UNDERMINING THE FREE OIL MARKETS?

CHINA'S PETROLEUM STRATEGY AND THE U.S.-P.R.C.-JAPAN TRIANGLE

Master of Arts in Law and Diplomacy Thesis

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Introduction

The year 2006 saw the continuation of an unprecedented climb in the prices of crude oil around the world, as prices for most grades reached all-time highs during the months of July and August.[1] The universal importance of the commodity made this price move fodder for magazine covers and constant television coverage on business and news programs. The attention stemmed from oil's position as by far the most widely used feedstock for creating transportation fuels, a position it has enjoyed for well over fifty years. Notwithstanding attempts to introduce substitutes like ethanol, oil will likely retain its dominant position as the transportation fuel of choice for the foreseeable future.

Since militaries depend on efficient mobility for operational success and oil products enable that mobility, security of oil supply is a matter of national concern to states around the world. In his 1991 book, *The Prize: The Epic Quest for Oil, Money and Power*, Daniel Yergin summed up this dynamic simply, saying, "Oil provided the point at which foreign policy, international economic considerations, national security, and corporate interests would all converge."[2] Yergin's comment referred to lessons learned by states during World War II, and the dynamic remains true today—and especially in the context of extremely high oil prices.

Historically, oil prices have moved cyclically but periodically the concept of "peak oil" creates a heightened awareness of oil's finite nature. "Peak oil" centers on the concept that humans will eventually have used half of the planet's original endowment of

[1] Department of Energy, Energy Information Agency, *April 2007 Monthly Energy Review* (accessed May 3, 2007); available from http://tonto.eia.doe.gov/merquery/mer_data.asp?table=T09.01. This information goes back to 1973. In nominal terms, nothing before 1973 approached the prices of 2006, but in real 2005 dollars, the only years during which the average price of oil has been higher than 2006 were 1860, 1980, and 1981. Source: Cambridge Energy Research Associates' (CERA) *Historical Crude Oil Prices: 1860-2006*, which is updated yearly but unavailable for public consumption, for prices before 1973.

[2] Daniel Yergin, *The Prize: The Epic Quest for Oil, Money & Power* (New York: Free Press, 1991), 410.

oil, which will undeniably happen at some point given continued consumption of oil. After that inflection point, so the theory goes, the resource will dwindle at a predictable rate and, assuming continued demand growth, oil shortages will result.[3] The concept has been around since the first oil booms of the latter half of the 1800s, but widespread concern about it ebbs and flows. Nonetheless, in times of heightened attention to "peak oil," prices can jump as some writers push the concept and buyers attempt to get ahead of the ostensibly endless climb in prices. This is certainly not the only price driver during times of tight supply, but the perception of "peak oil," whether true or not, can cause price-moving speculation.

Of course, the uncertainty lies in the fact that no one really knows when the actual inflection point will occur. Further, people will not truly know that we have reached the inflection point until well after we do. So, much of the behavior resulting from this kind of thinking is a product of perception rather than any certain knowledge. In other words, it doesn't matter if oil is plentiful when states perceive that it is not. As James Manicom noted in a paper presented to the Australasian Political Studies Association Conference in 2005, "Combined with the general link between affordable energy and economic growth, the perception of a supply shortage would cause energy security concerns to develop a zero-sum quality."[4] While Manicom's comment perhaps wrongly implies inevitability, he verbalizes a concept that *could* incite states to action. He also hints at the link between energy and

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[3] This concept is widely discussed and has been the focus of such recent books as *Out of Gas—The End of the Age of Oil*, by David Goodstein (New York: W.W. Norton & Company, 2004); *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy*, by Matthew Simmons (New Jersey: John Wiley & Sons, 2005); *Beyond Oil: The View from Hubbert's Peak*, by Kenneth Deffeyes (New York: Hill and Wang, 2005), among others. For a comprehensive look at the development and periodic influence of the concept, see Yergin's *The Prize*, passim.

[4] James Manicom, "Thirsty Eagle, Starving Dragon: Energy security and the Sino-U.S. relationship," Paper Presented to the APSA conference 28-30 September 2005-08-05. Accessed November 12, 2006. Available from http://www.ssn.flinders.edu.au/spis/research/2005papers/JamesManicomAPSA2005paper.pdf, 17.

security, as it pertains to economic stability. Acknowledging this link is crucial to understanding the geopolitically strategic nature of the energy-related actions of states.

Clearly, perception can significantly affect the behavior of states when it comes to the security of their oil supplies. This is especially true of developed states without sufficient domestic oil resources. These net oil importers are dependent for their supply on international oil companies (IOCs), foreign states, the international oil markets, and the security of the sea lanes by which oil is transported around the world. In 2005, the three largest oil importing states were the United States, Japan, and the People's Republic of China (PRC).[5] This will not change when the 2006 numbers become official, nor is it likely to change in the foreseeable future.

It is important to note that China's inclusion in this group is a relatively recent phenomenon. Indeed, China only became a net oil importer in 1993. Since then, the torrid pace of economic growth in China has driven domestic oil demand upwards so quickly that China's demand passed that of Japan after only 10 years as net importer. China's average consumption was close to 7 million barrels per day (mbd) in 2005 and is on pace to consume well over 7 mbd in 2006.[6]

Japan remains a larger importer than China, due to the fact that it imports virtually all of its crude and, of course, the United States imports much more than China. However, with China's consumption rising more quickly than Japan's, China will likely

[5] Department of Energy, Energy Information Agency, *International and United States Petroleum (Oil) Import, Export, and Net Import Tables: Net Oil Importers, 2005* (accessed February 25, 2007); available from http://www.eia.doe.gov/emeu/cabs/topworldtables3_4.html.

[6] BP Statistical Review of World Energy 2006, *Consumption* (accessed May 3, 2007); available from http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2006/STAGING/local_assets/downloads/pdf/table_of_world_oil_consumption_2006.pdf. This chart shows China's 2005 consumption coming in at just under 7 mbd. The data for 2006 have not been finalized or widely disseminated, but private analysts like CERA have the annual number for 2006 at well above 7 mbd.

be importing more oil products than Japan in less than a decade [See Table 1]. It is well known that oil is extremely important to all three states, but China's unprecedented demand growth seats a potentially revisionist player ever more firmly at the international oil market table.

Table 1

Country	Oil Demand (mbd)[a]		Net Oil Imports (mbd)		% of Demand that is Imported	
	2005	2006 (thru Q3)	2005[b]	2006 (thru Q3)[c]	2005	2006 (thru Q3)
USA	20.8	20.6	12.4	12.4	60%	60%
PRC	6.9	7.3	3.1	3.4[d]	45%	47%
Japan	5.35	5.2	5.2	5.3	97%	102%

[a] Source: Energy Information Agency Website http://www.eia.doe.gov/emeu/ipsr/t24.xls (accessed February 25, 2007)

[b] Source: Energy Infromation Agency Website http://www.eia.doe.gov/emeu/cabs/topworldtables3_4.html (accessed February 25, 2007)

[c] Source: Energy Infromation Agency Website http://www.eia.doe.gov/emeu/international/oiltrade.html (accessed February 25, 2007) for U.S. and Japan.

[d] Unofficial number calculated from various news stories attributed to the Chinese National Bureau of Statistics

China's rapid ascent on the list of oil consumers (and importers) has been unsettling for the United States and Japan. First of all, China's ever-increasing demand places upward price pressure on oil that stems from the strain placed on global production capacity. Mainly, though, China's transition away from a centrally-planned, communist economy towards a more market-based one has not thus far been accompanied by a similar transition towards military transparency.

China attempts to veil its military expenditures and capabilities, while simultaneously visiting U.S. military installations as observers. Interestingly, Chinese entrepreneurs have thrived by copying methods they learned by asking just a few pointed questions on tours of competitors' facilities; the U.S. military feels that such one-sided information "exchanges" do not serve to build trust, and may consider halting them if

reciprocation does not increase.[7] So, in the context of such guarded behavior, China's moves to guarantee the continued mobility that imported oil provides for its military has struck some analysts as threatening.

Going a step further, transparency more broadly has lagged. Nor has this transition happened in such a way as to completely reflect the free market and democratic values ostensibly held so dear by western states. The Chinese Communist Party (CCP) retains a firm grip on all the levers of power and operates a socially authoritarian state. While current signs point to a progressively more open financial system, western market participants still perceive a risk that the CCP could quickly reassert control over the Chinese economy. All of this contributes to a general sense of apprehension on the part of the United States and Japan, which makes them even more prone to perceive China's oil acquisition policies as threatening.

The policies to which the U.S. and Japan are most likely to object are ones that threaten U.S. oversight of international oil markets—a situation which benefits the Japanese, who are close allies of the United States and can comfortably free-ride the demonstrable security that the U.S. has thus far provided for the vast majority of sea transportation lanes and oil production sites. The seamless operation of a functioning, free oil market that benefits all paying participants stems from this security and a *laissez faire* approach toward those participants.

[7] James Kynge, *China Shakes the World: A Titan's Rise and Troubled Future – and the Challenge for America* (New York: Houghton Mifflin, 2006), 18-19. Kynge's book gives an anecdote that outlines the strategy. The reaction of the U.S. military to the possibility of similar strategies being used by the Chinese military came from U.S. Navy's Admiral Mark Ferguson in a lecture at the Fletcher School of Law and Diplomacy in November, 2007. He implied that the U.S. military would discontinue its invitations if there was no *quid pro quo* from the Chinese military.

Specific policies that might threaten stability include unorthodox government financing for Chinese national oil companies (NOCs) and engagement of regimes in oil-producing countries that are targeted for marginalization by Washington. Other rankling issues might proceed from the policies mentioned above, but they are unlikely to present genuine threats to the global oil markets. However, they might produce the perception of a threat to the established rules of the game and provide fodder for hawkish political responses in Japan and the United States.

Heightened attention to issues concerning oil in the context of the current high price environment provides a backdrop for the activities of these three states. In some sense, Japan and the United States have behaved in ways that seem reactive to China's emergence as a rival player. At the same time, China's behavior is not very different from that exhibited by the United States over the decades. The United States and Japan might be well-served by adjusting the institutional frameworks that have historically governed global oil acquisition policies to make China a welcome participant. This would likely include the rather difficult task—in light of membership hesitation, as well as hesitation on the part of the PRC—of securing Chinese membership in the Organization for Economic Cooperation and Development (OECD), but the institutional restraints could preempt China's mercantilist tendencies.

Numerous authors have pointed out the potential benefits of cooperation between the three states in these matters.[8] It seems, however, that mutual distrust between China and Japan and, to a slightly lesser extent, between China and the United States will preclude the United States and Japan taking a welcoming stance towards the newcomer.

[8] See Downs, Evans, Taylor, Lewis, Jaffe, Manning and others cited in this paper. Numerous other authors not cited in this paper have also spoken of the benefits accruing to cooperation on these issues.

As China continues to pursue its activities in this wary environment, the United States, and especially Japan, seem to be faced with an energy security dilemma and are acting out roles that seem to reflect, sometimes obliquely, roles captured in the classic security dilemma.

This paper seeks to answer the question: What impact, if any, are current Chinese petroleum acquisition policies having on the petroleum acquisition policies of the United States and Japan. In an effort to do so, I will first attempt to define energy security and the energy security dilemma as I see it. Then, I will examine individually the past and present petroleum acquisition policies of Japan, China, and the United States. After taking a look at the policies as they seem to be enacted, I will examine case studies that might indicate departure from or continuation of those policies. Those case studies include China's activities in Angola and Sudan; the bid for an American oil company, Unocal, by a Chinese state-owned oil company; the competition between China and Japan in Iran and Russia; and the conflict over natural gas fields in the East China Sea. I will conclude with some observations about possible developments in the future.

Chapter One: Energy Security and the Energy Security Dilemma

In 1988, Daniel Yergin provided a useful definition of energy security often used more or less unaltered by many writers on the topic, saying that it is "…to assure adequate, reliable supplies of energy at reasonable prices and in ways that do not jeopardize major national values and objectives."[9] However, eighteen years after he phrased this definition, he gave a crucial addendum, "…different countries interpret what the concept means for them differently."[10] This captures an important element of the current discussion. China, Japan, and the United States all focus on the factors most relevant to their own peculiar needs and concerns. Whereas the United States and Japan have more or less aligned their definitions as members of the International Energy Agency (IEA), and despite some cooperation, China remains officially on the outside. For all practical purposes, real engagement with China at the national policy level, especially regarding controversial practices, remains unexplored and mistrust reigns.

During the Cold War, Robert Jervis wrote an article entitled, "Cooperation Under the Security Dilemma," which proposed a framework for examining cooperation and defection in the context of the traditional security dilemma. A number of his insights seem relevant to energy security as well. Indeed, tweaking the parameters of his model to understand motivations stemming from energy security concerns creates an interesting way to explore the rivalry between the new actor and the two incumbents.

Jervis briefly describes the security dilemma, saying, "…many of the means by which a state tries to increase its security decrease the security of others."[11] This might also be a correct statement when written as: many of the means by which a state tries to

[9] Daniel Yergin, "Energy security in the 1990s," *Foreign Affairs* 67, no. 1 (1988): 11.
[10] Daniel Yergin, "Ensuring Energy Security," *Foreign Affairs* 85, no. 2 (2006): 71.
[11] Robert Jervis, "Cooperation Under the Security Dilemma," *World Politics* 67, no. 2 (1978): 169.

increase its energy security decrease the energy security of others. When talking about oil, the premise is irrelevant if one believes in the indefinite stability of the global oil markets as a reliable and predictable provider. However, if any market participants challenge the relevance of the market, the premise becomes somewhat more pertinent.

If a major participant, like China, behaves as if the market is not the supreme provider then other major participants, like the United States and Japan will take notice. China's behavior may not *necessarily* dictate the behavior of the other two, but it could. The very fact that China might be preparing for an alternative scenario could encourage Japan and the U.S. to hedge themselves by similarly preparing for an alternative scenario. This tendency might be amplified if either Japan or the United States perceived that the defector could succeed, or at least partly succeed, in its efforts to circumvent the dictates of the market. The tendency might also be amplified by fears of what might result from China's successful deviation. Clearly, because of its absolute dependence on the physical market as overseen and guaranteed by the military and economic strength of the United States, Japan has the most to lose.

It is crucial to delineate the differences between the United States and Japan in their respective roles as cooperators. As mentioned above, Japan imports 99% of the oil that it consumes, and is absolutely reliant on those imports for its economic stability. The United States, on the other hand, like China, has significant domestic production. While the two larger states are heavily reliant on the market for supply, they are nowhere near as vulnerable as Japan. Indeed, speaking of risks in the context of a new national energy strategy, the Institute of Energy Economics Japan (IEEJ) said in the first paragraph, "Japan's poverty of energy resources means that these new risks and threats have a

crucial bearing on its existence as a state."[12] This is strong language from a group whose input helped to create Japan's New National Energy Strategy, which was published in May of 2006. While China and the United States must be very cognizant of energy security, their worries are not existential.

