The 2008 Renegotiation of Kazakhstan's Kashagan PSA Field and the Events that Led to It

By Nathan Reich*

Introduction

After obtaining independence in 1991, Kazakhstan rapidly sought to develop its potential as a supplier of oil to world markets: it created a friendly investment environment, initiated progressive domestic reforms, and joined a range of western economic, political, and military organizations. Kazakhstan thus demonstrated a desire to become a member of the international community, a strategic partner of the EU and U.S., and a destination for western international oil companies (IOCs). Yet in 1998, as world oil prices recovered from their lowest point in over a generation, the Kazakh government changed from a cooperative to a confrontational regime. This shift is perhaps nowhere more evident than in its oil and gas sector. Between 1998 and 2008, the Kazakh government fined IOCs upward of \$4US billion,¹ unilaterally revised signed project sharing agreements (PSAs). changed numerous national laws despite international protest, and forced the consortium of energy companies developing its giant Kashagan field to renegotiate the terms of their contract.

Observers have variously interpreted the significance of these events. Some see in this shift from cooperation to confrontation a government that plans to nationalize its oil and gas sector; others see no grand design but merely a duplicitous pursuit of wealth; still others see a legitimate use of authority to correct for previous contractual and legal mistakes. Observers have often based their conclusions on analyses of historically isolated events. One paper has sought to be historically thorough. But the credibility of that investigation is in doubt since its authors use potentially unreliable statements by Kazakh officials to make their case. And its usefulness is limited since the report's chief conclusion is opaque.²

This paper argues that the Kazakh government's behavior toward IOCs should be seen as a case of *constrained resource nationalization*. This concept highlights the role that capacity asymmetries play in bringing together IOCs and emerging resource-rich countries: IOCs have what emerging resource-rich countries need, namely, the overall capacity to bring technologically and environmentally challenging fields on line.³ The absence of this capacity constrains the host government from nationalizing its resources. This concept also highlights the tenuous nature of the contractual agreement in politically risky states: if an emerging resource-rich country acquires the capacity to explore, develop, and produce its own resources, then, in the absence of powerful countervailing forces, it will likely nationalize them.

This paper begins with a brief history of the world's current energy system. It then offers a theory of state behavior. This theory is used to model the behavior of resource-rich emerging states. Model-based predictions are used to test whether the theory explains Kazakhstan's behavior. Conclusions are then offered.

The World's Energy System, 1948-2008

...the energy system is again on an unsustainable path, threatening the political, economic, and social stability necessary for continued world progress.

Henry Kissinger, speech at IEA Ministerial, 14 October 2009

The world's energy system is dynamic. Some periods in the history of the world's energy system are profoundly unstable; others offer such energy peace that empires themselves can rise. The rise of the United States as the world's largest oil producer in the first half of the 20th century marks an era of energy peace. The second half of the 20th century, by contrast, marks an era of energy peril. In the 1950s, the United States became a net importer of oil. In the 1960s, most of the world's known oil reserves shifted hands from IOCs to autocratic states at political loggerheads with the west. The precariousness of this

arrangement culminated in the 1973 Arab oil embargo; a second oil crisis in 1979; and the Carter Doctrine of 1980. After oil prices collapsed in the early 1980s, leading OPEC members to adjust their policies to market realities, the U.S. entered a second era of energy peace, one in which global oil production capacity generally exceeded global demand. This second era of energy peace lasted nearly twenty years (see graph on next page).⁴

As we begin the second decade of the 21st century, global energy security is again threatened. Sources of instability are numerous but one is fundamental: demand for energy is projected to exceed the supply of it. As Fatih Birol,

See footnotes at end of text.

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Chief Energy Economist of the IEA, said recently, "If all those projects which are already funded [are] implemented...12.5 million barrels a day are still missing....This gap means that we could face a supply shortage and very high prices during the next years."⁵ Consequently, consumers must look to riskier "oil provinces for the new oil to balance out the global market."⁶ In-adequate investment in oil-rich regions along with rising global demand has heightened the value of marginal oil lands, granting previously ignored nations international leverage and a path to prosperity.

