I'm only governing the country, and the country has elected me various times. ...All of those who voted for me backed socialism, and that is where we are heading."[2]

Venezuelan Oil Minister Rafael Ramirez threatened in early May that US oil giant ConocoPhillips would be kicked out of Venezuela altogether if it tried to drive a hard bargain for turning over shares in its fields in the Orinoco Belt. The official US reaction has been muted. On May 1, 2007, US State Department spokesman Sean McCormack said Venezuela's negotiations with oil companies "will proceed as they will," but that Chavez's broader actions, including withdrawing from the World Bank and International Monetary Fund, were "digging a hole for the Venezuelan people."[3]

The US has a long tradition of circumspect responses to the moves of national oil companies. The US has responded tepidly to many moves since the 1930s when Mexico nationalized the oil field holdings of US oil companies. In the case of Mexico, the US had other foreign policy priorities at the time of these nationalizations, first the fight against Nazism and then the struggle to keep communism out of the hemisphere. Thus, despite lodging diplomatic protests and rebuking Mexico with mild economic penalties, the US did not allow the incident to

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Matthew E. Chen is a research associate at the James A. Baker III Institute for Public Policy.
Amy Myers Jaffe is the Wallace S. Wilson Fellow in Energy Studies at the Baker Institute and the director of its Energy Forum.

damage bilateral relations in the face of greater strategic challenges.[4] Similarly, the US government did not interfere with Venezuela's 1976 nationalization, for which the international oil companies received compensation.[5] The United States was even passive as recently as the 1980s, when Saudi Arabia implemented the gradual nationalization of the American oil company stakes in the Aramco Oil concession. US-Saudi relations were relatively strong in the 1980s and into the 1990s, and the US government made no objections whatsoever to Saudi Arabia's nationalization of Aramco's oil assets.[6]

Some US officials have been vocal that the government should be doing more to punish Hugo Chavez for his oil campaign against US interests. Presidential candidate Rudolph Giuliani, for example, said Chavez is "dangerous" to US interests, and in one recent speech, he called on the US to develop alternative energy sources and domestic production. Antagonistic leaders from oil states such as Chavez would be left with "little power" if the US could stop buying oil from them.[7]

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The recent developments in Venezuela highlight how crucial energy security has become to US foreign policy. In this case, the traditional US response—a more cautious, calculating approach to Chavez—is probably the right one at this juncture, but this does not hold true for US energy policy as a whole. Because Caracas has failed to identify any serious alternative, commercially profitable, customers, the vast majority of Venezuelan oil is still coming to the United States. Moreover, the US still holds many cards because the Venezuelan government owns substantial collateral assets in the US, including Citgo Petroleum, the Venezuelan government-owned refining and marketing company, based in Houston.

Chavez has not formally kicked any American companies out of Venezuela's oil industry. On the contrary, he has pushed only as far as it takes to grab a larger share of the profits, while allowing US oil companies to maintain their activities. Some industry analysts even argue that Venezuela's request for a larger piece of the pie is a reasonable response to the huge jump in oil prices experienced since the 1990s, when Venezuela first signed the oil-field deals with Western firms. At that time, the risks remained that oil prices could tumble back below $20 into the teens, as they did in 1998, which required Venezuela to offer foreign investors a sweet deal and larger take to offset the possibility of losses if prices fell over the course of the investment arrangements. Now, with oil prices tens-of-dollars a barrel higher than expected and showing no prospects of falling, companies do not need such attractive terms to render the Venezuelan operations profitable; hence the US State Department statement that renegotiations between American firms and Venezuela will "proceed as they will."