Thus, Japan becomes the lynchpin in this triangle. Japan's vulnerability might make it jumpy and unpredictable in times of stress. Currently, the United States guarantees Japan's security and this becomes a factor when eyeing the various potential stress points in the system. Almost thirty years ago, Jervis made the point,

> The easier it is to destroy a state, the greater the reason for it either to join a larger and more secure unit, or else to be especially suspicious of others, to require a large army, and, if conditions are favorable, to attack at the slightest provocation rather than wait to be attacked….By contrast, if…states are resilient, they can afford to take a more relaxed view of threats.[13]

Jervis captures the dual relationship perfectly. Applied to energy, Japan's absolute dependence on the market makes it more likely to feel cornered by threats, perceived or otherwise, to the oil markets as they currently function. This makes it more likely to imitate a mercantilist approach by China if it perceives such an approach to be potentially successful or disruptive to its own activities. The United States, on the other hand, with the advantage of having friendly oil exporters on its northern and southern borders as well as control over the world's sea lanes, can afford to take a wait-and-see attitude towards China's activities.

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[12] *The Establishment of an International Energy Security System—27th Policy Recommendations of the IEEJ from May of 2006* (accessed November 12, 2006); available from http://eneken.ieej.or.jp/en/data/pdf/338.pdf. I want to thank Dr. Peter Evans of CERA for highlighting this point.

[13] Jervis, 172.

Regardless of the motivating factors behind China's activities, portraying its defection or cooperation as a driver of the activities of Japan or the United States requires a look at the recent energy acquisition policies of all three states. After outlining recent behavior, any permanent changes or temporary departures might show up in better relief. Some of the recent headline-grabbing events having to do with this topic are the bid for America-based oil company Unocal by CNOOC Ltd. (a subsidiary of the government-owned Chinese National Overseas Oil Company), China's natural resource-based diplomacy in Africa, Japan's tussle with the Iranian government over investments in the Azadegan oil field, and the simmering conflict between China and Japan over the East China Sea gas fields. Following a look at the current drift of the three countries' policies, examining these events might provide some insight into both the opportunities for cooperation and the dangers of inertia, as well as what impact, if any, Chinese policy is having on that of the U.S. and Japan.

Chapter Two: China's Petroleum Policy

China's energy acquisition policies must be regarded as extremely complex, and academics are racing to analyze them. Unfortunately, they also remain the most difficult to discern with any real clarity. Due to endless questions about the credibility of information provided under the close watch of the authoritarian government in China, outsiders reluctantly rely only on what little information independent analysts can add to the rhetoric and statistics provided by the government to assist in the analysis of various activities. Of course, the NOCs like China National Offshore Oil Company (CNOOC), the Chinese National Petroleum Corporation (CNPC), and Sinopec publish information. However, because they are state-owned enterprises (SOEs) and thus beholden to the PRC government, their credibility remains in doubt. Given this backdrop, it seems most telling to observe and analyze the actual activities of various Chinese actors.

Nonetheless, there is widespread agreement among academics that many of the elements of energy security as defined above play a significant role in Chinese decision-making.[14] Stability of supply and reasonable prices are central tenets. Additionally, as Erica Strecker Downs has pointed out, the policy-making apparatus in China is not monolithic. There is no ministry for energy, so the responsibility for formulating policy falls to a number of participants, including the Chinese national oil companies (NOCs), the National Development Reform Commission (NDRC), the Ministry of Foreign Affairs (MFA), the People's Liberation Army (PLA), and a few others.[15] These groups sometimes have divergent interests and in her article, "The Chinese Energy Security

[14] Erica S. Downs, "The Chinese Energy Security Debate," *The China Quarterly* 177, no. – (2004): 23. Available from Cambridge Journals Online.
[15] Ibid., 24.

Debate," Downs examines at length the various ideas and concerns being submitted to the Chinese leadership by all of these sources.

While these ideas all contribute to the formulation of energy policy in China, such as it is, I submit that the most telling indicator of policy is the actual action that has come out of China's historic transition from oil exporter to oil importer. Indeed, even as some observers point to a shift towards policies placing more emphasis on sustainability and conservation, they concede that the inertia of current direction will be the main driver in the short and medium term.[16] Thus, examining what China has done in the past and what it is doing currently will serve to highlight potential catalysts for reactions—either positive or negative—by Japan and the United States.

Historical circumstance placed China in a largely different situation than Japan. First of all, in terms of industrial development, China lagged far behind Japan for the first three-quarters of the twentieth century, as it was hindered by civil war and the Japanese occupation until the establishment of the PRC in 1949. Additionally, the size and geography of the PRC gave it access to ample oil and natural gas reserves, which ensured self-reliance in oil. In fact, China even exported oil to Japan. However, since 1993, when China became a net importer of oil,

> [China's] GDP has almost tripled and its demand for oil has more than doubled. Today, China imports 3 million barrels of oil per day, which accounts for almost half of its total consumption. China's share of the world oil market is about 8 percent, but its share of total growth in demand since 2000 has been 30 percent.[17]

[16] Christian Constantin, "China's Conception of Energy Security: Sources and International Impacts" (UBC Centre of International Relations Working Paper No. 43, March 2005). Available from http://www.iir.ubc.ca/Papers/Constantin-WP43.pdf (accessed November 18, 2006), 18-19.
[17] Yergin, "Ensuring Energy Security," 72.

Chinese oil demand has increased since Yergin wrote his article to average over 7 mbd during 2006, and Chinese production has not significantly increased.[18] As indicated earlier, that shortfall in domestic production is being covered by increasing imports [See Table 1]. As is the case in most other industrialized and developing countries, the rate of China's oil consumption rises in conjunction with its GDP. Given China's continuing focus on industrialization as a mean to strengthen its economy, the resultant GDP growth will almost surely result in ever more oil consumption and imports.

While the specific numbers released by China have been subject to some criticism, the PRC claims to have averaged annual GDP growth rates of over nine percent during the period from 1979 to 2004.[19] While those numbers might be disputed, all agree that China's GDP grew significantly during that time, and shows no signs of slackening now. China's reports from 2005 remained consistent, indicating GDP growth of 9.9%,[20] and China's GDP grew 10.7% in the third quarter of 2006.[21] As long as China's GDP continues to grow, its oil consumption will continue to grow along with it.

In keeping with this economic success, China's approach to oil security has become decidedly more relevant to other oil-consuming nations over the last ten to fifteen years. More pointedly, over the last five years its approach has become highly visible, with state-owned NOCs acquiring overseas oil and natural gas assets, mainly in Africa and the Middle East. Consequently, China has engaged controversial regimes like Sudan, Venezuela, and Iran in this process, creating tension with the United States as the

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[18] Cambridge Energy Research Associates, "The Cost of Fear and the Oil Price Playing Field," *World Oil Watch,* October 2006. This information is available to paid subscribers.
[19] *China Revises its GDP Growth Rate in 1979-2004* (accessed April 23, 2006); available from http://www.china.org.cn/english/government/154646.htm.
[20] *National Economy Maintains Stable and Fairly Fast Growth in 2005* (accessed April 23, 2006); available from http://www.stats.gov.cn/enGliSH/newsandcomingevents/t20060125_402302848.htm.
[21] P.R.C. State Council, National Bureau of Statistics, *Monthly Data* (accessed November 18, 2006); available from http://www.stats.gov.cn/enGliSH/statisticaldata/monthlydata/t20061101_402361358.htm.

latter attempts to marginalize those regimes in the international community.[22] This has implications for Japan, which has long-standing relationships with both Iran and Venezuela. From Japan's perspective, U.S. pressure to withdraw from such countries could create opportunities for China to benefit at Japan's expense. In addition to these controversial regimes, China has engaged in oil diplomacy with resource-rich countries throughout Africa, some of which might be targets for U.S. moralizing in the future. These might seem to be geopolitical issues, but they are only relevant because of the energy assets at stake, which again highlights the similarity and, indeed, interconnected nature of strategic issues and the energy security dilemma.

China has also focused its attention on developing its internal resources, sometimes with the help of IOCs. The significant projects are in the western province of Xinjiang and in the erstwhile disputed regions of the East and South China Seas. Additionally, the PRC has actively pursued the completion of overland pipelines that would link its coastal population centers to the sizable oil and natural gas deposits of Russia and Central Asia. Finally, China has begun to slowly create its own strategic petroleum reserve (SPR), which would serve the same role as it does for OECD countries like the United States, who agree to pay for SPRs as a condition of their membership in the International Energy Agency (IEA).

A crucial driver of China's energy policy is the fact that the three largest Chinese oil companies are all substantially controlled by the Chinese government. Nonetheless, since 1998 the Chinese government has allowed the managers of its NOCs to pursue business opportunities based on profit motive rather than production targets.[23] At the

[22] David Zweig and Bi Jianhai, "China's Global Hunt for Energy," *Foreign Affairs* 84, no. 5 (2005): 32.
[23] Downs, "The Chinese Energy Security Debate," 37.

same time, the overall strategy, "…is built on relatively tight coordination between state geo-political interests and energy interests. For China's leaders, energy security clearly is too important to be left to the markets."[24] China lets its energy companies run under a capitalist model, but seems inclined to secure energy assets that will be partly devoted by contract to China's consumption needs. This is not unusual as such, but China's huge and growing appetite seems to be spurring more aggressive Japanese competition over promising petroleum deposits.

Of course, the Chinese oil companies also continue to push for access to overseas oil assets because they want to gain the expertise to compete with the global supermajors: ExxonMobil, British Petroleum, ChevronTexaco, ConocoPhilips, and Total.[25] And, despite its occasional efforts to provide guidance to the Chinese NOCs, the Chinese government supports their global ambitions, as their eventual rise to prominence would lessen the importance of those western supermajors that currently dominate the global markets.[26]

The structural links between the government of the PRC and its oil companies give the oil companies financial strength that they might not otherwise have if they were run in a free market fashion. For instance, despite the fact that CNOOC has raised capital through equity listings in China and abroad, the PRC government retains 70% control through its complete ownership of CNOOC's majority shareholder, China National Offshore Oil Company.[27] It remains unclear exactly what role the politicos in China play

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[24] Mikkal E. Herberg, *Asia's Energy Insecurity: Cooperation or Conflict* (accessed November 11, 2006); available from http://www.nbr.org/publications/strategic_asia/pdf/sa04_11energy.pdf, 351.
[25] Downs, "The Chinese Energy Security Debate," 25.
[26] Erica Strecker Downs, *China's Quest for Energy Security*, (Santa Monica: RAND, 2000), 51.
[27] "CNOOC's bid for Unocal is purely commercial, CNOOC Ltd.," *People's Daily Online*, July 1, 2005 (accessed April 3, 2007); available from http://english.people.com.cn/200507/01/eng20050701_193475.html.

in the management and direction of the NOCs, but there is no doubt that the CCP is the majority shareholder and can exercise influence if and when it chooses to.[28]

As CNOOC and CNPC have bid for and acquired energy assets around the world, Chinese government strategy has certainly played a role in the choice of targets, resulting in the acquisition of some assets (like Canada's PetroKazakh) that might produce oil for transport overland via pipeline. This, of course, obviates the need to use the U.S.-dominated sea lanes and would complicate U.S. strategy in the event of a crisis wherein the U.S. wanted to disrupt Chinese oil supplies. If such a crisis turned out to be war, the United States would likely violate the sovereignty of not only China, but potentially other nations through which the pipeline would run.[29] More importantly, for those interested in the operation of the global markets with a minimum of governmental interference, favorable financing arrangements and ostensibly unrelated development loans supplied by the PRC government may give the Chinese NOCs an edge in competing for the most promising oil sites around the world, thus pushing companies without such cozy relationships to the margins.[30]

Observing the actual events that have taken place over the last few years leads one to a conclusion that reflects Downs' assessment of the dominant ideas in Chinese energy policy. Namely, that the major elements of China's energy policy are to continue following through on "…plans for a SPR, investment in overseas oil fields, the construction of transnational pipelines and oil diplomacy."[31] Downs saw these as the

[28] Steven W. Lewis, "Chinese NOCS and World Energy Markets: CNPC, Sinopec and CNOOC," *The Baker Institute Energy Forum*, March, 2007, 49. Accessed April 3, 2007. Available from http://www.rice.edu/energy/publications/docs/NOCs/Papers/CNOOC_Lewis.pdf.
[29] Downs, *China's Quest for Energy Security*, 46-47.
[30] Lewis, 3.
[31] Downs, "The Chinese Energy Security Debate," 32.

dominant themes in 2004 and they remain so; they are all things that China has done or is in the process of doing. Taken alone, these activities are no different than those of other oil-consuming nations, and could be seen as beneficial to global petroleum security.

However, the repercussions of these activities taken together are the subject of some disagreement. Many observers agree that China gives at least the appearance of attempting to circumvent the market by locking up energy assets.[32] They point to China's purchase of equity oil stakes in various oil-producing countries as evidence of China's mercantilist intentions. China's Tenth Five-Year Plan lends some credence to these fears by stating the goal of increasing to 30% the proportion of oil imports that come from equity oil stakes held by Chinese companies; Downs goes a step further and asserts that China "…would probably prefer to have the oil China imports lifted by Chinese companies and transported by Chinese-flagged tankers."[33] The Chinese will likely have difficulty meeting these targets but, again, the *appearance* of trying to work outside the market, and the perceptions thus created can change the behavior of rivals like the U.S. and Japan. Although Japan seems to be creating its own goals for equity oil production, historically the United States and Japan have been content to rely on the various participants in the international oil markets for provision of petroleum products.

In the short-term, the thought process underlying this mercantilist approach to energy security certainly seems unsteady, since the United States can control and does protect the sea lanes by which this equity oil would be delivered.[34] And currently, the amount of oil that China controls represents a tiny fraction of the global oil market, making China's attempts to horde supply meaningless to other countries. But while

[32] See Downs, Herberg, Jaffe, Lewis, and Taylor all cited in this paper.
[33] Ibid., 35.
[34] Amy Myers Jaffe and Steven W. Lewis, "Beijing's Oil Diplomacy," *Survival* 44, no. 1 (2002): 125.