A General Theory of State Behavior Applied to Emerging Resource-rich Countries

As a rule, states seek to magnify their power using whatever means they deem appropriate. From hermit states to the most expansive of empires, this rule seems to allow of no violation

since all powers, whether focused inward on increasing domestic strength or outward on foreign acquisition or influence, whether by consent or force, seek to control their environment, and thus not merely to survive but to prosper. This general rule of state behavior may be tailored to resource-rich emerging states.

Emerging states lack an efficient manufacturing base, a large, skilled, and specialized labor force, and effectively functioning government. Underemployment, dramatic wealth and opportunity inequity, ineffective taxation, an amalgam of overlapping, often contradictory laws, and the concentration of power in a few hands tend to be some of their more prominent features.⁷ They also lack the domestic capacity to effectively explore, develop, and produce their natural resource endowment. They must, therefore, look abroad for assistance.

Our tailored rule implies that foreign entities cause an emerging power to select behaviors based on how those entities value its resources. This causal relationship may be modeled. The independent vari-



able (IV) is the value set by foreign entities upon the emerging state's oil endowment; the dependent variable (DV) is the behavior of the emerging state. The intervening variable (IntV) specifies the transmission mechanism whereby foreign perceptions cause the state's behavior.

But the model does more than merely describe the causal efficacy of foreign valuation. It suggests that resource nationalization is the natural strategic objective for a resource-rich emerging state, since all states seek to maximize their power. As

the intervening variable indicates, the emerging state must first partner with a foreign entity before it can pursue a strategy of resource nationalization. To clarify, a "high" value on the IV causes a "yes" value on the IntV, which causes a "high" value on the DV. "Moderate" and "low" IV values follow an identical horizontal path across the diagram (i.e., moderate \rightarrow uncertain \rightarrow moderate; low \rightarrow no \rightarrow low).

Predicting the Historical Record: What We Should Find if the Theory is True

If our model explains Kazakhstan's behavior, we should find in the historical record evidence that:

- Kazakhstan created a friendly investment environment in order to attract foreign companies to explore, develop, and produce its oil.
- As oil prices rose, the Kazakh government used various means to increase its share of oil profits.
- · Kazakhstan's leadership views its oil as a geostrategic resource.
- Nazarbayev confided in advisers his plans to nationalize the country's oil and gas sector.

Chronology

The following chronology centers on the exploration and development of the Kashagan structure from the early 1970s to 2009 while bringing in relevant surrounding events. "Green" highlights oil price developments; "yellow" consortium history and contractual activities; "red" Kazakh government actions to increase oil revenues; and "blue" demarcates decades.