Because his options at this juncture appear limited, giving Chavez too much attention might prove counterproductive by forcing a more extreme scenario. The rhetorical benefit aside, Chavez is probably aware that kicking out the foreign oil companies completely might be more damaging to his future than keeping them there. That is because Venezuela's own state industry lacks the funds and expertise to replace the foreign firms. Oil production in the areas that were already 100 percent controlled by state Venezuelan oil monopoly Petróleos de Venezuela (PDVSA) has been falling dramatically since Chavez took control in 1999, and it is likely to continue to decline, given poor maintenance and the aging nature of the fields. Venezuela's oil production capacity has already fallen from 3.7 million barrels a day in 1997 to 2.4 million barrels a day currently. During this same period, privately controlled fields operated by foreign firms—now returning to PDVSA control—added 550,000 barrels a day to oil production, offsetting what would have been even larger losses in productive ability by Venezuela and related export revenue. If foreign investors pull out or are kicked out of Venezuela, it will greatly restrict Caracas' ability to boost its output. Private investors were slated to provide up to a third of the $77 billion needed to repair and expand Venezuela's oil fields between now and 2012.[8]

The United States, by avoiding an escalating public confrontation with Chavez, permits his hypocritical reliance on foreign oil firms, though just enough to keep the oil flowing. A stronger US position would almost certainly lead Chavez to push back, either by fully nationalizing his industry or placing an embargo on the US in order to prove his revolutionary gusto, to the detriment of oil market stability and the future of the Venezuelan people. While such an extreme scenario might give Chavez the rope to hang himself, in the long term, it is unclear if the threat he currently poses to US and regional security is large and serious enough to sacrifice the normal supply of Venezuelan oil to the global marketplace.

But the lesson of cautious restraint against Chavez doesn't mean the US should always have a passive or neutral policy towards national oil companies. As we move forward, questions are being raised about whether neutralism will remain the correct approach.

The fact that national oil companies will increasingly pose a strategic challenge to the United States and its allies is not in doubt. National oil companies (NOCs) now command close to 80 percent of the world's remaining oil reserves and will overwhelmingly dominate world oil production and pricing in the coming decades. Increasingly, these national oil behemoths are flexing their geopolitical muscles. Russian state-owned Gazprom's cut off of energy supply to Ukraine in a pricing dispute is a case in point. Economic justifications aside, Gazprom's move effectively shifted internal politics and rearranged elective coalitions in Kiev, which led to a turn from an anti-Russian candidate toward a governing coalition more to the Kremlin's liking. The oil acquisition campaign of Chinese NOCs is also having the side effect of bringing Beijing into the geopolitics of regions where it was previously uninvolved, including Africa, the Persian Gulf, and now even Latin America.

The multifaceted nature of NOCs' strategic challenge presents the United States with a number of geopolitical and economic dilemmas. While the rise of NOCs from both consuming and producing countries does not constitute an immediate threat to US national security, the growing economic power and strategic influence of NOCs on global energy markets pose long term problems for global security, as well as the economic and geopolitical interests of Organization of Economic Cooperation and Development (OECD) countries.

The key concerns are threefold:

First, numerous NOCs from countries like China, Malaysia, and India are investing and operating in some of the world's most troubled regimes, noted for hostility to the US and to democratic, free-market values. The close bilateral connections fostered by this investment, in turn, are obscuring efforts on a strategic level to resolve international conflicts in places like Iran, Sudan, and Burma, and also dilute tactical efforts to promote good corporate governance and international norms for trade and finance. National oil companies from emerging economies have become entangled in host countries' domestic political and human rights problems in countries across Africa and Asia, much as their international oil company (IOC) counterparts before them. China National Petroleum Corporation (CNPC), India's Oil and Natural Gas Corporation (ONGC), and Malaysia's Petronas, among others, have come under scrutiny from OECD governments and non-governmental organizations for their political influence and operational impacts in conflict zones. If undertaken without regard to nascent global norms regarding legitimate business behavior, NOCs' foreign investments in failed or "rogue" states could exacerbate local grievances while empowering governments hostile to United States strategic interests.