China is investing in a blue water navy that will result in greater influence in the Pacific region, it does not, for now, seem to be investing in the naval necessities to challenge the United States global naval supremacy.[35] Indeed, according to the U.S. military, the PRC is unlikely to launch even one aircraft carrier before 2015, and even that might not happen until 2020, if at all.[36]

This implies a willingness to depend in the short to medium term on the global oil markets as a reliable sea-borne delivery system. Thus, it should be the longer-term implications that compel attention; as China seeks to circumvent traditional market methodologies and oil markets become tighter over the next twenty or thirty years, it could force countries like Japan or the United States in similar directions, if only to compete. Such developments would likely be accompanied by growing Chinese military strength, which in a tense environment, would make the U.S. and Japan hyper-conscious of the security of their oil supplies, and might tempt the two governments to become more directly involved in ensuring that security.

[35] In class presentation at the Fletcher School by U.S. Admiral Mark Ferguson, November 13, 2006.
[36] Department of Defense, Office of the Secretary of Defense, *Annual Report to Congress: Military Power of the People's Republic of China 2006*, 31-32.

Chapter Three: Japan's Petroleum Policy

Japan's fossil fuel policy gradually shifted in the post-war period from one focused on coal to one focused on oil. Natural gas has worked its way into the policy, but the technical and corporate issues behind the use of natural gas are closely related to those of the oil industry, thus the policy approach is as well.

Japan has never been blessed with the vast petroleum reserves that some other industrialized countries have. This probably has much to do with the rather pedestrian development of its domestic oil industry. The decreasing relevance of oil extraction in Japan during the first half of the twentieth century resulted in a stratification of the oil industry into two distinct sectors. On the one hand, there was the anemic upstream exploration and production sector and on the other hand, there were the downstream refiners, wholesalers, and retailers.[37] Importantly, this also meant that self-reliance in energy issues was impossible. Unlike China after 1949, post-occupation Japan necessarily had to reengage the international energy markets, inevitably resulting in close ties between Japanese oil companies and western (mostly American) oil companies.

While the Japanese government tried for much of the twentieth century to direct Japanese companies towards consolidation that would mirror the more successful western companies, it largely failed. And its failure was marked by poorly conceived financing support for upstream actors from government agencies external to the oil industry. In other words, despite its efforts to guide the industry, the Japanese government was never able to take a meaningful equity stake in the relevant companies that might have given it leverage. At the same time, the domestic Japanese industry resisted consolidation, with

[37] Richard J. Samuels, *The Business of the Japanese State: Energy Markets in Comparative and Historical Perspective* (Ithaca: Cornell University Press, 1987), 168.

the Japanese downstream sector doing everything it could to avoid using the proceeds of its virtual monopoly for financing risky upstream projects overseas.

After the U.S. occupation of Japan ended in 1952, Japan's Ministry of International Trade and Industry (MITI) attempted to minimize the island nation's reliance on the western IOCs by promoting such ventures. More specifically, MITI wanted to find a way around the Japanese downstream industry's dependence on foreign capital and exploration and production (E&P) expertise.[38]

The first attempt came as MITI negotiated a compromise with the Ministry of Finance that would establish the Japan Petroleum Exploration Company (JAPEX), to serve ostensibly as a national policy corporation. However, a company called Teikoku Oil had a legacy of dominance in Japan's upstream and was able to leverage its contacts with the Ministry of Finance. Teikoku was a joint venture of the major downstream Japanese companies and the compromise that resulted in JAPEX's formation made it the dominant shareholder in the new, government-financed venture. The financing arrangement allowed Teikoku's shareholders to poach off the exploration to be done by JAPEX—investing little themselves, but reaping the benefits of any successes.[39] This arrangement reflected the continued preponderance of private sector, mostly downstream, concerns in *de facto* oil policy.

JAPEX began operations under the legacy of competition between the various domestic refiners that controlled Teikoku. These companies, who had found willing upstream partners in the international majors, wanted to focus on domestic refining activities—to the detriment of JAPEX's proposed upstream explorations. As this rather

[38] Chalmers Johnson, *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975* (Stanford: Stanford University Press, 1982), 192.
[39] Samuels., 193

impotent arrangement languished during the late 1950s and 1960s, the Japanese economy continued to shift its predominant energy sourcing from coal to oil.[40] While the established players focused on domestic investments, unable to see the future benefits of acquiring direct control of overseas assets, the Japanese oil industry fell further and further behind the multinational powerhouses. Thus, Japan's private sector willingly continued its trend of insignificance in global upstream activities, despite the best efforts of policy-makers.

As MITI became more solidly entrenched in the Japanese political economy, it tried repeatedly to control the fragmentation of the domestic oil industry.[41] By the late 1960s, it was clear to all concerned that oil was the fuel of the future. MITI's quest to direct a national response to the challenge of securing supply compelled it to develop the explicit goal of creating a national champion but the efforts to realize that goal failed,

> Early efforts to achieve a market presence for the state in the form of an ENI-like "Japanese major" (*wasei mejā*) were sacrificed to political expediency. MITI settled for a second petroleum industry law (PIL-II) instead. Successive MITI visions of an integrated national oil champion were transformed into more limited proposals for a state presence in the oil market place which became little more than the state exhorting the private sector to consolidate. State policy never served to transform the market…it consistently served to ratify it.[42]

The strength of the vested interests in the private sector resulted in a pointed lack of Japanese presence in upstream markets. Despite the continued efforts of bureaucrats, the Japanese government proved unable to guide oil acquisition policies as it would have liked. And in their competition with one another, Japanese firms never took the initiative to consolidate their industry. Thus, no prospects materialized for a Japanese firm capable

[40] Ibid., 195
[41] Ibid., 196
[42] Ibid., 196

of competing on the international stage, leaving Japan perennially dependent on the firms of other nations for its increasingly crucial oil supplies.

MITI's frustration with this situation continued even with the creation of the Japan Petroleum Development Corporation (JPDC) in October of 1967, which briefly took over JAPEX as its E&P arm, explicitly offering cheap financing to the industry shareholders. This lasted only until 1970, when JAPEX reverted to the ineffective E&P stepchild of the Japanese downstream companies. Only this time it retained the implicit offer of cheap financing from JPDC.

This bumbling quest for access to overseas supply became a secondary concern with the onset of the Organization of Petroleum Exporting Countries (OPEC)-administered oil shocks of 1973 and 1974. The turmoil of the global oil markets played to Japan's deepest fears as the IOCs were forced to reallocate and ration non-Arab oil to satisfy demand in all of the countries targeted by the OPEC embargo. In this situation, Japan for the first time exhibited a willingness to break with the United States on foreign policy, hinting at a shift towards the Middle East.[43]

The solution came as industrialized nations of the OECD formed the International Energy Agency as a counterweight to the power of OPEC. Membership obligations of the IEA still underlie Japanese oil policy, requiring signatories, "To maintain and improve systems for coping with oil supply disruptions," by assisting in the creation of an emergency sharing system and investing in strategic petroleum reserves (SPR).[44] The costly purchase of SPRs by governments of the largest and most oil-dependent countries creates opportunities for free-riding by both industry and less dependent countries, but

[43] Yergin, *The Prize*, 628-29.
[44] *International Energy Agency-An Overview* (accessed March 22, 2007); available from http://www.iea.org/Textbase/about/docs/Overview.pdf.

the oil shocks made clear that they were one of very few ways to combat the "oil weapon," as wielded by OPEC. Japan began to build its own SPR in earnest around the time of the second oil shock that coincided with the fall of the Shah in Iran.

More importantly, perhaps, is the IEA's admonishment, "To promote rational energy policies in a global context through co-operative relations with non-Member countries, industry and international organizations."[45] This is the current incarnation of what originally came across as an exhortation for countries to count on the market as it was (and would be under the aegis of the IEA), for delivery of adequate supply. And it presupposes the continued prevalence of the IOCs as the accepted method of delivery. Of course, the market was tested by the first oil shock and failed to deliver enough oil at low enough prices to satisfy industrial consumers. The prescription of the IEA was preemptive cooperation amongst industrial nations that would allow the infrastructure set up by the IOCs to continue to work. Japan ultimately sided with the importing nations of the industrial world and continues to depend largely on the market as run by IOCs.

Still, as before the first oil shock, Japan continued its attempts to create its own presence in the upstream side of the market presence. Around the time of the second oil shock in 1978, JPDC became the Japan National Oil Corporation (JNOC), but very little changed except for its responsibility for Japan's SPR. Both incarnations of this organization amounted to government financing for projects proposed by the private sector, and the SPR was yet another, albeit crucial, government expense that served to help the industry as it was. Essentially, these government initiatives reinforced moral hazard in the Japanese upstream oil industry, with private sector companies giving up no

[45] Ibid.

equity, but using the government as a guarantor for projects, no matter what the level of risk.[46]

Ultimately, JNOC disappeared into a number of other ventures in 2005 with a consistent record of failure and massive losses.[47] This legacy of failure and inactivity in upstream activities provides a backdrop for the changes that have occurred over the last ten years, as Japan has responded to China's shift from a supplier of Japanese oil to a competitor for oil imports. Ultimately, as JNOC failed to constructively produce profitable upstream assets for the Japanese oil industry, that industry became ever more dependent on the market. The unstated Japanese policy was for its downstream operators to pay for crude oil, regardless of cost, in the assumption that the IOCs of its allies would operate the international oil business for the foreseeable future. China's apparent oil policy may undermine this assumption and could be the impetus for the renewed vigor of Japanese bidding for overseas oil assets, which contravenes the spirit of cooperation enshrined in the IEA agreement.

Indeed, Japan's new energy policy published in May of 2006 can in some ways be seen as a direct response to the challenges posed by China's emergence as such a large consumer of oil, as well as to the explicit goals of China's Tenth Five-Year Plan, which was still effective when Japan's new energy policy was being drafted. One of Japan's explicit goals is to increase the percentage of imports made up by Japanese equity oil from the current 15% to 40% by 2030.[48] As mentioned above, part of China's last five-

[46] Samuels, 215
[47] Martin Fackler, "Finding Oil is Japan's New Priority," *Wall Street Journal*, March 9, 2005 (accessed April 23, 2006); available from http://www.uofaweb.ualberta.ca/chinainstitute/nav03.cfm?nav03=44056&nav02=43872&nav01=43092
[48] Japan Ministry of Economy, Trade and Industry, *New National Energy Strategy*, May 2006. English translation of document provided by Peter Evans.

year plan was to increase its own equity oil to 30% of imports. This, of course, will pit the two rivals against one another in competition to develop the rare promising development blocks that come available.

Chapter Four: America's Petroleum Policy

Oil policy in the United States developed somewhat more organically than elsewhere in the world. Unlike Japan, the United States was blessed with a huge natural oil endowment that attracted entrepreneurs eager to take advantage of growing demand for petroleum products. Additionally, unlike China, the U.S. expanded quickly during the latter half of the nineteenth century and throughout the majority of the twentieth century. China, on the other hand, staggered through much of that time under the burden of a crumbling empire, followed by colonialism, civil war, and the misguided economic directives of the Maoist CCP.

As entrepreneurs in America took advantage of the economic growth occurring in the emerging industrial power, as well as the gradual integration of oil usage into the industrial and retail complex, massive corporations emerged. Chief among these was the legendary Standard Oil Company, which briefly controlled a global monopoly over the supply of oil. As it became clear that the United States would not be the only major oil producer, the strength of that monopoly waned. Nonetheless, U.S. government confronted the behemoth that had grown up under its protection and forced the breakup of Standard Oil in 1911.[49]

Ultimately, the U.S. government took a stand against monopolies in numerous industries, including oil. Mandates handed down from above caused Standard Oil to splinter into a number of regionally-centered organizations that ultimately evolved into some of today's supermajors, namely ExxonMobil, ConocoPhillips, and ChevronTexaco. While interesting, the more salient point is the precedent set by these interactions: the

[49] Yergin, *The Prize*, 109.

U.S. government was willing to meddle in the affairs of these giant and powerful corporations, but the entrepreneurial American ethos, although embattled by the poor public image of various monopolists, protected them from any kind of nationalization.

This remains true in the United States, thus far. However, the government and the people it represents have always had an ambivalent relationship with these giant oil companies, which have made enormous profits from the removal, processing, and sale of what is essentially the American national endowment of oil. Periodically, representatives of these companies have to appear before Congress, whether fairly or unfairly, to defend themselves against allegations of profiteering, environmental apathy, and other corporate sins. At the same time, some companies have received subsidies to encourage drilling in hard-to-reach places like the deep waters of the Gulf of Mexico.[50] The largest companies have also worked in concert with the U.S. and other governments to guarantee continued flow in times of shortage and crisis. Indeed, during World War II, oil supplied largely by U.S. companies kept Allied forces moving—at least it did when the ships carrying it managed to avoid the torpedoes of German submarines.[51]

In 1943, during World War II, the U.S. government contemplated going into the oil business as a part owner in a U.S.-based joint venture that would be involved in upstream activities in Saudi Arabia. This initiative fizzled in the face of unified opposition from all the domestic oil companies *not* included in the joint venture, which feared the strength of the "competition" and the possibility of nationalization in the

[50] Edmund L. Andrews, "Big oil companies reap windfalls on U.S. incentives for drilling," *International Herald Tribune*, March 27, 2006 (accessed May 7, 2007); available from http://www.iht.com/articles/2006/03/27/business/oil.php.
[51] Yergin, *The Prize*, 371-384.

future.[52] As the exigencies of World War II drove the entire discussion and it still failed, this might be called the closest that the United States government ever came to being directly involved in the oil business.

Nonetheless, the famous meeting between President Franklin Roosevelt and Saudi Arabia's King Ibn Saud on Roosevelt's return trip from Yalta helped to ensure friendly relations between the United States and Saudi Arabia, as well as fertile ground for investment in Saudi oil fields by U.S. companies. While Saudi Arabia nationalized its oil assets during the 1970s, the friendly relations remain and the market system receives relatively consistent Saudi production and investment, ostensibly in exchange for a continuing safety guarantee for the ruling House of Saud. This provides an excellent example of the relationship between the U.S. government and its oil companies; Washington is willing to use its strength to secure good relations, but leaves the actual financial and corporate operations to companies with which it has a legacy of doing business. Of course, as in any such relationship, this one experiences some turmoil in the political arena. But on the whole, both the U.S. government and the U.S. oil companies benefit immensely from the current arrangement.

This marriage was defined by anti-trust activity in the early part of the twentieth century, was consummated during World War II, and has remained healthy since, largely because it hasn't experienced untenable stress. Indeed, even during the oil shocks of the 1970s the U.S. government intervened in the oil business only through regulatory action. At no time did the "stagflation" of the 1970s lead the United States towards nationalization of its oil companies. This might have been a result of America's ideological Cold War position as the leader of the capitalist-oriented, liberal-democratic

[52] Ibid., 399.

world; nationalization would not have looked good set against the centrally-planned economy of the USSR. Rightly, the United States wanted to provide a successful and ideologically consistent capitalist model that would counter the then-seemingly powerful Soviet economy. Still, the practical result is that the U.S. government retains its legacy of eschewing ownership of oil assets around the world, including its own; it attempts to influence production decisions through international negotiation and domestic legislation.