Date	Event
1970-1979	
early 1970s	Soviets discover Kashagan but do not drill because of environmental concerns, high cost, and geologic complexity.
1980-1989	
1990-1999	
17 Dec 1991	Kazakhstan signs Energy Charter. ¹
25 Dec 1991	Kazakhstan obtains formal independence from Russia.
1992	Kazakhstan joins North Atlantic Cooperation Council.2
15 Dec 1992	Kazakhstan helps found Commonwealth of Independent States. ³
30 Jan 1992	Kazakhstan joins Organization for Security and Cooperation.
March 1993	Kazakh government founds KazakhCaspiShelf (KCS), a state-owned company designed to oversee O&G development in Kazakhstan's Caspian Sea territory. ⁴ Kazakh government invites Eni (Italy), BG Group (UK), BP (UK), Statoil (Norway), Mobil (USA), Shell (UK), Total (France), and KCS to undertake seismic surveys and environmental studies of the north Caspian Sea.
March 1993	Spot price oil just over \$20US/bbl (West Texas Intermediate, FOB)
13 Dec 1993	Kazakhstan joins International Atomic Energy Agency. ⁵
14 Feb 1994	Kazakhstan signs Charter on Democratic Partnership. ⁶
1994	Kazakhstan changes legal system to attract foreign investment.7
1994	IOCs initiate 3 year seismic survey of north Caspian. Parker Drilling initiates 5 year research project into drilling for oil in same while meeting "strict environmental regulations"; research team includes Kazakh, Russian, and other scientists.
1995	Kazakhstan joins NATO's Partnership for Peace.8
1996	Kazakhstan signs Comprehensive Test Ban Treaty; applies for admission to WTO (to date not admitted).9
1996	World Oil estimates Kazakhstan's reserves at 10-20 million barrels.
Nov 1997	After seismic exploration, IOCs and Kazakh government form joint operating company, Offshore Kazakhstan International Operating Company (OKIOC), and sign the North Caspian Sea PSA to explore and produce hydrocarbons on Kashagan prospect. OKIOC includes: Eni (Italy, 14.28%), BG Group (UK, 14.28%), Mobil (USA, 14.28%), Shell (UK, 14.28%), Total (France, 14.28%), BP (UK 9.52%), Statoil (Norway, 4.76%), and Kazakh Government (14.28%). ¹⁰ Budget for Kashagan exploration and development over 40 year life of PSA projected at \$57US billion.
Aug 1998	Kazakh government sells stake in OKIOC to consortium. Government will receive 80% of profits from sale of oil. Inpex (Japan) and ConocoPhillips (USA) enter consortium, purchasing Kazakhstan's 14.28% share for \$500 million.
10 Dec 1998	Spot price on oil drops to \$10US/bbl
4 Sep 1999	OKIOC spuds Kashagan East Well at depth of 5000 meters; estimates as high as 4 billion barrels of oil (BBO). American officials worry that the discovery will accelerate competition between US and Russia for control over future pipelines from Central Asia.
2000-2009	
Jan 2000	Spot oil price nearly \$30US/bbl. ¹¹
16 Oct 2000	Oil analysts suggest that Caspian reserves may be large enough to provide alternative to Persian Gulf supplies.
Jan 2001	Spot oil price holds at \$30US/bbl