Second, NOCs are expected to control a greater portion of future oil production over the next two decades, compared with the last thirty years. As the world becomes more dependent on NOCs for future oil supplies, major oil consuming countries are questioning the ability of these firms to bring on line new oil in a timely manner and in the volumes that will be needed, stimulating new debate about long term energy security.

The list of NOCs whose oil production has been falling or stagnant in recent years due to civil unrest, government interference, corruption & inefficiency, and the diversion of corporate NOC capital to social welfare is long, and includes Indonesia, Iran, Iraq, Mexico, Russia, and Venezuela. To the extent that NOCs must meet national socio-economic obligations, such as income redistribution, over-employment, fuel price subsidization, and industrial development, NOCs have fewer incentives or resources for reinvestment, reserve replacement, and sustained exploration & production activity. This raises the question of whether timely development of the vast resources under the control of national oil companies can take place, given the constraints imposed by domestic political influences and geopolitical factors. In sum, future oil supply may simply fail to materialize in the volumes that are needed, leaving major oil consuming nations scarce of fuel.

Third, many NOCs have significant diplomatic and financial support from home governments that offer leverage in international trade and commerce, which IOCs simply do not have. NOCs have been accused of overbidding for assets, offering soft loans for infrastructure development that negate the accountability measures in World Bank or IMF financing, and undermining internationally-recognized standards of transparency and global investment & trade. While not imminently threatening to US national security, the rising influence of NOCs still presents important long term challenges to US geopolitical goals, American economic power, and the efficacy of international standards concerning basic human rights, good corporate governance, and global investment & fair trading practices.

The growing role of the NOCs in global oil markets has important policy implications for oil importing nations like the United States. The US may need to adjust its national energy strategy to reduce vulnerability to changes or instability in NOC reinvestment rates. The US should also reinvigorate its trade diplomacy to promote free trade and to utilize multilateral frameworks, such as the WTO and Energy Charter, to press NOCs to adopt institutional structures that will enhance their efficiency, promote market competition, and curb interference in commercial investment decisions by their national governments.

The case of Norway's Statoil is instructive on this point. For Norway to join the European Economic Area (EEA), in which Norway would receive access to the common market, it was forced to follow common competition directives. Before the EEA entered into force, Norwegian oil and gas companies constituted a monopoly sales organization that regulated marketing and sales of Norwegian gas into the continent. This meant that Statoil, as the controlling party, was able to act as a monopoly, setting natural gas prices for all long-term sales of gas from the Norwegian Continental Shelf. With entry into force of the EEA, this scenario changed as Norway had to mirror the European Commission's rules in the "fields of competition, state aid and public procurement."[9] The European Union's (EU) insistence that Norway join the EEA without making an exception for its national oil company ensured that Statoil promoted transparent and competitive practices, permitting the firm to make efficient investments in future production capacity and forcing it to give up its monopoly power of gas sales to the EU.

NOCs and Global Security

Most national oil companies portray their foreign oil and gas investment activities as "commercial" businesses indistinguishable from private investors, but the reality is more grey, as many NOCs wind up serving the geopolitical interests of the main shareholder, the home government. In some cases, the tail can wag the dog, as the interests of the NOCs influence foreign policy formulation.

In recent years, several NOCs from Asian governments have invested, and now operate, in a number of states that are troubled by widespread civil strife, pursue strategic goals antithetical to US interests, or suffer from faltering governance. Foremost among these states are Burma, Iran, and Sudan. But even states such as Nigeria and Indonesia have seen a rise in activity by disaffected localized militant groups, creating challenges in the areas of human rights, terrorism, and sustainable development. NOCs' efforts to secure energy supplies in failed states have complicated international efforts to create a more effective architecture to mitigate humanitarian crises and resolve international conflict over energy resources.