Essentially, the alternative to nationalization was United States participation in the creation of the IEA. The practical result of the IEA, of course, was enshrinement of the dominance of the IOCs under the watchful eye of the U.S. military. This stemmed from the natural position of leadership assumed by the United States in the process as the leading consumer and importer of oil, as well as the necessary participation of its oil companies in the reallocation of non-Arab oil to consumers around the world during the first oil shock. It was in the interest of Washington to support anything that would prop up the workings of the oil market as run to best serve the global, petroleum-based economy, so it was a simple thing for the U.S. to buy in to the premises laid out in the section above pertaining to Japan's oil policy—reliance on the market would assure its relevance. Adherence to the mandates of the IEA remains a fixture of current American oil policy and benefits both the U.S. government and American IOCs. In other words, IEA membership means an implicit acceptance of the market system combined with careful preparation in the event of supply disruptions.

But the relationship between the private oil industry and the Washington also firmed as a result of the geopolitical situation that immediately followed World War II *before* the deep freeze of the Cold War, in which the United States was the dominant

power on the planet, but was about to relinquish its position as the dominant oil producer on the planet. Until 1947, the United States produced enough oil to cover its own consumption. The balance of production supplied overseas markets. Around 1948, the United States experienced what China experienced in 1993 as it began to import more oil than it exported.[53] While the exigencies of World War II raised fears of future oil shortages for the U.S. military, the commanding geopolitical position occupied by the U.S. military, combined with its footholds in the Middle East, allowed the *laissez faire* treatment of the oil companies. While the concern for the future was there, nothing pressing threatened the integrity of the infrastructure in place.

This system, with the added dynamic of decreasing U.S. production in the face of increasing U.S. demand, has not been tested as it was during World War II. Although China and the Soviet Union both nominally participated in Korea and Vietnam, the hot wars since World War II have never pitted the U.S. military in *open* conflict with a potentially global adversary. Thus, security of supply has not been of major concern as U.S. naval power has never come under existential threat. That is not to say that such an existential threat exists or is likely to exist in the near future, but the multipolar aspirations of the PRC place the United States in the awkward position of appearing both unconcerned with *and* supportive of Chinese oil policy as a whole, while simultaneously trying to subvert potentially threatening aspects of it.

As it relates to the IOCs and their independent competitors, the policy of the United States has been to spur investment with royalty relief in times of low oil prices and to attempt with varying success to renege on those breaks and incentives in times of industry weal. Currently, however, the additional issues of "reliance on foreign [read:

[53] Ibid., 410.

Middle Eastern] oil" and climate change add complexity to the relationship. Thus far, the policy solution of the Bush administration has been to encourage the use of ethanol and the development of more domestic oil assets, currently protected by environmental regulation, as a means of reducing dependence on foreign oil. As far as environmental concerns go, the governments of some states offer tax abatements for environmentally-friendly automobiles and the federal government offers rhetorical flourishes about the future of renewable fuels.

Nonetheless, the foreseeable future of oil policy in the United States will involve keeping relationships with foreign oil producers strong and attempting to insure the security of global oil supply in the face of quickly-rising demand. Excluding the inevitable disagreements stemming from its support for Israel, the U.S. has always placed a premium on building and maintaining friendly relations with important oil producers. Difficulties with Iran since 1978 and Iraq throughout have complicated that approach, but the U.S. remains hedged by its friendship with Qatar, United Arab Emirates, Kuwait, and the Saudi regime, which retains a firm grasp on by far the largest proven oil reserves controlled by one state. So, despite China's activities in some of the marginal oil producing countries, the biggest prizes remain well within the United States' sphere of influence.

Chapter Five: China in Africa

The actions of China's NOCs in Africa represent a cause for concern in the United States and, to a lesser extent, Japan. China's treasured dedication to the concept of sovereignty allows it to ignore the inner workings of the countries of Africa in which it invests. This flies in the face of ostensibly well-intentioned efforts on the parts of western multilateral organizations like the International Monetary Fund (IMF) and some western governments. Some see this as a reflection of China's realist approach to economics and foreign relations, while others see this as a fortunate rhetorical ploy that allows China to exploit oil assets in African states without competition.

Whatever the motivations might be, China is thumbing its nose at the normative developments taking place among the industrial nations that make up the OECD and the IEA. Certainly, the United States does not have a stellar record of standing up for its erstwhile moralizing rhetoric, but the IEA system it helped to build has a solid record of keeping the market for physical oil products stable, if not the price for those products. And if the freedoms touted as inalienable by the west have not necessarily improved in the U.S.-aligned Middle Eastern oil exporters, living standards have. China has cooperated with the IEA on numerous issues, but its behavior in Africa exhibits hallmarks of revisionist tendencies. While not immediately threatening, China's stepping outside of the familiar and tested could undermine confidence in the system over the long term.

Clearly, though, China has been able to parlay its devotion to sovereignty into a mutually beneficial exchange with some African countries. Growing economic ties highlighted by trade and investment in the African oil industry have created a *de facto*

alliance in the United Nations, whereby some African states frustrate western efforts to condemn China's record on human rights.[54] At the same time, China provides an alternative measure for financing in countries with attractive natural resource assets, which comes with no conditions attached, outside of the nearly universal requirement to break off relations with Taiwan in favor of the PRC.[55] This makes a mockery of growing western efforts to improve transparency and promote democracy, highlighting an issue that may stand in the way of meaningful cooperation between China and the United States, especially if China benefits by the approach.

Angola

One African country in which China is extremely active is Angola. That state recently became China's largest supplier of oil, increasing exports to the PRC by 64% over the previous year to reach 540,000 barrels per day (bpd) for the January to May period of 2006. This represents 18% of China's total crude imports for the period, which is just ahead of the 17% that China imports from Saudi Arabia.[56] China is also Angola's second largest market with its purchases making up over one third of Angola's daily production of 1.5 million barrels.

China recently buttressed its status as one of Angola's most important customers by taking a stake in developing the country's infrastructure after its recent internal war; in 2004, the Chinese export-credit agency (China Exim) extended the Angolan government

[54] Denis M. Tull, "China's Engagement in Africa," *Journal of Modern African Studies* 44, no. 3 (2006): 473.
[55] Ibid, 466.
[56] "Beijing Opts for Angolan Crude," *Petroleum Argus Global Markets*, July 10, 2006, 4.

a $2 billion credit line at an interest rate of 1.5% over seventeen years.[57] In early 2006, China increased the credit line to $3 billion, while also adding about $6.3 million in interest-free loans.[58] It goes without saying that these interest rates are well below the market. And this loan was likely the impetus behind Angola's award to the Chinese oil firm Sinopec of two promising oil exploration blocks.[59] More accurately, Sinopec holds a 75% stake in the joint venture with Angola's state oil company that holds the exploration rights. While joint ventures are common in international oil work, this favorable division of equity speaks to the venality of the Angolan government and the Chinese willingness to oblige that instinct.

That is not to say that many other oil producing nations behave differently from Angola, nor is it to say that other oil importing nations do not jump to secure their advantage when opportunities arise. Certainly, the history of the relationship between the United States and Saudi Arabia comes to mind as a suitable comparison. Nonetheless, oil development is a relatively recent phenomenon in Angola, and during the last decade human rights organizations have been more effective in creating a political environment that precludes western companies from doing business with questionable regimes. Regimes like Saudi Arabia do not seem to be realistic targets for such organizations but countries in Africa do, perhaps because superior Saudi standards of living serve as a veil for supposed human rights violations.

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[57] Ian Taylor, "China and Africa: The Real Barriers to Win-Win," *Foreign Policy in Focus*, March 9, 2007. Accessed April 2, 2007. Available from http://www.fpif.org/fpiftxt/4067.
[58] Ian Taylor, "China's Oil Diplomacy in Africa," *International Affairs* 82, no. 5 (2006): 947.
[59] Peter C. Evans and Erica S. Downs, *Untangling China's Quest for Oil Through State-backed Financial Deals* (last accessed November 17, 2006); available from http://www.brook.edu/comm/policybriefs/pb154.pdf, 3.

While western IOCs are also active in Angola, they have come under increasing pressure from these international human rights organizations to scale back operations that support Luandan elites, "…an oppressive, dictatorial regime by any standards."[60] Simultaneously, attempts by the IMF at linking the extension of loans to successful reform on the part of the Angolan government have been undermined by the aforementioned credit line from China. By providing Angola with alternative financing, the PRC has created an environment in which corruption and poor governance can continue to flourish in a country that has not seen the vastly improved living standards provided by U.S. allies in the Middle East.[61]

China's willingness to ignore such issues stems from its belief in sovereignty as a state's supreme entitlement. Of course, one might argue that China pays obeisance to the concept of sovereignty only when it benefits China, but the result is the same. And certainly in this context, the Chinese believe that sovereignty is a principle more important than human rights; of course, African leaders committing human rights violations are inclined to agree with them.[62] And, even if the Angolan regime is not committing human rights violations, which is a questionable assertion, the principle benefits Angola by not forcing questions about the disappearance of state funds, including oil revenues, into the hands of government officials through patronage and theft.

Some analysts argue that China's actions in Angola, as well as in other African countries, are a boon to development efforts, at least in the short term; the cheap money

[60] Taylor, "China's Oil Diplomacy in Africa," 947.
[61] Ibid., 948.
[62] Ibid., 939.

and infrastructure building have helped.[63] At the same time, China has moved 2,500 domestic workers into Angola to do the construction work being financed by the loans mentioned above, and there are expectations that the number of Chinese workers will ultimately reach 30,000.[64] As Denis Tull noted in a recent article, "The least one can say is that China's massive transfer of personnel is unlikely to have a positive impact on African job markets, the building of local capacities and the transfer of technologies."[65] Indeed, the $3 billion credit line was not only tied to an oil supply agreement, it also allowed for 70% of the construction contracts implied by the loan to be awarded to non-Angolan companies.[66] Ultimately, these contracts seem to end up benefiting Chinese companies.

Despite the fact that Angola became a member of OPEC on January 1, 2007, its production capacity in 2010 is projected to be almost double what it was in 2005, at approximately 2.5 mbd.[67] However, the production limits by which it may or may not ultimately abide as a member of OPEC *could* constrain that figure.[68] It will be interesting to see what kind of influence China will be able to wield if those production limits interfere with the operations of its NOCs. Despite its desire to remain as independent as possible, China may find itself uncomfortably confronted by the strength of the OPEC

[63] Ibid., 951.
[64] Tull, 473.
[65] Ibid.
[66] Taylor, "China's Oil Diplomacy in Africa," 947.
[67] Congress, House, Energy and Air Quality Subcommittee, *The Oil Industry Growth Challenge: Expanding Production Capacity*, 109th Cong., 1st sess., December 7, 2005. Transcript accessed April 2, 2007. Available from http://energycommerce.house.gov/reparchives/108/Hearings/12072005hearing1733/Esser.pdf.
[68] Jad Mouawad, "Angola: oil rich but dirt poor—New OPEC member joins exporting elite," *International Herald Tribune*, March 20, 2007 (accessed April 2, 2007). Available from http://www.iht.com/articles/2007/03/20/business/angola.php?page=1.

cartel and may look to join forces with the other (mostly western) oil companies active in the country, which may be similarly inconvenienced.

Nonetheless, as it pertains to the current discussion, the most crucial characteristic of China's activities in Angola is the recent action of its Exim Bank. The provision of such significant loans at a below market rate certainly undercut efforts by western lenders to instigate normative reforms, and this highlights a major point of contention when it comes to the inclusion of China in international regimes. However, it also went against an economic agreement between members of the OECD. The OECD Export Credit Arrangement, while not legally binding, in practice, "…sets and enforces terms and conditions on official export credits and foreign aid," in the interest of reducing potentially harmful credit competition.[69] Parties to the organizational treaty police one another to make sure that no one country uses below-market lending to secure favorable trade agreements—a tactic that could spur a race to the bottom that would serve mainly to enrich the borrower. This is not an issue likely to cause an immediate upset in the financial balance in Angola, but it can be seen as a model that China might replicate in the future, to the detriment of the existing system.

China's status as an OECD outsider keeps it from being constrained by this agreement, which seemingly hews to its advantage. Because of the links between the Chinese government and Chinese oil companies, risk can be handed back to the government by the oil companies in the form of sweetheart financing, making those companies more competitive internationally. Simultaneously, the Chinese government, as the major shareholder of the NOCs, can try to bolster the prospects of its investments by trying to ensure access to the most promising overseas assets through cheap, inter-

[69] Evans and Downs, 6.

governmental, "development" loans that don't negatively impact the bottom-line of the NOCs. Then, if things go according to expectations, the Chinese government could conceivably realize shareholder benefits that outstrip the potentially negative financial consequences of the cheap lending.

IEA member-states are aware of this discrepancy between competing behavioral norms and are likely to resent China's willingness to behave opportunistically, despite China not being beholden to the group. This could in turn ratchet up the mistrust that can lead to adversarial rather than cooperative approaches towards energy. Of course, China has not yet been invited into the OECD, so it can indignantly operate at its pleasure while maintaining the somewhat justified air of an unappreciated outsider.

Sudan

The question of human rights has not yet resulted in a withdrawal of western IOCs from Angola, but the pressure on them to divest from operations in Sudan has been much greater.[70] The civil war in Sudan has attracted intense scrutiny from international observers and the Sudanese government has been accused by U.S. officials of committing genocide. Thus, western IOCs have not been operating in Sudan for some time, although Sudanese oil likely finds its way into those companies' systems by way of indirect purchases by non-public, international oil traders. This has left a vacuum into which China has stepped, citing as a justification once again its respect for a state's sovereignty.

[70] The coverage of the crisis in Darfur, as well as American activities in Sudan, has been copious. For one archetypal example of the pressure brought to bear, see the comprehensive Human Rights Watch 2003 publication *Sudan, Oil, and Human Rights* (accessed April 2, 2007); available from http://www.reliefweb.int/library/documents/2003/hrw-sud-25nov.pdf. 487-89, 529-30.

The absence of western oil companies and the formidable competition they represent is in itself a draw for Chinese oil companies.[71] By filling the oil investment vacuum created in Sudan by the imposition of economic sanctions and the subsequent withdrawal of western IOCs, China's oil companies have been able to gain much-needed operational experience. The presence of western companies and their much greater technological capacity would inevitably reduce the relevance of China's NOCs in Sudan.[72] Here again, China has proven willing to work against the developed members of the international community by using its seat on the United Nations Security Council to disrupt potential intervention efforts in Sudan.[73] At the same time, it has sold weapons to the government that are seemingly being used to wage war against insurgents and civilians in Darfur and elsewhere.[74]

Of course, many of the dynamics at work in Angola apply to Sudan. However, in the case of Sudan, western companies have disappeared from the equation. Thus, China stepped into the breach when CNPC acquired a 40% stake in the Greater Nile Petroleum Operating Company (GNPOC), which translates to approximately 150,000 bpd of equity oil.[75] This represents the largest stake of any shareholder, including the Sudanese government. India and Malaysia also hold stakes in GNPOC, but they have not attracted the same attention as China has. This can be attributed to the higher degree of trust that characterizes their relations with the developed countries of the west.