July 2001	"Contrary toU.SKazakhstan tax treaty," the Ministry of Finance assesses Parker Drilling for US\$29 million in unpaid taxes. ¹⁰ Parker files lawsuit against Kazakh government, and wins in April, 2002, ¹¹
Feb 2001	Agip Caspian Sea B.V., a subsidiary of Eni, is selected by OKIOC consortium to act as sole operator of Kashagan. OKIOC is renamed Agip Kazakhstan North Caspian Operating Company (Agip KCO). Kashagan expected to produce commercially by 2005.
2001	BP (9.52%) and Statoil (4.76%) sell shares in project; consortium partners, using preemption rights, purchase BP and Statoil shares. New distribution: BG (16.67%), Eni-Agip (16.67%), ExxonMobil (16.67%), Shell (16.67%), Total (16.67%), Conoco-Phillips (8.33%), and Inpex (8.33%).
15 June 2001	Kazakhstan and China found Shanghai Cooperation Organization.
2001	Kazakh government creates Kazakhstan National Fund ¹⁴
Dec 2001	Kazakhstan signs Energy Partnership Declaration with the United States. ¹⁵
Jan 2002	Spot oil price falls to \$21US/bbl
June 2002	Kashagan declared commercial; BG sells share (16.67%).
June 2002	Kazakh government stakes claim on BG share, causing two years of negotiations with Agip KCO, and works to change national law governing preemptive rights so that the state oil company, KazMunayGaz (KMG), can buy back into consortium. ¹⁶
July 2002	After 2-year appraisal program, Kashagan's reserves are placed at 7-9 BBO; 9-13 BBO with secondary recovery.
7 Oct 2002	Kazakhstan joins Armenia, Belarus, Kyrgyzstan, Russia, and Tajikistan in founding the Collective Security Treaty Organization.
Oct 2002	Agip KCO selects Karabatan as location to build plant to process gas from Kashagan. ¹⁷
Nov 2002	Public break between Kazakh government and ChevronTexaco as the government seeks to "revise agreements unilaterally"; revision would divert oil profits to government rather than to expanding oil production. ¹⁸
25 Nov 2002	Agip KCO plans sulfur recovery projects at Kashagan: 3 trains, each handling 1,900 tons per day. Project completion expected in 2006.
Dec 2002	TengizChevroil ¹⁶ is fined \$71US million by Kazakh court for "ecological damage" (in 2003 fine reduced to \$7US million). Parker Drilling warms Kazakh government that it will stop drilling if disagreement between TengizChevroil and Kazakh government pesists. Agip KCO also threatens to suspend work if the government seeks to unilaterally revise signed agreements.
Jan 2003	Spot oil price rises to nearly \$35US/bbl
Jan 2003	Government introduces new foreign investment law, which "offers lewer protections to foreign investors and limits exemptions from customs fees to one year, with extensions limited to no more than five years[and removes] the right to international arbitration to settle disputes "20"
March 2003	Kashagan first oil now expected in 2006 or 2007. BG seeks to sell share (16.67%) to China National Offshore Oil Company (CNOOC) and Sinopee, for \$1.23US billion. Agip KCO partners exercise right of first refusal, denying CNOOC and Sinopee membership in Kashagan consortium.