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Both the current governments of Burma and Sudan have presided over years of stagnant political reform, combined with widespread abuses of basic human rights, while earning millions in revenue from the energy sector. Violence in each country has compelled thousands to flee to refugee camps, while inadequate international action suggests that Burma and Sudan's ongoing political problems will continue without lasting resolution. The once reclusive Burmese military regime has grown rich from welcoming investment from select sources, including NOCs. Between 2005 and 2006, Burma's junta earned an estimated $35 million from Indian and Thai energy investments.[10] In Sudan, ending the grievous conflict in Darfur has proven maddeningly elusive—in large part because of the political cover afforded Khartoum by countries with major stakes in Sudanese oil. China, in particular, long obstructed the passage of robust UN measures to sanction Sudan. While China has lately moderated its stance to deflect international criticism, perhaps out of sensitivity to the upcoming 2008 Olympic Games,[11] its recent trumpeting of Khartoum's grudging acceptance of a greater UN role in Darfur should be credited only if Darfur's civilians and aid workers finally receive the protection they need. The diplomatic support that the parent countries of NOCs provide for failed states has had a deleterious effect on the will of the international community to act in a timely way to curtail mass atrocities; it has also hindered diplomatic and economic initiatives to encourage gradual democratic development without empowering dangerous regimes.[12]

Meanwhile, in the Near East, investment by national oil companies and other businesses has provided a revenue stream for the nuclear ambitions of the Iranian government, while simultaneously driving a wedge between UN Security Council members. As a recent American Enterprise Institute study points out, since 2000, nearly 3 dozen countries have concluded $153 billion in business deals with Iran, mostly in the energy sector.[13] While the Iranian oil sector remains enfeebled, isolating Iran diplomatically has still proven more difficult due to the eagerness of NOCs from China, Russia, and elsewhere to invest there.

Finally, in Nigeria, the failure of oil wealth to be administered for the benefit of the country as a whole, and the Niger Delta in particular, threatens to perpetuate the lawlessness, poverty, and violence, which characterize the country's energy sector. In 2006, militant attacks and bunkering cut production by 25 percent. To date, efforts ranging from military action to community assistance divorced from local grievances have not managed to quell violence in the oil-rich Delta. If not handled more deftly, the entry of NOCs into foreign exploration and production in areas marked by governance failures and humanitarian crises, let alone hostility to the US, could fuel more internecine violence and international disputes, while also destabilizing oil-rich areas needed for increasing global supply.[14]

NOCs and Efficiency

NOCs represent the top oil reserve holders internationally. In 2005, globally-proven oil reserves were 1,148 billion barrels, with national oil companies in control of 77 percent of the total (886 billion barrels) allowing no equity participation by foreign oil companies, and with partially or fully privatized Russian oil companies in control of another 6 percent (an additional 69 billion barrels). By comparison, Western international oil companies (IOCs) that once dominated the oil scene in the 20th century now control less than 10 percent of the world's oil and gas resource base.[15]

The ownership of reserves also has some bearing on shares of world oil production. In contrast to years past, when privately-held IOCs with publicly listed shares, such as ExxonMobil, BP, Royal Dutch Shell, and Chevron, represented the largest oil and gas producers worldwide, NOCs now dominate global production. According to *Petroleum Intelligence Weekly (PIW)*, of the top 20 oil producers worldwide, 14 are NOCs or newly privatized NOCs; the international majors have been relegated to second tier status in terms of controlling the world's oil production. *PIW's* ranking shows that Saudi Aramco, Russia's Gazprom, Iran's NIOC, Pemex of Mexico, Algeria's Sonatrach, INOC of Iraq, PetroChina, Kuwait Petroleum Corp., Brazil's Petrobras, Malaysia's Petronas, Rosneft of Russia, ADNOC of Abu Dhabi, Russia's Lukoil, PDVSA of Venezuela, and Nigerian National Petroleum Corporation (NNPC) are among the most important oil and gas producing companies in the world.[16]

The International Energy Agency (IEA) projects that investments of over $2.2 trillion will be needed over the next thirty years to meet rapidly growing world oil demand. But the major national oil companies who will be responsible for implementing this investment over the coming years face bureaucratic, organizational, and political challenges that may thwart them from expanding their oil production and export levels.