[71] Myers and Jaffe, 127.
[72] Tull, 470.
[73] Taylor, 950.
[74] Ibid.
[75] Ibid., 949.

Sudan provides approximately 6.9% of China's oil imports and analysts have estimated that China has invested $5 billion thus far in Sudan's oil facilities.[76] The proven and potential reserves in Sudan make this "…project among the largest that China has undertaken overseas."[77] This also, of course, makes the Sudanese oil industry a strategic interest of China's which, more than any rhetoric about sovereignty, would explain China's stance in the UN Security Council arguing against sanctions.[78]

Interestingly, however, the case of Sudan shows how China might respond positively to international pressure regarding human rights. A human rights group used the U.S. legal system to compel a Canadian oil company to sell its 25% share in GNPOC, which confirmed the difficulties that China had had earlier in raising funds for CNPC in the United States. It also hints at how China's behavior in the future might curtail its ability to raise funds generally.

> CNPC was seriously interested in a listing on Wall Street themselves and prepared for an IPO in 2000 which was expected to raise $10bn; however, publicity generated by human-rights activists forced a withdrawal of CNPC and a restructuring to create a subsidiary, PetroChina, that explicitly denied that any of the capital raised would go to Sudan. In the end they were only able to raise $300m.[79]

China has shown a keen desire to list shares of its big state-owned enterprises on international exchanges, in keeping with its gradual movement towards liberalization of its economy. This event surely highlighted to China's policy-makers the influence that human rights norms have, as well as how its behavior in the realm of human rights might impact its plans to raise capital in the future through such share offerings. Looking at the bigger picture in this way might eventually result in China reassessing the value it

[76] Tull, 470.
[77] Taylor, 950.
[78] Tull, 470.
[79] Chris Alden, "China in Africa," *Survival* 47, no. 3 (2005): 158.

receives by resisting the growth of international norms vis-à-vis human rights and corruption.

Interestingly, China has shown a willingness to pressure the Sudanese government to end its military activities in the Darfur region. While the Sudanese government seems to be responding, likely due to the amount of Chinese investment in revenue-creating projects, China's motivations are opaque. Threats from American celebrities to encourage a boycott of the highly-anticipated Beijing Olympics in 2008 could be spurring Beijing to create an appearance of distancing itself from things that might be construed as genocidal. While the short-term result is positive, it remains to be seen what kind of staying power this policy might have.

While oil and other natural resources do not provide the only justification for China's engagement with Africa, they are certainly a major one. As relatively undeveloped producers of hydrocarbons, African countries provide new opportunities for Chinese NOCs to gain valuable experience. And, certainly, developing its NOCs into world class energy companies is one significant goal of Chinese energy policy.[80]

While in 1998 the Chinese government shifted the focus of its NOCs from production targets to profits,[81] they remain functionally agents of the Chinese government. Despite protestations by at least one Chinese analyst that Chinese NOCs do not operate in such a capacity,[82] these companies do overpay for projects that are likely to

[80] Downs, "The Chinese Energy Security Debate," 25.
[81] Ibid., 37.
[82] Presentation by Professor Zha Daojiong at MIT on November 7, 2006, entitled, "China, the U.S. and the Worldwide Search for Energy Security."

lose money.[83] If profit motive was the only driver in the operations of these firms, they would be precluded from undertaking such uneconomic projects. However, government financing allows the government to participate in strategic direction. And, of course, links at the highest levels between government officials and NOC officials further blur the line between government policy and company policy.

In Africa, such links between the government and its NOCs have created a formidable team that is willing to jump at opportunities left open by the departure or forbearance of western IOCs, regardless of internal conditions in the various countries. Government financing for projects, as well as cheap policy loans by China Exim pave the way for these NOCs to gain footholds in oil producing countries. While western states are in no position to condemn the PRC for an amoral approach to the continent, emergent norms regarding human rights and the pressure brought to bear in support of those norms ostensibly keeps IOCs from implicitly supporting human rights violations and corruption.

At some point, China's own rhetoric about sovereignty might put it in an awkward position that forces it to confront the realities of running major operations in unstable countries. For example, in Nigeria, to which the China Exim recently agreed to loan approximately $4bn dollars at terms similar to those granted to Angola,[84] China has had to deal with animosity from the insurgent Movement for the Emancipation of the Niger Delta (MEND). In April of 2006, this group threatened Chinese oil companies with violence if they chose to operate in the Niger Delta.[85] This raises questions about how China's hands-off approach would fare in the face of such events. Further, it raises

[83] Taylor, "China's Oil Diplomacy in Africa," 942.
[84] Dino Mahtani and David White, "China in $4bn move to gain foothold in Nigerian oilfields." *Financial Times*, April 27, 2006, 1.
[85] *Militants warn Chinese Oil Companies* (accessed December 19, 2006); available from http://www.chinadaily.com.cn/china/2006-04/30/content_581041.htm.

questions about how China would react to a change in leadership or the nationalization of Chinese assets.[86] Ironically, those kinds of events could lead China to consider aligning itself more with western norms as a method to promote stability through the equitable distribution of oil revenues.

Despite these examples of how China resists international institutions and the constraints that come with them, China's broader approach has been one of engagement. Its accession to the World Trade Organization is certainly an example of that. While some countries object to the prospect of China joining the OECD/IEA, informal talks with China espousing the mutual benefits that accrue to those who abide by the OECD Export Credit Agreement could bear fruit. Unfortunately, a sticking point is likely to be the various concerns that China has about energy security.

Certainly, the rhetoric of non-interference is most vociferous as it pertains to countries in which China has significant energy investments. Ian Taylor's comment on these contradictions is both insightful and succinct, "This irony reflects the overall tension in Chinese foreign policy in its simultaneous pursuit of engagement and a critical stance towards certain norms that underpin the extant global order."[87] This tension creates the kind of mistrust that can preclude cooperation on issues pertaining to energy security.

And if China continues to reap the rewards of below-cost financing and supporting marginalized regimes, this mistrust will lead to resentment or action in kind. It is unlikely that human rights norms and antipathy towards corruption will quickly evaporate. However, because of the strategic nature of energy security, the world could

[86] Taylor, "China's Oil Diplomacy in Africa," 954.
[87] Ibid., 940.

conceivably see a departure from the market-oriented approach to energy investment, which would play into the hands of the national energy champions with the deepest pockets. At some point, perhaps not for some number of decades, Chinese NOCs could be sufficiently wealthy to benefit from such a turn. The specter of an increasingly well-armed and potentially confrontational China could cause the U.S. government to doubt the security of its own oil supplies. In such a scenario, Washington might be tempted to reconsider the nationalization plans with which it flirted during World War II if its powerful oil industry were threatened with an inability to provide petroleum products in the event of war or some other disruption.

Chapter Six: CNOOC's Bid for Unocal

There seems to be no immediate danger of industry nationalization in the United States. However, when CNOOC bid for U.S. oil independent, Unocal, in the summer of 2005, China's oil policy vaulted to the forefront of consciousness for United States policy-makers. Ultimately, the outcry from segments of the American government and the U.S. polity stymied the acquisition, to the detriment of Unocal shareholders.[88] At no time did policy makers remotely consider nationalizing Unocal as a way of protecting the company from the Chinese bid, but the interference that led to Unocal shareholders receiving less compensation from Chevron's eventual takeover of their company highlights the implicit stake that the U.S. government has in any companies it deems vital to national security.

Despite the high drama during the summer of 2005, the conclusion seemed foregone as many American observers reacted somewhat hysterically to this highly visible, all cash bid for the California-based deep-water drilling specialist, which ultimately reached $18.5 billion.[89] During the process, critics called into question CNOOC's ability to finance such a transaction without help from the PRC government,

> The purchase of Unocal was approved by the Chinese State Council, China's Cabinet, and the governor of the state central bank helped to assemble the financing package. The enterprise has direct and special access to the unlimited, deep pockets of the Chinese government's reserves. Calling the transaction a free market activity is absurd and a distortion of the notion of free markets. The loan package is heavily subsidized - $7 billion dollars from CNOOC's parent, China National Offshore Oil; $2.5 billion of that is interest free and the rest is a 30-year loan at 3 percent. Six billion dollars more is coming from a state-owned bank.

[88] Francesco Guerrera, Joe Leahy and James Politi, "Unocal Board Snubs $18 bn Renewed Offer by CNOOC," *Financial Times*, July 16-17, 2005, 8.
[89] Francesco Guerrera and James Politi, "Unocal Board Reconvenes Over CNOOC's Bid," *Financial Times*, July 15, 2005 (last accessed on April 23, 2006). Available at http://news.ft.com/cms/s/2fc2c31e-f565-11d9-8ffc-00000e2511c8.html.

> Such heavy subsidization would make possible the $18.5 billion acquisition by a company worth only $22 billion itself.[90]

Financially speaking, this excerpt outlines all of the concerns voiced by congressional opponents to the deal, including CNOOC's access to government financing in the form of interest-free and below-market loans. It also clarifies the views of U.S. critics, who viewed the transaction as divorced from free market competition.

The complaints were certainly valid in their own terms, but the fact that they appeared in congressional discourse raises the philosophical question of whether or not the U.S. government should be able to disregard the interests of corporate shareholders in favor of political concerns about another country's method of doing business. Without delving too deeply into the question, one could say that facing such sensitive transactions will often cause the U.S. government to err on the side of national security, leaving the free market questions untouched. Probably sensing the difficulty inherent in merely financial objections, critics in Congress looked elsewhere and found issues of national security as justification for intense scrutiny of the proposed transaction.

Among other things, a U.S. representative mentioned that transferring the dual-use technology present in Unocal's deep-water drilling operations to CNOOC would present national security concerns.[91] Certainly, this was an issue to think about, but a more pointed attack came from C. Richard D'Amato, the Chairman of the U.S.-China Economic and Security Review when he spoke on the topic in front of the House Committee on Armed Services. Correctly, he mentioned the issue of reciprocity as it

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[90] *Dark Clouds on the Horizon: The CNOOC-Unocal Controversy and Rising U.S.-China Frictions* (accessed May 5,2006); available from http://www.carnegieendowment.org/files/Bartholomew_Transcript_7-14-052.pdf. This is taken from the transcript of a speech made by Carolyn Bartholomew at the Carnegie Endowment for International Peace on July 14, 2005.

[91] Todd Bullock and Katie Xiao, "Congress Cites Security Concerns Over Chinese Bid for Unocal." (accessed April 23, 2006); available from http://usinfo.state.gov/eap/Archive/2005/Jul/19-818204.html.

pertained to the nonexistent possibility of U.S. concerns acquiring Chinese energy companies. One Chinese analyst confirms this assertion, "…international energy companies have tried to enter the Chinese onshore market but have met with frequent changes to the ground rules."[92] He also mentioned the national security concerns inherent in the transfer of such advanced technology, as well as the problematic precedent such an acquisition would set.[93] In much the same way that the U.S. government spoke out against the spate of Japanese takeovers in the 1980s, D'Amato portrayed the CNOOC bid for Unocal as potentially the first in a string of acquisition attempts that would continue to test the bounds of what U.S. corporate assets mean to national security.

Most importantly, D'Amato spoke about the impact of China's approach towards energy more generally, "China's strategic approach threatens the long-term viability of US policy, to rely on open markets, to promote energy security for everyone, and to promote sharing arrangements in the event of supply disruptions."[94] D'Amato's point about the threat of China's mercantilism towards the open market system in place is well taken. And, whether or not the threat actually exists, his comment reveals a perception held by observers that it *could* be. It is as much this perception as it is any concrete threat that might spur countries to various actions designed to either protect existent energy asset or to compete with China on its own terms.

Ultimately, Unocal's board voted to accept a rival bid from U.S. supermajor, Chevron. However, the attempt to outbid Chevron only truly stalled when CNOOC

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[92] Zha Daojiong, "China's Energy Security: Domestic and International Issues," *Survival* 48, no. 1 (2006): 184.
[93] Congress, House, Committee on Armed Services. *National Security Dimensions of the Possible Acquisition of UNOCAL by CNOOC and the Role of CFIUS*, 109th Cong., 1st sess., July 13, 2005 (accessed March 26, 2007); available from http://www.uscc.gov/testimonies_speeches/testimonies/2005/05_07_13_testi_damato.php.
[94] Ibid.

withdrew its own bid, citing the hostile political climate; Unocal's shareholders never had the opportunity to vote on the transaction. Chevron later acquired Unocal for around $18 billion. Speculation was rife that Unocal's board only rejected CNOOC's bid as a result of pressure from the U.S. government, because the Chinese bid represented a significantly better deal for shareholders than that of Chevron. Technically, the U.S. government never got involved in the transaction because the Committee on Foreign Investment in the United States (CFIUS) is the avenue for oversight of such transactions, and CNOOC's withdrawal from the competition mooted any possible investigation.[95] Still, it is very clear that the price tag of the deal was not the issue; CNOOC got the hint not very subtly projected by U.S. policy makers and disappeared. *De facto*, the American government preemptively interfered with the transaction without regard for the financial concerns of Unocal shareholders.

Interestingly, CNOOC had significant ties to Unocal before the bid ever took place. Along with Shell and CNPC, the two firms had agreed much earlier to develop the natural gas fields in the East China Sea. Shell and Unocal withdrew from the project in early October of 2004, saying that the project was not commercially viable for them.[96] At no time did members of the U.S. Congress raise concerns about dual-use technology transfer in the time that the joint venture was being considered by Unocal. Perhaps Unocal withdrew from the venture before the issue could gain the requisite visibility and traction.

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[95] *Fact Sheet: Committee on Foreign Investment in the United States (CFIUS)* (accessed March 26, 2007); available from http://www.ofii.org/facts_figures/cfius.cfm. Interestingly, this fact sheet points out that only one of over 1500 transactions submitted to the committee since its inception has gone to the President of the United States for a decision and has been rejected. That purchase was one made by a Chinese company in the aerospace industry.

[96] *Oil Giants Pull Out of East China Sea Gas Fields Project* (accessed April 23, 2006); available from http://www.china.org.cn/english/BAT/108656.htm.