Jan 2004	Spot oil price rises to \$36US/bbl
1 Jan 2004	Kazakh government changes tax policy: excess profit tax contracts are now "subject to taxes and other obligatory payments in accord with the tax legislation in effect on the date the tax liabilities arise," ¹¹
1 March 2004	Kashagan first oil postponed until 2008. Capital investment costs for full field development over 15 year horizon estimated to range from \$29US to \$30US billion; development plan "addressessevere climatic conditions, sensitive environment, high reservoir pressure, hydrogen sulfide content, relative remoteness, and lack of established infrastructure," including construction of onshore Kashagan-gas processing facilities and offshore facilities for raw gas reinjection. ²²
2004	IOCs pay fine of \$150US million to Kazakh government for Kashagan delays; both parties agree that the 2005 production start date was "unrealistic."
2004	Kazakh government adopts new law concerning "environmental contraventions."
2 July 2004	Kazakh government impounds Parker Drilling's "Sunkar" barge rig, alleging \$6US million in unpaid duties. ²⁰ The Oil and Gas Journal reports that this may be a "strong-arm tactic" to ensure that the Kazakh government obtains BG's share (16.67%).
Nov 2004	Kazakh government changes legislation governing preemptive purchase rights. KazMunayGaz can now buy back into Agip KCO.
Jan 2005	Spot oil price rises to \$49US/bbl
2005	Between 1998 and 2005 the "imputed value" of the Kashagan field rose from US\$3.5 billion to US\$7.4 billion. 24
14 March 2005	Kazakhstan agrees to purchase half (8.33%) of BG's share in Agip KCO. Consortium members will share the remaining half (8.33%).
31 Aug 2005	Nazarbayev announces that contracts signed with foreign investors will not be revised; and that Kazakhstan's labor force, which has obtained sufficient training, will in future likely undertake oil E&P on its own. ²⁵
3 July 2005	Kashagan's resource in place estimated to be 39.6 BBO.
Jan 2006	Spot oil price rises to US\$68/bbl
March 2006	Eni increases production cost of Kashagan to US\$33-\$35 billion "because of weakened dollar and higher equipment costs."26
11 Oct 2006	Agip KCO receives three certifications by independent audit in recognition of its business, environmental, occupational and employee safety management systems. ²⁷
16 Oct 2006	Eni will present revised development schedule and budget to Agip KCO by end of 2006. Eni's CEO Paolo Scaroni explains that delayed production of Kashagan is due to implementation of additional "environment and health protection measures."
Jan 2007	Spot oil price falls to \$60.77
1 Aug 2007	Kazakh government suspends Kashagan project for three months, citing "environmental concerns." Nurlan Iskakov, Kazakhstan's Minister of Environmental Protection, claims that further work on project will cause "irreversible ecological damage."**
27 Aug 2007	Iskakov states that Agip KCO's work may be stopped over environmental concerns.
29 Aug 2007	Agip KCO submits new budget and timeline for Kashagan to Kazakh government, elevating costs from \$57US billion to \$136US billion and postponing commercial production from 2008 to latter half of 2010. ⁵⁹
10 Sept 2007	Kazakh government threatens further suspension of Kashagan project, claiming environmental violations and breach of contract; asks for "adequate compensation" for cost overum and production delays; and expresses interest in having KazMunayGaz become joint operator of Kashagan project.
26 Sept 2007	Kazakh parliament accepts amendments to Law on Subsurface and Subsurface Use. Amendments give Kazakh government the right to unitaterally review and break contracts with subsoil users if those contracts are judged to threaten the country's national and economic security." European Commission initiates review to determine whether changed subsoil laws conflict with the Energy Charter Treaty; questions also raised about the constitutionality of amended subsoil laws. ³¹
1 Oct 2007	Despite rising costs, the Kazakh government demands the profits they would have received in 1997 when they signed the North Caspian Sea PSA; and fines TengizChevroil \$609US million for environmental violations.
8 Oct 2007	Minister of Energy and Mineral Resources, Sauat Mynbayev, states that Kazakhstan may drop its demand to make KazMunayGaz joint operator of Agip KCO; he sees no reason for the western consortium to cease work on the Kashagan field.
15 Oct 2007	President Nazarbayev reiterates that his government will not revise the terms of its contract with Agip KCO, but also states that Kazakhstan "reserves the right" to reconsider/renegotiate annul contracts with foreign companies that break their contracts.
1 Nov 2007	Kazakh government announces that Agip KCO may be fined an additional \$10US billion for Kashagan production delays.
Jan 2008	Spot oil price nearly hits \$100US/bbl.
1 Jan 2008	New contract for the development of the Kashagan doubles KazMunayGaz's share from 8.33% to 16.66% and reduces other partner shares. Agip KCO will pay Kazakhstan between \$2.5US and \$4.5US billion for project delays. New contract changes Eni from sole operator to partial operator, sharing responsibility with ExxonMobil, Royal Dutch Shell, and Total.
1 April 2008	Kazakh government agrees to pay Agip's IOCs \$1.78US billion for its 16.66% share, a price judged to be well below market value. ³²
8 June 2008	Kazakh government and Agip KCO postpone first oil until 2013; Agip KCO commits to pay floating royalties linked to the price of oil. Expiration date for Agip KCO PSA is 2041.
3 July 2008	Spot oil price hits \$145.31US/bbl
Jan 2009	Spot oil price falls to \$42US/bbl
2 Feb 2009	The North Caspian Operating Co. BV (NCOC) replaces Agip KCO as the operator of the Kashagan field. Members include KazMunayGaz (16.18%), Eni (16.18%), Total (16.18%), ExxonMobil (16.18%), Royal Dutch Shell (16.18%), ConocoPhillips (8.4%), and Inpex (7.55%). Under contractual terms effective as of January 22 ^{ed} , 2009, NCOC will "manage planning, coordination, reservoir modeling, conceptual studies, appraisal plans, early development plans, and government interfaces."