As concluded in a recent in-depth, two year study on national oil companies by the James A. Baker III Institute for Public Policy, many governments use NOCs as a tool to achieve wider socio-economic policy objectives, including income redistribution and industrial development.[17] At home, NOCs compete for capital budgets that might otherwise be allocated to more core oil industry, commercially-oriented activities such as reserve replacement and oil production enhancement. According to the Baker Institute research, these non-core, non-commercial obligations have imposed costs upon the NOC, and in some cases, have diluted the incentive to maximize profits, hindering the NOC's ability to raise internal or external capital and to compete at international standards. In addition, many of these emerging NOCs have close and interlocking relationships with their national governments. The result has been stagnation in capacity growth and an inability to maintain or grow the countries' oil production capacity. The absence of explicit pressure to earn a return on capital, often coupled with inadequate financial transparency, has in many cases resulted in the inefficient or wasteful allocation of already scarce investment resources. For example, many NOCs are asked to provide fuel to the home market at heavily subsidized prices, stimulating a large growth in demand and reducing the net amount of oil available for export.

Many NOCs lack adequate financial transparency as well, limiting their access to external capital that could be used to maintain or expand capacity, according to the Baker Institute study. These trends are partly responsible for the slow pace of resource development relative to the rapid rise in global demand, and could mean that new production will not materialize to meet rising oil requirements in the future.

NOCs and Trade

The United States, as the world's sole superpower, has the responsibility to protect the routine operation of global trade and commerce. Since the Second World War, the US has taken the lead in many rounds of international negotiations to reduce tariffs, open markets to unrestricted capital flows, and establish rules for protecting investments and intellectual property. At times, the US has relied on multilateral negotiations; at others, when multilateral talks were not promising, it has utilized multi-track frameworks.[18] This liberalized system of global trade and investment, like any system of law and order, thrives because the overwhelming majority of participants agree to behave according to a certain set of rules and act in the belief that other participants will also uphold those rules. This system is currently supported in large measure by the international community, and the United States, as the world's military superpower, backs up the operation of this global marketplace by policing the seas and international commerce from attack by hostile nations or non-state actors, and by promoting international institutions to defend the rules and obligations of the system.

The United States, as a world power and primary energy consumer, favors an open, transparent, and competitive global market for oil in which no seller or group of sellers can dominate the market and thereby threaten the access by the US or its allies to purchase the supplies of oil needed to conduct normal everyday consumer, business, and military operations.[19] However, in the past year or two, several oil and gas producing countries, through the actions of their national oil companies, have exercised their market power to the detriment of the United States and its allies. Gazprom's trade disputes with several key energy transit countries in Eastern Europe have raised questions about the security of Russian energy supply to Europe. Furthermore, Hugo Chavez's moves to renationalize the oil field holdings of Western investors more broadly threatens the sanctity of international contracts in the oil exploration arena.

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Some national oil companies from consuming countries, such as China's CNPC and India's ONGC, have access to the deep pockets, strategic clout, and economic might of their home governments, and their activities are providing a challenge to the US-dominated global system of energy trade and investment. These NOCs have given soft loans to governments in return for oil deals, leaving host countries able to bypass the more stringent conditions posed by international financial institutions like the World Bank and IMF. In 2005, when the IMF sought to conclude a loan with Angola that included transparency measures, the Angolan government did a *volte-face* and accepted a Chinese loan that conspicuously lacked any of the IMF's stipulations. China's offer included a $2 billion loan with an interest repayment rate of 1.5 percent over 17 years, tied to future oil production and infrastructure projects.[20]