At the same time, however, the idea of dual-use technology transfer is intriguing as it pertains to Japan. Given the tense environment and continuing competition between Japan and the PRC, one can only wonder if Japan felt threatened by China's opportunities to obtain such technologies from the United States. They have made no such statements publicly, but thus far, they have not had to; the private sector actors of their close ally, the United States, have not consummated such close deals with Chinese companies that would cause concern.

There is no doubt that there were valid operational reasons for CNOOC's bid for Unocal; the acquisition would have increased CNOOC's reserves by almost 80%.[97] And many of those reserves are eminently accessible to the Chinese mainland, lying as they do in places like Indonesia and Central Asia. And CNOOC pledged during the process to retain American workers and to continue unchanged Unocal's provision of energy to the U.S. markets. But, as Chairman D'Amato hinted, Unocal's technical facility would have significantly upgraded that of CNOOC as the Chinese company focused on absorbed Unocal's expertise.

This issue raises a concern not voiced by Congressional leaders during the event. Much of the success experienced by western IOCs in working with NOCs in foreign countries is due to its technological superiority, especially in offshore E&P. In fact, the access that Unocal had to CNOOC and the East China Sea deal was due mostly to "…China's heavier reliance on foreign technological and financial input in offshore exploration and development."[98] The lack of offshore expertise is a shortcoming of the Chinese oil industry that, if corrected, would likely lead to the same kind of ground rule

[97] *CNOOC Launches Bid for Unocal Takeover* (accessed March 23, 2007); available from http://www.cnooc.com.cn/defaulten.asp.
[98] Zha, "China's Energy Security: Domestic and International Issues," 184.

changes for offshore Chinese blocks that western companies currently observe when bidding for onshore assets. While many in the U.S. energy industry feel confident that the supermajors will be able to retain their significant lead in technology over Chinese and other challengers, the purchase of offshore expertise (like that found at Unocal) by the Chinese could quickly close the gap. Indeed, the bid for Unocal was not only a grab at strategic assets, but also an attempt to purchase the technology that would abet the Chinese goal of making its NOCs competitive with western IOCs.

And there is no doubt that this method has worked in other industries, as was pointed out by James Kynge in his recent book, China Shakes the World, "Chinese companies, by and large, derive their technologies by buying them, copying them, or encouraging a foreign partner to transfer them as part of the price of access to a large potential market."[99] When applied to the current discussion, this approach hints at China's long-term approach to the oil industry, which is extremely dependent on technologies of the highest order. China can use the "free market" now and whenever possible to purchase the skills that may make it possible to horde energy from the rest of the world. Successfully hording oil at the expense of other countries would be conceivable only if supply demonstrably and significantly dwindled, but, again, the appearance of the attempt could breed hostility and confrontation. However, CNOOC's experience in bidding for Unocal taught the Chinese that, at least in the current environment, it will be unable to purchase such energy-specific skills from the United States.

[99] Kynge, 114.

Kynge goes on later in his book to speak about CNOOC's bid for Unocal as a "…clash of political economies."[100] His observations accurately reflect the American response to CNOOC's foray into its oil industry. Perhaps some U.S. policy makers were indeed thinking of the long term threat that China's approach poses to the privatized status of the American oil industry. More likely, however, they were thinking in geopolitical terms about the location of Unocal's oil and natural gas assets, and the ramifications of an invigorated Chinese presence in those regions. Or they were thinking about the possibility that China might use Unocal's technology to enhance its military. Or, if they were thinking rather simplistically, they might have feared that China would make Unocal's reserves unavailable to the market.

Regardless of the validity of these concerns, Kynge (and D'Amato) is correct in saying that China's way of doing business, at least in the energy sector, is in many ways opposed to that of the United States. And, as other countries around the world look for leadership, the challenge to the *status quo* implicit in Beijing's actions and Washington's response thereto might make other countries, like Japan, begin to question the validity of America's market-driven leadership.

Predictably, China does not see things in quite the same way as American observers, perceiving America to be devoted to stifling its pursuit of energy assets. One Chinese analyst implies what I have indicated above—that CNOOC withdrew from bidding due to political meddling on the part of the American government. However, after he notes the inferior returns Chevron gave to Unocal's shareholders, he observes that,

[100] Ibid., 141.

> The result is widely interpreted in China as representing an America that bends over backwards to deny Chinese access to energy resources, which may serve as justification for ignoring United States attempts at dissuading China from engaging 'rouge states' for energy.[101]

While this might be true, the fact that many Chinese observers feel this way does not give China an indisputable claim to the moral high ground. It just underlines the deep and abiding disconnect between the two countries normative behavior in the realm of industrial mergers, especially when it comes to mergers that can be conceived as having an impact on national security. Bridging this normative gap, or at least building a perception of benign motives on both sides, would do much to alleviate the mistrust and competition that could stem from such a widely-remarked event as CNOOC's bid for Unocal.

[101] Zha, "China's Energy Security: Domestic and International Issues," 184.

Chapter Seven: The Competition Between China and Japan for Assets in Russia and Iran

Due to the progression of events, the United States is in a geopolitically dominant position. Either because of that or as a cause of that, the United States is also in a dominant position over the global oil markets; it can militarily stop the flow of oil to anywhere in the world. And the past and present of its production capabilities and the pedigree of its oil companies suggest that their preeminent expertise will remain for the foreseeable future. For different historical reasons, Japan and China cannot presently compete with the United States in this arena. However, they can and do compete with each other.[102]

The Jervis matrix of relative positioning within the security dilemma discussed earlier seems to suggest that Japan's vulnerability, which cannot be overstated, makes it more likely to flee the current U.S.-dominated market system as a result of its rivalry with and geographical proximity to the much larger and increasingly powerful PRC. The existential nature of its oil vulnerability compels Japan to be ever-vigilant to changing power dynamics that might affect its security of supply. The constant watchfulness might result in prescient maneuvers, knee-jerk reactions, or both. Either way, Japan is ever on high alert and the recent surge in China's demand for petroleum, as well as its assertive behavior around the world seems to be causing reactions in Japan.

This dynamic is likely transparent to those observers that stand to benefit from the competition. Savvy oil-producing countries around the world can watch the skittish behavior of Japan and manipulate it when possible. Two countries seemingly engaging

[102] Roland Dannreuther, "Asian Security and China's Energy Needs," *International Relations of the Asia-Pacific* 3 (2003): 205.

in this opportunistic behavior are Iran and Russia. Iran has immense oil reserves and needs capital, both fiscal and political, to develop its assets for export. Russia also has massive oil reserves and wants to sell it to reliable customers who are willing to share the burden of building the necessary transportation infrastructure without demanding control of it.[103]

Both countries have played China and Japan off against one another to realize these goals. In Iran, the most recent example is the development of the Azadegan oil fields, which offer tremendous potential reserves. Iran has used the Japanese commitment to the field and China's incipient interest to keep secure China's support in the United Nations against U.S.-proposed sanctions against Iran for its supposed nuclear ambitions. And China's interest, combined with Japan's rivalry with that country, were enough to keep Japan committed to Iran much longer than the U.S. would have liked. While Japan was somewhat interested in the field for its own sake, it seems that a crucial part of its interest was to preempt Chinese involvement.

For its part, Russia, intent on doing whatever it can to secure demand for its petroleum exports, has begun building a pipeline from its oil and gas fields in eastern Siberia ostensibly to the Pacific Ocean. Obviously, this pipeline is intended to supply the fast-growing countries of the Asia Pacific: China, Japan, and South Korea. But it could also supply the American west coast.[104] Clearly, Russia sees the markets for its products shifting eastwards away from Europe. While the pipeline itself is a savvy commercial

[103] Isabel Gorst, "Energy Dimension in Russian Global Strategy—Russian Pipeline Strategies: Business vs. Politics, *The Baker Institute Energy Forum*, October, 2004. *Passim*. Accessed April 2, 2007. Available from http://www.rice.edu/energy/publications/docs/PEC_Gorst_10_2004.pdf.
[104] Sergei Blagov, "Russia walks thin line between China and Japan," *Asia Times Online*, 2005 (accessed April 2, 2007); available from http://www.atimes.com/atimes/Central_Asia/GA05Ag01.html.

decision, the process deciding what route it would take pitted China and Japan against one another in what turned out to be a bidding war.

Both Iran and Russia have attempted to draw China and Japan into bidding wars for the "right" to assist in financing their respective projects. In Russia, the ploy largely worked, and the pipeline route seems set. However, Moscow has waffled in the past with regards to its intentions and the pipeline is still being built; the situation could change. Iran, for its part, is having difficulties with U.S.-sponsored UN sanctions, and both bidders have (for the time being) withdrawn from the Azadegan project. However, before these sanctions became a reality, Iran seemingly played on Japan's fear of Chinese involvement. While Iran's tactic was unsuccessful, Japan's behavior as it resisted U.S. pressure and delayed as long as it could served to underline the fact that under other, less geopolitically-charged circumstances, oil producers may indeed benefit by trying to play on Japan's rivalry with China.

The Azadegan Oil Fields

Japan has a lengthy tradition of close relations with Iran which extend back into the middle of the twentieth century. Japan even retained normal relations with Iran after the fall of the Shah in 1979 and has retained them despite the terms of the various financial sanctions placed on the country by the UN. In the 1980s China, "…considered Iran a bulwark against Soviet expansionism."[105] However, the nature of the relationship between the two countries has changed since the end of the Cold War and since China's emergence as a net oil importer. As in the 1980s, China still provides Iran with cheap

[105] Daniel L. Byman and Roger Cliff, *China's Arms Sales—Motivations and Implications* (Santa Monica: Rand, 1999), viii.

weapons, but Beijing is now focused less on constraining Russia and more on securing energy.[106]

The United States has worked hard to convince China that limiting its arms sales to Iran will increase stability in the Persian Gulf, which will redound to China's benefit by keeping oil prices low.[107] Still, China has not felt the same pressure to disengage as Japan has, due to the latter's close association with the main backer of sanctions against Iran: the United States. Much like the United States did before 1979, both China and Japan base their relationships with Iran on the promise of plentiful oil assets that need external expertise and financing for development. As much as they sensibly can, both attempt to circumvent American efforts to limit their involvement in Iran's oil industry.

Given a certain perspective and concern as to China's motives and tendencies, namely that China is "…not fully convinced of the benefits of expanded reliance on world energy markets,"[108] China's rampant demand growth sets up a zero-sum game beyond just the arena of energy policy formation. And given the high demand for oil in both countries, Japan is China's natural competitor in this game. Indeed, Japan has ramped up its bilateral initiatives with energy-producing countries in recent years, perhaps in an attempt to head off China wherever it can. As mentioned before, Iran seems to be aware of this dynamic and has tried to play the two rivals against one another.

Japan's $2 billion dollar investment in the Azadegan oil fields, the biggest oil asset Japan has ever undertaken to develop on its own, provides an excellent example of this. The Japanese investment group, led by Inpex, was aware of major shortcomings in

[106] Ibid., 11.
[107] Ibid.
[108] Downs, *The Chinese Energy Security Debate,* 40.

their investment having to do with oil quality and accessibility.[109] Still, it concluded the deal in February of 2004, taking a 75% stake in the fields. Due to China's own activities in Iran, this emphasized the growing competition between the two, as well as the trap in which Japan still finds itself.

> Japan's decision to conclude the Azadegan deal can be seen therefore as a possible response to China's growing acquisition of oil concessions in the Middle East as her demand for oil increases. Iran was playing off Japan against China. If Japan would have decided to drop out from the Azadegan project (July 2003), China's Sinopec would have taken advantage of this and would have concluded the deal.[110]

This divergence from restraint and implicit acknowledgement of China in its oil strategy in such a large undertaking represented something of a sea change in Japan's approach to energy security, and is directly related to its burgeoning competition with its mainland rival.

Competition between Japan and China rises to a new level of complexity in Iran. This is especially true in the current global environment and it raises stark issues of choice for Japan. As mentioned above, Sinopec would have almost certainly taken Japan's place in the Azadegan oil field negotiations, had Japan stepped away. Much like Japan, which imports approximately 13% of its oil from Iran[111], China has a strong relationship with Iran. As of mid-2005, China already imported 11% of its oil for Iran. And China has made it a priority to cultivate and preserve those relations, and has proven reluctant to chastise Iran's suspected dabbling in military nuclear weaponry in its role as a member of the United Nations Security Council (UNSC).

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[109] Raquel Shaoul, "An Evaluation of Japan's Current Energy Policy in the Context of the Azadegan Oil Field Agreement Signed in 2004," *Japanese Journal of Political Science* 6, no. 3 (2005): 423. Available from Cambridge Journals Online.
[110] Shaoul, 435.
[111] *METI's Preliminary Report on Petroleum Statistics, 2005* (accessed May 7, 2006); available from http://www.meti.go.jp/english/statistics/downloadfiles/h2j581011e.xls.

In addition, the 11% number did not include the $70 billion agreement that Sinopec made with Tehran in October of 2004, in which China, "…committed to develop the giant Yadavaran oil field and buy 250 million tons of liquefied natural gas over the next 30 years; Tehran agreed to export to China 150,000 barrels of oil per day, at market prices, for 25 years."[112] Clearly, China is well-positioned in Iran. Further, China does not have to concern itself with the burden of being a close ally of the United States, which finally pushed the UNSC to introduce sanctions against Iran in December of 2006. Japan, on the other hand, does have that concern.

Predictably, China was reluctant to go along with the American initiative, but its recent successes with Saudi Arabia might have made it more willing to be seen as promoting stability in the Persian Gulf.[113] Additionally, Iran's bellicose statements and actions, including the recent capture of 15 British seamen, seem almost designed to support higher oil prices, which are not helpful to China at all.[114] Indeed, while Iran stands to gain approximately four million additional dollars per day for every dollar that the price of oil climbs, China (as well as Japan and the United States) stands to lose a similar amount, because of the global market for oil. While China wants to retain friendly relations with Iran, it does not want the high oil prices that come from instability in the Persian Gulf. Nor will it be happy to see its new friend, Saudi Arabia, get involved

[112] Zweig and Bi, 29.
[113] *China, Saudi Arabia forge closer relationship* (accessed May 7, 2007); available from http://www.chinadaily.com.cn/english/doc/2006-01/24/content_515060.htm.
[114] In the eleven days following March 22, 2007, the day before Iran announced the capture of the British sailors, the price of the OPEC basket of oil rose from $57.28 to $63.87. When the Iranian government started making more conciliatory statements on April 3, 2007, the price started to drop. Iran produces something in the neighborhood of 4 mbd; that price jump equates to over $25 million in extra revenue every day the price remains that high. To briefly explain the dynamic behind the rise in price, in the current high-priced, low excess production capacity environment that characterizes the global oil markets, any aboveground threats to stable oil production, real or perceived, have the tendency to send oil prices markedly upward. See Yergin, "Ensuring Energy Security," 69.

in a balancing act with a newly nuclear Iran, as conflict between the rival states could result in a war that would threaten two of China's petroleum sources; inroads in Saudi Arabia are the larger prize and might outweigh the economic consequences of sanctions against Iran.