Analysis of Predictions

...Kazakhstan...seeks to secure investment while retaining control of [its oil and gas] sector, but there is no agreement on how this can be accomplished.⁴⁰

Mark Kaiser and Allan Pulsipher

Earlier I listed four predictions. These predictions specify observations we should make if our model explains the Kazakh government's behavior. Below each prediction is examined.

Prediction 1. The above chronology shows that Kazakhstan aggressively sought to develop an investment friendly environment immediately after obtaining its independence from Russia (1991), when average world oil prices were relatively low (\$20bbl, 1993) and Kazakhstan's oil reserves were believed to be relatively trivial (10-20 million barrels, 1996). Between 1991 and 1996, Kazakhstan passed several

laws to encourage foreign investment. These allowed foreign firms to participate in nearly every sector of its economy, providing them with duty free imports, total tax relief or substantial tax breaks, guarantees against future changes to Kazakh law, and customs exemptions.⁴¹ Over the same time period, Kazakhstan entered an array of western cooperative military, economic/energy security, and trade organizations, including the Energy Charter Treaty, NATO's North Atlantic Cooperation Council and Partnership for Peace, the OSCE, the Charter on Democratic Partnership, and the IAEA. IOCs responded by entering Kazakhstan to explore, develop, and produce its resources. For nearly eight years they were not fined. Evidence strongly confirms prediction 1.

Prediction 2. The year 2000 defines an inflection point in Kazakh-IOC relations. In the year 2000, world oil prices began to recover from a low of \$US10/bbl and estimates of Kashagan's resource in place jumped from 4 BBO to 8-50 BBO, leading observers to suggest that Kazakh oil may offer an alternative to Persian Gulf supplies. Kazakh authorities responded to the rise in price and international interest by taking lawful and (arguably) unlawful actions to increase the country's revenues from its oil and gas sector. Between 2000 and 2008, world oil prices rose (from \$US30 barrel to \$US145 barrel) along with Kashagan reserve estimates (from 4 BBO to 13 BBO using enhanced recovery). Over this same period, the Kazakh government charged IOCs with a variety of crimes (tax, duty, and environmental), leading to prolonged negotiations and court battles. It also fined IOCs in excess of \$US4 billion; gave itself the legal right to unilaterally revise/annul previously signed PSAs; used strong-arm tactics to force IOC compliance (e.g., impoundment, work suspension on fabricated environmental charges); increased tax rates on IOC activities; and forced a renegotiation of the terms of the original Kashagan PSA. Evidence strongly confirms prediction 2.

Prediction 3. Kazakh authorities view international competition over their energy resources as an opportunity to magnify the country's power, prestige, and prosperity. Known as "Kazakhstan 2030," Nazarbayev has implemented an ambitious plan to make Kazakhstan one of the fifty most competitive countries in the world. His plan substantially depends on oil revenues.⁴² The rising value foreign entities (the U.S., the EU, Russia, India, China and Iran) have placed on Kazakhstan's oil resources and their competition for regional influence and access to resources, has enabled Kazakh authorities to act with little regard for the concerns of western investors and IOCs. As Kazakhstan's former energy minister Vladimir Shkolnik put it: "You do not like it – leave. There is already a whole line of those desiring Kazakhstan's oil fields." Evidence strongly confirms prediction 3.

Prediction 4. We have no access to recordings of conversations held privately between Nazarbayev and his ministers, but public statements and actions do suggest that Kazakh authorities hope either to nationalize the country's resources or to drive off the IOCs now involved in their development. In 2005, Nazarbayev declared that Kazakhstan would in future take over the exploration, development, and production of its energy resources. Having obtained the requisite training from oil and gas companies, it was merely a matter of acquiring the financial wherewithal to do so. Two years later, the Kazakh government threatened to increase its share in OKIOC from less than 10% to 40% and to take over as joint operator. They relinquished this demand, but not without doubling their share in the Kashagan project and strengthening the operations role of the state oil company. With the recovery of world oil prices and the discovery of Kazakhstan's giant oil reserves, the Kazakh government has consistently been hostile toward IOCs, suggesting that it would rather conduct its oil and gas operations without them. As Shkolnik's comment suggests (see prediction 3), the Kazakh government feels that competition for access to its resources has given it leverage. Taken together, these statements and actions suggest that the Kazakh government does not feel beholden to the IOCs, but they do not decisively confirm or disconfirm prediction 4. The statements referenced here were made publicly, not privately, and may have been calculated to produce an effect rather than to communicate a purpose.