The lack of transparency and accountability in soft loans contributes to worsening inequality and authoritarianism in oil rich countries. The real benefits to this form of financing frequently accrue to the governing elite, rather than the whole population, increasing the chances of corruption and oppression. While American and European privately-held public corporations are bound by foreign corrupt practices restrictions and run the risk of state prosecution for violating such laws, governments may be more reluctant to blow the whistle on government-run national oil companies. In 2006, Norway's Statoil was investigated by the US Department of Justice for paying $5.2 million in bribes to influence officials in Iran to obtain a contract for the development of the Iranian South Pars gas field. The national oil company made a settlement agreement with US authorities and paid fines to the Securities and Exchange Commission (SEC), but its executives, though fined, were never prosecuted in Norway. The case came to light in the United States because of the company's presence in US capital markets.[21]

Over the longer term, NOC to NOC crony financing may prove unsustainable if the majority of the local populace does not begin to see tangible benefits from oil development, and if leading countries themselves question this form of international finance; the latter is particularly true in African states. While the IFIs' heavily conditional approach to international finance may require some revision, the pernicious character of overbidding and soft lending by NOCs stands to decrease the influence of the US and EU at a time when more Western firms are being cajoled into adopting nascent norms of corporate citizenship and responsible behavior, exemplified in initiatives such as the UN Global Compact and the Extractive Industries Transparency Initiative (EITI).

The Rise of NOCs: Policy Recommendations

As we have argued in this article, the rise of national oil companies within international energy markets poses a long-term challenge to American strategic interests and economic power. The NOC phenomenon also, if not properly addressed, could reduce the efficacy of international standards concerning basic human rights and good corporate governance.

Therefore, the United States should adopt a more proactive and long-term policy framework to meet the challenges posed by national oil companies' geopolitical influence and economic power. Given the complexity inherent in global energy markets, no single set of solutions will be adequate for this task. Rather, the US should seek, where feasible, to cooperate with NOCs and their governments, while at the same time responsibly lobbying for the kind of global trade rules and international economic architecture that will constrain the freedom of movement of NOCs to bypass the global system of trade and investment rules. The US needs to promote best practices for national oil companies, through mechanisms like the World Trade Organization, the Energy Charter, and the North American Free Trade Agreement. These agreements currently limit uncompetitive energy subsidies and barriers to open investment in energy projects. Moreover, the US should also consider deploying targeted foreign aid to supplement investments by American oil companies where social and economic development assistance is desired.

It is crucial that the US diplomatically engage other, major consuming countries with NOCs, like China and India, to seek common solutions to international conflicts where access to or investment in oil resources plays a material role. The imperative remains for the "industrialized consuming countries of the US, Europe and Northeast Asia [to] convince an ambitious, energy-hungry China that secure supply for all requires a cooperative foreign policy."[22] Cooperative frameworks such as the International Energy Agency, the European Energy Charter, and other multilateral frameworks serve as a good vehicle for promoting cooperative action during oil market disruptions and guaranteeing open access for investment in energy resources to meet rising global energy demand.

Equally, the US and other consuming countries stand to benefit from developing joint policies and practices to support long-term stability—through better governance and peaceful dispute resolution—in oil-rich areas plagued by corruption, poverty, and violence, such as the Niger Delta. As a report from the Center for International Policy observes, "…increasing militarization of the region by the United States does nothing to address the systemic problems in the Niger Delta and can only 'exacerbate an already tense situation in Nigeria.'"[23] The creation by the US military of an African command makes strategic sense, but non-military efforts to combat corruption, increase transparency, and promote good governance are just as salient for energy security.[24]

Results-oriented consultations convened by the UN, or the International Energy Agency, are needed to renew multilateral backing for these methods. All stakeholders in the energy sector have incentives to discuss and devise practical ways in which energy can more often function as a catalyst for global security. Furthermore, it is time that policymakers expand their conceptual horizons to see that human security is part of energy security.