Despite its tendency to join Russia to balance the U.S. on the UNSC, China can act relatively independently. And it recently did so, leaving Russia (an oil exporter which stands to benefit from high oil prices) to resist sanctions against Iran by itself. In the meantime, Japan's traditional dependence on the United States for overarching security guarantees places it in an awkward position vis-à-vis its Iranian oil interests. Japan's involvement in Iranian oil investment runs contrary to the policies of the U.S. administration, which is focused on disengagement from and the isolation of Iran. As a result, the United States pressured Japan to withdraw from the Azadegan agreement. In 2004, that pressure was relatively mild, involving little more than a rebuke.[115] While the U.S. and Japan deny a causal link between the two issues, some observers have hypothesized that Japan's commitment of a small Special Defense Force unit to the Iraqi arena served as a way of mitigating U.S. pressure.[116]

However, as the rhetorical battle between Iran and the United States escalated in the second half of 2006, Japan came under increasing pressure to divest. Tokyo delayed as long as it could—ignoring deadlines for production to begin. But ultimately, in October of 2006, Iran and Japan agreed that Inpex's stake in Azadegan would fall to

[115] Richard Hanson, "Japan, Iran sign major oil deal, US dismayed," *Asia Times Online*, February 20, 2004 (accessed March 31, 2007), available from http://www.atimes.com/atimes/Japan/FB20Dh04.html.
[116] Michael Penn, "The Battle of Azadegan: Japan, Oil and Independence," (accessed May 8, 2006); available from http://japanfocus.org/article.asp?id=379.

10%.[117] Interestingly, Japan did not object strenuously and let the matter fade as it observed China's *volte face*. When sanctions were a distant prospect, China's growing prominence in Iran and its stance in support of that country spurred Japanese to retain its stake in Azadegan. When, however, China proved willing to back the sanctions, thus giving up the moral stance it would need to assume to secure Iranian support, Japan found the out that it needed and resumed its support of the United States' initiative.

Indeed, as it pertains to bilateral competition, it follows that *one* of the reasons for China's stance against the United States might have been to unnerve Japan and make its life more difficult. "Beijing fears that the consolidation of the U.S.-Japanese alliance is coming at its expense and that the growing closeness is motivated by the allies' common concern about the increase of China's power."[118] Thus, one benefit to China's positioning vis-à-vis Iran might have been to drive a wedge between Japan and the United States. But when appearing to side against Saudi Arabia (Iran's rival) became anathema to the Chinese, that benefit became ancillary. Interestingly, China might have benefited by its support for Iran—the Sunni leadership in Saudi Arabia could have courted their new customer as a way to separate it from their Shi'ite rival.

The Taishet-Nakhodka Pipeline

Japan and China also found themselves competing for influence over the path of a proposed pipeline that will transport oil from Russia to the Pacific and supply both of the Asian rivals. The geopolitical implications of this tussle might be more tangible than Iran to both the PRC and Japan, because of their proximity to Russia and the stormy relations

[117] Hisane Misake, "Japan's energy drive stalls over Iran," *Asia Times Online*, October 11, 2006 (accessed March 31, 2007). Available from http://www.atimes.com/atimes/Japan/HJ11Dh01.html.
[118] Wang Jisi, "China's Search for Stability with America," *Foreign Affairs* 84, no. 5 (2005): 44.

that have enveloped all three states over the last hundred and fifty years. While trying to simultaneously use the rivalry to its advantage, as well as keep its customers happy, Russia delayed its decision and attempted to come up with a compromise solution that would see pipelines in both countries.[119]

The two options were Angarsk-Daqing and Taishet-Nakhodka, proposed by China and Japan, respectively [See Appendix A]. Russia repeatedly vacillated on its ultimate decision, but most recently settled on the Taishet-Nakhodka route. Russian president Vladimir Putin signed preliminary accords with Japan in November of 2005, promising a pipeline that would extend from Siberia to the Russian Pacific coast.[120] Still, the initial direction of the pipeline was towards the Chinese border, and questions remained as to where oil will be diverted first and most heavily, as China continues to push for a pipeline spur into its own territory. Currently, China receives Siberian oil that is diverted from the pipeline by rail. As the construction of the pipeline runs close to Russia's border with China, Russia will be able to keep its options implicitly open as a carrot to use in political negotiations between the two rivals,

China initially thought that it had secured the deal with its Angarsk-Daqing proposal; it began talking about a project with Russia in 1994 and reached an agreement in 2001.[121] However, Japan was able to lure Russian interest away with the promise of more fully-integrated trade between itself and Russia, as well as between $12 and $14 billion in financing for the project. Additionally, Japan agreed to invest $8 billion in

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[119] Pak K. Lee, "China's quest for oil security: oil (wars) in the pipeline?," *The Pacific Review* 18, no. 2 (2005): 274-5.
[120] James Brooke, "To supply Japan with oil, Putin promises pipeline to Pacific coast," *International Herald Tribune*, November 21, 2005 (accessed May 8, 2006); available from http://www.iht.com/articles/2005/11/21/news/putin.php.
[121] Lee, 274.

completely separate oil and gas projects in Russia.[122] Japan's motivation to compete with China in this venture stems from various concerns. The issue of energy security from such a large oil producer as Russia was certainly important, and "…Japan worried about China being a 'monopoly power to get the Siberia oil', and thus lobbied Moscow to allow 'the oil to be available to the wider Asia-Pacific market'."[123]

This ties into Japan's broader concern of containing China's rise in the region; Japan's insertion of itself between the two behemoths of the Asian mainland can be seen as an attempt to prevent Russia and China from forging closer relations outside the realm of oil diplomacy.[124] Closer commercial ties resulting from a pipeline partnership could result in greater military cooperation, ostensibly dedicated to pipeline protection. But when ties like these deepen, they have the potential to threaten those not included. Whether or not this is likely, it is certainly a relevant consideration for Japan, which might fear having its own security impinged upon by a development that could come to mirror its own alignment with the United States.

[122] Sergei Blagov, "Russia walks thin line between Japan and China," *Asia Times Online*, 2005 (accessed May 8, 2006); available from http://www.atimes.com/atimes/Central_Asia/GA05Ag01.html.
[123] Liao Xuanli, "The petroleum factor in Sino-Japanese relations: beyond energy cooperation," *International Relations of the Asia-Pacific* 00, (2006): 18. Available from Oxford Online Journals.
[124] Ibid.

Chapter Eight: The East China Sea Conflict

Geographically speaking, the Russian pipeline to Nakhodka will come out adjacent to Japan north of the East China Sea. Interestingly, the East China Sea holds energy resources most likely to spark direct conflict between China and Japan. The tiny Senkaku Islands (known to the Chinese as the Diaoyutai Islands) sporadically jut out of the East China Sea to the north and east of Taiwan, and to the south of the Ryukyu Islands that themselves trail southward from greater Japan. While the Japanese administer the Senkakus, China claims that these uninhabited islands have been implicit parts of China for centuries; more recently, they claimed that the islands are appurtenances of Taiwan and thus rebounded to China with Taiwan after Japan's defeat at the end of the Pacific War.

In practice, however, Japan has administered these islands since the end of the United States' notably *un*controversial trusteeship, which lasted from the end of the Pacific War until the end of 1971 and never inspired the same kind of rancor. At that point, the Okinawa Reversion Treaty arguably gave administration of the island chain back to Japan.[125] This reflected Japan's initial claim to the islands in the context of Sino-Japanese War of 1894-1895. Being in no position to object at that time, and having no compelling reason to do so, the Chinese ignored the Japanese claim. Thus, Japan administered the islands through World War II.

Even after the end of the Pacific War, sovereignty over the Senkakus seemed unimportant to either Japan or China. Until, that is, a United Nations report published in 1970 speculated that the seabed around the islands contained significant hydrocarbon

[125] James C. Hsiung, "Sea Power, the Law of the Sea, and the Sino-Japanese East China Sea 'Resource War'," *American Foreign Policy Interests* 27, no. 6 (2005): 520.

deposits.[126] At that point, oil had become a much more significant part of Japan's energy profile than China's. Still, while China had significant domestic oil production at that point, the possibility of recoverable reserves beneath the East China Sea certainly piqued its interest. Nevertheless, the issue did not initially heat up, as Japan offered diplomatic relations to China in 1972 while simultaneously severing ties with the Taiwanese (ROC) government.[127]

Despite a couple of brief flare-ups, one of which pertained to Japan's construction of a lighthouse on one of the islands in 1978, Japan has solidified its *de facto* control over the islands through uninterrupted administration since 1972. However, the dynamics of the conflict changed in 1992 when China passed a domestic law called the Law on the Territorial Sea and Contiguous Zone, which associated the Senkaku Islands with Taiwan, thus drawing them into the Chinese conception of its own territory.[128] Despite China's claim, Japan has based part of its maritime claims in the East China Sea on the premise that the Senkaku Islands are a part of Japan.

More broadly, Japan ascribes to Article 57 of the United Nations Convention on the Law of the Sea (UNCLOS), which describes a coastal state's Exclusive Economic Zone (EEZ) as a region that "…shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured."[129] This ostensibly gives a state the right to explore and exploit deposits of minerals in the seabed within that zone. China, on the other hand hews to Article 76 of the same agreement which

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[126] Steven Wei Su, "The Territorial Dispute over the Tiaoyu/Senkaku Islands: An Update," Ocean Development & International Law 36, no. 1 (2005): 47.
[127] Ibid.
[128] Ibid.
[129] United Nations Convention on the Law of the Sea art. 57, Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter UNCLOS] (accessed November 28, 2006);
available from http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf. 44.

stipulates that "…the outer limit of the [coastal state's] continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured."[130] China's view is that this area is an extension of its continental territory and thus falls naturally under Chinese sovereignty.[131]

As it pertains to the East China Sea between Japan and China, one analyst succinctly points out the problem resulting from these two claims as follows,

> Japan and China are two states with opposite coasts, but the body of waters between them is fewer than 400 nautical miles in total. The width varies from 180 nautical miles at the narrowest points to 360 nautical miles at the widest…Thus the two EEZs present a serious overlap problem.[132] [See Appendix B for map]

Interestingly, besides vaguely referring potential disputants to whatever resolution might be provided by international law, the UNCLOS offers a mechanism for resolution of China's claim later in Article 76. The Commission on the Limits of the Continental Shelf stands ready to receive submissions and will render recommendations that should be considered binding.[133] It is important to note that neither Japan nor China has undertaken such proceedings. This would seem to indicate the reticence of either country to give ground on this issue, as well as a fear of losing existent claims.

The overlap between the two claims has resulted in a disputed zone, but the actual line of control is based on Japan's unilaterally-drawn "median line."[134] Thus far, the line has acted as the *de facto* divider between the two states, but China has rhetorically

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[130] Ibid., 53.
[131] Hsiung, 516.
[132] Ibid., 516-517.
[133] UNCLOS, *supra* note 118, art. 76. (accessed November 28, 2006);
available from http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf. 54.
[134] Hsiung, 517.

resisted accepting it. Additionally, some amount of naval posturing has occurred as a result of the ongoing disagreement as to the nature of an equitable division.

A significant factor in making this disagreement so contentious is the location of the Xihu Trough, which lies under the East China Sea between the Senkaku Islands and the Chinese mainland and which contains the only commercially developed hydrocarbon deposits in the area thus far. Approximately 80 percent of the Xihu Trough indisputably belongs to China, but the remaining 20 percent falls on the Japanese side of the "median line." After all else is said, it is only Japan's hold on the Senkaku Islands that gives it a claim to even that relatively small portion of the trough. And the Xihu Trough contains the most promising and easily-produced geological formations remaining undeveloped in the East China Sea. So a resolution of the dispute over the Senkaku Islands in favor of China would eliminate Japan from even contending for these resources.

China began production of natural gas from the Pinghu field in 1998 and from the Chunxiao field in 2006. The former field is relatively small and is located well inside of China's EEZ. The latter field, however, which supplies natural gas via undersea pipeline to Shanghai, is approximately 5 kilometers from the "median line" and will probably turn out to be the most productive field in the Xihu Trough. China's development of the Chunxiao field began in 2003 after the western oil companies Unocal and Royal Dutch/Shell pulled out of the area. As it became clear that the Chinese would in fact produce natural gas from the field, the Japanese trade minister publicly expressed Japan's concern that Chinese development of the field would drain resources from the Japanese side of the line.[135]

[135] Hsiung, 518.

China, for its part, disputes the very line about which Japan is concerned but, nonetheless, has not moved its topside operations into the disputed zone. Japan, however, is operating in the disputed zone without regard for the unsettled nature of the conflicting claims. Despite the fact that Japan cannot reasonably lay claim to the significant portion of these assets, it clings to the hope that it might add to its energy security by finding some sort of domestic production.

This hope recently led Japan to begin exploration in the disputed zone adjacent to the Chunxiao field. Perhaps this is part of an effort to get as much gas out of the field as it can before China drains it, but it has ratcheted up tensions in the area. Certainly, things have been tense for some time, but this is yet another step in a dangerous game that has ominous implications.

The dispute really began to heat up in 2004 and, around that time, the IOCs that had been working with CNOOC on exploration pulled out of the joint venture, as mentioned earlier.

> The withdrawal was claimed for 'commercial reasons', but a report by the *Mainichi Shimbun* held that the oil majors were told by Japan via Washington that 'their investment would be risky as the planned gas field was located in an area disputed' (1 October 2004). No confirmation was made by either the Japanese or US authorities regarding the report, but it was logical to assume that the ongoing territorial dispute between China and Japan was part of the reasons.[136]

Interestingly, the U.S. majors had been examining this area for years.[137] At this point, given the progressively rising stakes of the energy competition between China and Japan at that time, we can revisit the idea that Japan might have been somewhat concerned about the transfer of technology issue touched on briefly above.

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[136] Liao Xuanli, 18.
[137] *Oil Giants Pull Out of East China Sea Gas Fields Project* (accessed November 28, 2006); available from http://www.china.org.cn/english/BAT/108656.htm.

Of course, no such incendiary statements have been made publicly about such concerns. Nonetheless, shortly after the withdrawal of the majors, in November of 2004, a Chinese submarine strayed into Japanese territorial waters.[138] Also in late 2004, "Japanese media reported that the Japanese Defense Agency had revised its security strategy partly on the assumption that conflicts over resources could escalate into war."[139] Certainly, tensions rose during this time period. One must also bear in mind that the tug-of-war over the Russian pipeline was at that time particularly tense. Japan's willingness to participate in this escalation over a resource of questionable value was not only a departure from its past behavior, but also a reflection of resource friction elsewhere.