A Case of "Constrained Resource Nationalization"

If the Kazakh government plans to nationalize its resources, why haven't they done so already? As the above chronology and discussion demonstrate, nationalization has not been avoided because of a collegial relationship between Kazakh authorities and the IOCs. Considering the improved overall capacity of the Kazakh government to explore and develop its own resources and its ambitious domestic economic and foreign policy objectives, the most plausible explanation is that it depends on the IOCs. As Tanya Costello of Eurasia Group has observed, "Although the...government...[has] pushed for an increased role in the oil sector...the state is unlikely to want to take on the financial and technical challenge of Kashagan."⁴³ But partnering with IOCs has enhanced Kazakhstan's ability to undertake fundamental oil and gas activities. If it obtains the financial wherewithal to shoulder the costs of E&P, an essential constraint on its behavior will be removed. Freed of this constraint, chances are it will nationalize its oil and gas resources. The Kashagan should, therefore, be viewed as a case of *constrained resource nationalization*.

As Kazakhstan's oil and gas sector matures, evidence will confirm or disconfirm whether our model of resource-rich emerging states explains the Kazakh government's behavior. Given its record, it is likely that Kazakhstan will use rising world oil prices to force changes to existing PSAs; that these changes will increase the rate of technology transfer and government margins; and that the Kazakh government will ultimately pursue a policy of resource nationalization, thus maximizing its oil and gas revenues while minimizing outside interference in its affairs.

Footnotes

¹ \$4US billion consists mainly of fines against IOCs developing the Kashagan, 1997-2008, and may significantly understate the total amount the Kazakh government fined IOCs countrywide over this same time period.

² Campaner, Nadia, and Shamil Yenikeyeff. 2008. "The Kashagan Field: A Test Case for Kazakhstan's Governance of its Oil and Gas Sector." The Institut Français des Relations Internationales. October. <u>www.ifri.org/files/Energie/Kashaganbis.pdf</u>. Campaner and Yenikeyeff conclude that "the renegotiation of the conditions of the Kashagan consortium should be seen as a particular case in...a hugely complex industrial project rather than yet another sign of... 'resource nationalism'...." The Kashagan project is certainly complex. But is it meaningful to say that the renegotiation should be seen "as a particular case"? A particular case of what? Campaner and Yenikeyeff's omission of a noun that would summarize the implied general principle yields a statement whose meaning is troublingly opaque.

³ By "overall capacity" I mean the technological resources, managerial and administrative experience, internal knowhow, operational efficiency, and access to capital and risk distribution options.

⁴ WTRG Economics. 2009. James L. Williams. www.wtrg.com

⁵ Relocalize.net. 2009. Post Carbon Institute. www.relocalize.net

⁶ Neff, Andrew. 2005. "Caspian oil not likely to fill market void or depress prices." The Oil and Gas Journal. June 6, 39.

⁷ Bantekas, Ilias, John Paterson, and M. K. Suleimenov. 2004. Oil and Gas Law in Kazakhstan: National and International Perspectives. The Hague/London/New York: Kluwer Law International.

⁸ Energy Charter Secretariat. www.encharter.org

9 NATO.int. 2009. North Atlantic Treaty Organization. www.nato.int

¹⁰ Mowchan, Major John, A. 2009. "The Militarization of the Collective Security Treaty Organization." Center for Strategic Leadership, U.S. Army War College. www.csl.army.mil/usacsl/publications/IP_6_09_Militarization_of_the_CSTO.pdf

¹¹AgipKCO. 2009. www.agipkco.com

¹² FAS. 2009. Federation of American Scientists. "US Warmly Welcomes Kazakhstan's Accession to NPT Treaty." www.fas.org.