While country-to-country dialogue remains essential, the US should also use its diplomatic access to encourage governments to press their NOCs to join the international discussion on corporate citizenship. NOCs need to be as active as the large international oil companies in joining the various industry associations, public forums, and multilateral initiatives that carry this conversation forward. Initiatives like the UN Global Compact, EITI, and others provide excellent resources to companies seeking improved public standing. Beyond political risk analysis, companies in the extractive industries can utilize, as many already have, the managerial, operational, and financial tools created to guide business leaders as they consider and implement project plans in politically troubled or economically underdeveloped locations. Over time, if more NOCs tap Western capital markets, market forces may have a greater impact. As noted in a May issue of *The Economist*, "however much those who run companies hate it, the role that business plays in the developing world is going to come under growing public scrutiny, especially when the firm has shareholders in rich countries."[25] Finally, while in an embryonic stage, the development of "soft law" to guide transnational corporate conduct may signal the distant but conceivable prospect of adjudicating liable business behavior before a competent international tribunal.[26] In the meantime, as described by UN Business and Human Rights Envoy John Ruggie, the concept of "shared responsibility and joint governance among different stakeholders" offers a theoretical point of consensus for advancing the movement for corporate social responsibility.[27]

Finally, the United States needs to recognize that, given the bureaucratic inefficiencies and domestic political interference in the operations of national oil companies, future oil resources might simply not materialize in the volumes we expect and need. This possible shortfall means that any energy strategy that only tinkers at the margins—such as investing heavily in biofuels—will fall dangerously short of what is required. An effective and broad-based American effort to reduce oil use by adopting more efficient transportation technologies or shifting to non-oil fuels would be extremely effective in not only limiting the monopoly power of any imaginable alliance of NOCs, but also in ensuring that any shortfall of oil that may result from ineffective NOC investment in resources can be countered by supplementary alternative energy supplies. A greater political effort to create a more comprehensive domestic energy policy would increase US energy security and it would enhance US credibility on the world scene, limiting the future challenge posed by NOCs to the US and its allies.

Notes

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[3] Natalie Obiko Pearson,"Venezuela Seizes Last Private Oil Fields" *Associated Press Online*, May 2, 2007.

[4] Major US oil companies, whose oil assets had been expropriated, enacted an embargo against Mexican oil and the US government suspended direct purchases of Mexican silver that provided important revenue for the Mexican government. However, these and other measures proved short-lived, especially as President Franklin Roosevelt and US Treasury and military officials sought stable bilateral relations in the pre-war period of the late 1930s. For more see: Catherine Jayne, *Oil, War and Anglo-American Relations: American and British Reactions to Mexico's Expropriation of Foreign Oil Properties, 1937–1941* (Westport, CT: Greenwood Publishing, 2001); Jonathan C. Brown and Alan Knight, *The Mexican Petroleum Industry in the Twentieth Century* (Austin, TX: University of Texas Press, 1992); Daniel Yergin, *The Prize: The Epic Quest for Oil, Money & Power* (New York: Free Press, 1991); and J. Richard Powell, *The Mexican Petroleum Industry, 1938–1950* (Berkeley: University of California Press, 1956).

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[17] *The Changing Role of National Oil Companies in International Energy Markets*, Baker Institute Study.

[18] Robert Gilpin, *The Challenge of Global Capitalism*, (Princeton, NJ: Princeton University Press, 2000), 227–264; and Robert Gilpin, "The Rise of American Hegemony," in *Two Hegemonies: Britain 1846–1914 and the United States 1941–2001*, edited by Patrick Karl O'Brien and Armand Clesse (Aldershot: Ashgate Publishing, 2002), 165–182: "In response to the ballooning American trade deficit, intensifying fears of deindustrialization, and rising protectionist pressures, the Reagan Administration in the mid-1980s significantly modified America's postwar commitment to multilateralism. The Administration began to pursue a multitrack trade policy that has not only de-emphasized multilateral negotiations, but also increased unilateralism and bilateralism (especially 'managed trade' with Japan) and economic regionalism as well (in the North American Free Trade Agreement with Canada and Mexico)."

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