Following this little back-and-forth, Japan granted exploration and drilling rights to fields on its side of the "median line" to Teikoku Oil. These fields are right in the heart of the disputed zone, and adjacent to China's active fields.[140] When Chinese warships patrolled the area around its fields shortly before Japan's elections in September of 2005, Japanese politicians responded by introducing bills allowing for the use of force to protect the activities of Teikoku Oil in the East China Sea.[141]

Because of its unprecedented nature, this continued escalation stresses Japan's perception that it must counter Chinese aggressive energy policy, especially locally. Indeed, shortly after Teikoku Oil received drilling rights in the East China Sea, the aforementioned merger with Inpex was announced, giving the government the majority stake in the new holding company. The prospect of military confrontation caused Japan to explicitly link the government to its biggest upstream energy interest and its stake in

[138] Kent E. Calder, "China and Japan's Simmering Rivalry," *Foreign Affairs* 85, no. 2 (2006): 130.
[139] Zweig and Bi, 31.
[140] *Japan Government Grants Drilling Rights to a Firm for Gas Fields in the East China Sea* (accessed May 8, 2006); available from http://www.fpcj.jp/e/mres/japanbrief/jb_552.html.
[141] Calder, 130-31.

the disagreement. While both states have expressed an interest in resolving the conflict peacefully, the two sides remain intransigent as to their rights, and the East China Sea remains a flashpoint for conflict.

Ironically, Japan's disagreement with China on the East China Sea territorial issue is counterproductive to its energy security as it precludes cooperation. Indeed, at different times during the last five years, both sides have declined cooperative development of the Chunxiao field. Furthermore, the intransigence of both sides results in the continued presence of a flashpoint between the two states that could conceivably result in actual military confrontation.

Additionally, to stress the irrational nature of the dispute, the topographical facts of the Xihu Trough make economical production and shipment of natural gas to Japan all but impossible; the Okinawa Trench reaches depths of greater than 2500 feet and lies between Japan and the Xihu Trough. An undersea pipeline connecting the two is a chimera. Any cooperation would likely result in Japan owning a percentage of the gas produced and selling it to China. Japan's inability to concede a rather meaningless energy asset may also preclude broader energy cooperation with China in other energy-rich regions of the world, which would likely improve the energy security of both countries. Of course, this reflects the broader strategic mistrust between the two countries. And the importance of perceptions vis-à-vis energy assets, as well as the link between energy and security, can leave a rankling issue to grow into something of more concern than it would otherwise merit.

Finally, to extend the implications of this conflict to the energy security dilemma and its impact on the future of the global energy markets, Japan's implicit recognition of the strength of China's position in their energy rivalry could augur a broader shift away from the market over the long term. By attempting to counter China's strength by giving its own upstream interests the promise of the financial wherewithal to compete with Chinese interests, Japan signaled its willingness to interfere with the market that has heretofore reliably supplied Japan with its energy needs. Further, by taking an equity stake in Inpex Holdings, the Japanese government mimicked China's nationalistic approach to energy strategy and symbolically lessened its support for the market system as the inevitable provider of reliable energy security.

Conclusion

Despite the PRC's continuing dependence on the global energy markets for over 40% of its oil consumption, its posture in acquiring energy assets around the world evokes distrust on the part of other major petroleum importers like the United States and Japan. Part of this distrust derives from an historical animosity between the players. Another part derives from currently high energy prices amid a tight market that is perceived by many as destined to grow progressively tighter in the future. And yet another part of this mistrust stems from a lack of transparency and China's seeming willingness to work outside traditional norms that characterizes the international energy markets.

The first two issues are more or less exogenous variables, while the latter is one that could be altered in the interest of ameliorating pressures brought to bear by the former two. Nonetheless, as it stands, China's acquisition of oil assets hint at a desire, if not an ability, to operate outside the traditional framework of the market as it is understood by other interested states, such as the United States and Japan. This threatens to undermine the prospects for cooperation on energy issues that would be beneficial to all parties. And Japan's lack of any significant domestic production, combined with its historical predilection for government assistance aimed at reducing its vulnerability, foretells reactive behavior in the face of China's assertiveness.

Heightened attention to issues concerning oil in the context of the current high price environment provides a backdrop for the activities of the two states. In some sense, Japan has recently behaved in ways that seem fearful of China's emergence as a rival player. While China's behavior is not very different from that exhibited by the United

States over the decades, it seems that mutual distrust between China and Japan will preclude Japan from taking a welcoming stance towards its neighbor. Indeed, as Robert Manning pointed out in 2000,

> …[a] strategic view of energy, particularly oil, has been part and parcel of most Asian actors' national security and foreign policy calculus in a region where underlying suspicious, distrust, and rivalry remain part of the pathology of inter-Asian and trans-Pacific relations still in a state of protracted historic transition.[142]

As China continues to pursue its activities in this wary environment, Japan seems to be faced with an energy security dilemma, and is trying to preempt China's moves in strategic regions such as Russia and Iran to forestall that dilemma. Japan's confrontational behavior in the East China Sea also reflects a fear of seeming weak to the Chinese, thus it closes off opportunities to back down, despite the rather pointless energy nature of the dispute.

While China is clearly causing consternation in Japan, the PRC's bilateral and mercantilist efforts create political alliances and financial agreements that raise the hackles the United States.[143] They also signal China's skeptical feelings towards some forms of cooperation in matters concerning energy. While Japan has gone so far as to make military preparations in the East China Sea, the United States seems disinclined to do much more than urge China to cooperate. The U.S. is in a much less vulnerable position than Japan is and thinks that it can afford to wait out China's current acquisition binge, as long as it doesn't overtly interfere with American interests, domestically or abroad.

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[142] Robert A. Manning, *The Asian Energy Factor: Myths and Dilemmas of Energy, Security and the Pacific Future* (New York: Palgrave, 2000), 59.
[143] Jaffe and Lewis, 115.

Many analysts argue that cooperation amongst oil importers like China and the United States should help those countries to balance the collective and individual influence of exporting countries.[144] Certainly, importers' natural interest in low prices will often conflict with exporters' natural interest in high prices. As mentioned earlier China is the third largest importer in the world, trailing only the United States and Japan. However, the potential benefits of cooperation have not yet proven compelling enough to cause China to embrace many of the international norms to which Japan and the United States adhere.

China's strategic approach towards energy is reminiscent of Japan in the 1970s.[145] However, Japan responded to the oil shocks ultimately by joining the International Energy Agency (IEA), the creation of which gave major energy consumers a forum in which they could counter potential disruptions of OPEC supply by threatening the concerted release of SPRs.[146] Interestingly, the IEA was formed partly as a way to constrain Japan's reckless and strategically-motivated bidding for oil assets which, if left unchecked, might have led to potentially destructive competition between Japan and the United States.[147] In its vulnerability as a negligible producer of domestic oil, Japan feared that a crisis or shortage would leave it unattended by the western-affiliated IOCs,[148] and seemed willing in its fear to succumb to the political demands of Arab oil

[144] Zweig and Bi, 37.
[145] Roland Dannreuther, 200.
[146] Jaffe and Lewis, 116.
[147] Professor Bruce Everett in a lecture at the Fletcher School on November 30, 2006.
[148] Dannreuther, 205.

producers. China today doesn't have these existential concerns, but it still behaves in some ways like Japan did in its quest for energy security.[149]

Nonetheless, at least one analyst points out that China has developed a strong working relationship with the IEA.[150] Perhaps as a result of that relationship, or perhaps due to its own inclinations, China is working to develop its own SPR. While this is a positive development for global energy security, it doesn't necessarily indicate a tendency on the part of China to cooperate with other large energy consumers. Erica Strecker Downs has noted that the SPR has long been a subject of debate among Chinese policy-makers, but as an internal matter.[151] Despite its relationship with the IEA, China is not bound by its dictates and can choose to release its SPR when it chooses. Thus, China perceives that its own interests are protected by its ability to act, but it can also free-ride on the actions of the official IEA members if it so chooses. The United States and Japan would be well-served by officially bringing the PRC into the fold of the IEA, even if they have to work around the OECD.[152]

In the meantime, as Japan visibly reacts to China and the United States vacillates on its willingness to include China in its version of a free market economy, China provides an alternative vision for the energy business that dovetails much more neatly with the NOCs of oil-producing countries. State ownership of Saudi Aramco, the National Iranian Oil Company, and many others is undisputed in their home countries. They control the assets that the IOCs want. And, as they look outward in the coming

[149] Yuka Hayashi, "China Studies Japan's Mistakes as the Pursuit for Oil Continues." *Wall Street Journal*, August 3, 2005 (accessed April 23, 2006). Available from http://www.uofaweb.ualberta.ca/chinainstitute/nav03.cfm?nav03=44622&nav02=43884&nav01=43092
[150] Christian Constantin, 36.
[151] Erica S. Downs, "The Chinese Energy Security Debate," 32-34.
[152] Mikkal Herberg and Kenneth Lieberthal, "China's Search for Energy Security: Implications for U.S. Policy," *NBR Analysis* 17, no. 1 (2006): 6. Accessed April 2, 2007. Available from http://www.nbr.org/publications/analysis/pdf/vol17no1.pdf.

decades, they will look to China as a stable customer capable of rivaling the United States. And if commercial relations with China do not come with the same types of exhortations regarding domestic policies, oil producers might be inclined to devote more attention to the less troublesome customer.

As the Chinese NOCs use the deep pockets of the Chinese government to develop or purchase the expertise that they need to bridge the technological gap between themselves and IOCs like ExxonMobil and ChevronTexaco, the oil producers in the Persian Gulf will be more inclined to include them in joint development of major assets. With comparable technological capabilities, it seems evident that the Chinese government of 2020 will be able to outbid ChevronTexaco for the most promising assets, since even in 2006, IOCs were hard-pressed to compete financially for individual projects with major NOCs.[153] It is possible that an NOC like CNPC or CNOOC could at some point in the future bid for a much larger target than Unocal—like, perhaps, ExxonMobil or one of its rivals.[154] This would be even more likely if those IOCs are slowly marginalized over the next two decades by changing geopolitical alliances that favor Chinese NOCs, and erode the IOCs' profitability by limiting access to promising overseas assets.

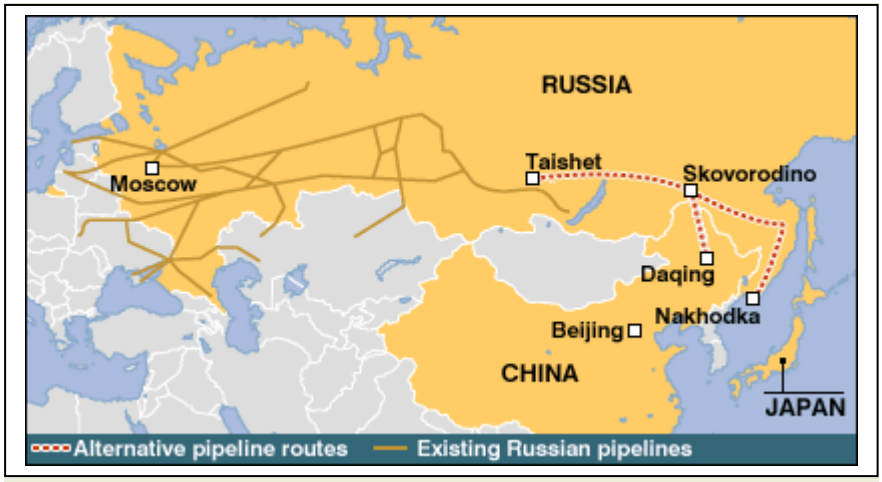
Clearly, the Unocal incident clarified the likely American response to such a bid from a country deemed to be a strategic rival, as China is. But it seems that the Chinese companies might be the only ones with the money and the will to make such a bid in the foreseeable future. If the returns to investors in the potential targets became too large to

[153] *Special OPEC Bulletin 9-10/06* (accessed April 2, 2007); available from http://www.opec.org/library/OPEC%20Bulletin/2006/pdf/OB09_10_2006.pdf, 81. This is a transcript of a speech given by oil industry analyst Peter Odell as he accepted an award from OPEC in 2006.
[154] Ibid.

ignore, and the targets had been sufficiently weakened in competing with their suitors, the United States might be forced to nationalize its oil industry. Much like Japan did with Inpex, the United States might see a tie-up with its oil majors as the only way to explicitly warn off a Chinese suitor with a dubious record as a traditional market participant. So, China's current activities might be sparking defensive moves in Japan, but if its future activities actually undermine the working of a free market system, it could spark the United States to a more drastic move, like making explicit the link between its military and its oil supply systems through the nationalization or partial nationalization of its oil industry.

Appendix A

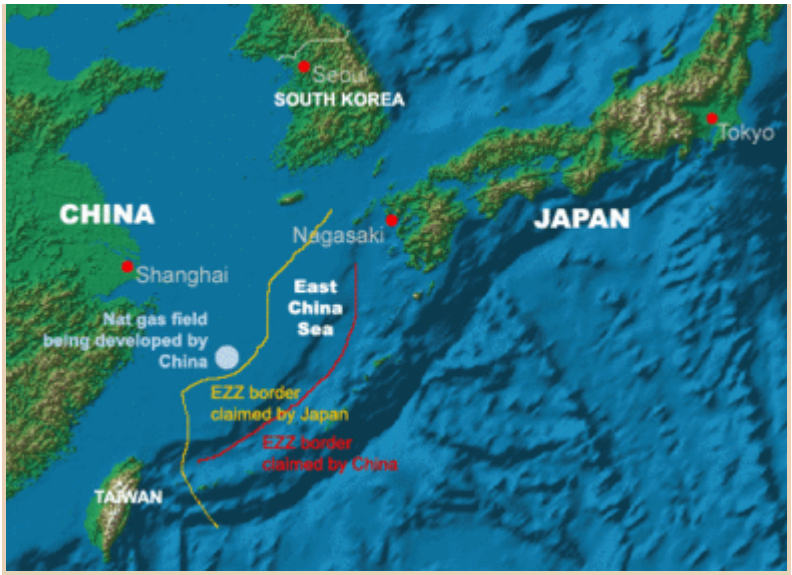
Map of Possible Routes for Russia's East Siberian Pipeline



Source: BBC News (accessed April 2, 2007); available from http://news.bbc.co.uk/2/hi/asia-pacific/4831624.stm#pipelinebox.

Appendix B

Map of the Disputed Area in the East China Sea



This map clearly shows the areas claimed by Beijing and Tokyo and the location of the Chunxiao field.

Source: http://www.pekingduck.org/archives/002890.php. (Accessed November 26, 2006)

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