13 Ibid.

¹⁴ "A new Foreign Investment Law in 1994...provide[s] stronger guarantees against changes in Kazakhstan's legislation, greater clarity on investment requirements and on the credit facilities available to foreign investors... additional customs exemptions, and a guarantee of the right to recourse to international arbitration to settle disputes." Nations Encyclopedia. 2009. "Kazakhstan - Foreign Investment." www.nationsencyclopedia.com

¹⁵ NATO. 2009. "Partnership for Peace." www.nato.int.

¹⁶ WTO. 2009. World Trade Organization. www.wto.org.

¹⁷ Gaddy, Dean, E. 1999. "Rig clubs help alleviate Caspian Sea drilling shortage." Oil and Gas Journal. November 8, 63.

¹⁸ EIA. 2009. Energy Information Administration. tonto.eia.doe.gov.

¹⁹ IRS.gov. 2009. www.irs.gov/pub/irs-trty/kazakh.pdf.

²⁰ Parker Drilling. 2009. www.parkerdrilling.com.

²¹ Kaiser, Mark, and Alan Pulsipher. 2006. "High costs, uncertainty challenge operators in promising Kazakhstan." The Oil and Gas Journal. July 3, 39.

²² Prosites-kazakhembus.homestead. 2009. "Kazakhstan and the U.S. Confirm 'Commitment to Strengthen the Long-term Strategic Partnership." prosites-kazakhembus.homestead.com

²³ Wilson, Michael. 2006. "The State's Pre-emptive Right." Oil and Gas Magazine. January 9. www.mwp.kz

²⁴ Staffetta News: Oil, Gas, and Power in Italy. 2009. www.staffettaonline.com

²⁵ Chevron. 2009. Chevron Corporation. www.chevron.com.

²⁶ Tengizchevroil. 2009. www.tengizchevroil.com.

²⁷ Nations Encyclopedia. 2009. "Kazakhstan - Foreign Investment." www.nationsencyclopedia.com.

²⁸ "How Kazakhstan's Contractual Arrangements have Changed." 2006. The Oil and Gas Journal. July 10, 34.

²⁹ "The North Caspian Sea." 2004. The Oil and Gas Journal. March 1, 8.

³⁰ Parker Drilling. 2009. <u>www.parkerdrilling.com</u>.

³¹ Kaiser, Mark, and Alan Pulsipher. 2006. "High costs, uncertainty challenge operators in promising Kazakhstan." The Oil and Gas Journal. July 3, 39.

³² In Nazarbayev's words, "Now...we have come to this time, we began to buy our shares back, we became the participants of largest projects as Kazakhstan now has money, our personnel learnt to work with the best. We know where to take technologies, where to learn. Now we go forward so that in the future we would likely develop [mineral deposits] on our own, when we would grow rich." Quoted in "Contracts with foreign investors signed earlier will not be revised." 2005. Kazakhstan Oil and Gas Weekly. August 31.

³³ "Eni: Kashagan field more 'generous' than thought." 2007. The Oil and Gas Journal. Feb 5.

³⁴AgipKCO. 2009. www.agipkco.com.

³⁵ "Deja-Vu: Eni May Lose Kashagan over Environmental Violations." 2007. Business Monitor International. Aug 1.

³⁶ Prosites-kazakhembus.homestead. 2009. prosites-kazakhembus.homestead.com

³⁷ Russian Law News. 2008. "Kazakhstan further stiffens its mineral development regime – New controls for strategic fields and pipelines." <u>www.russianlaws.com</u>.

³⁸ Konyrova, Kulpash. 2007. "Nazarbayev signs subsoil law, throws investors into a tailspin." New Europe. www.neurope.eu.

³⁹ "Eni's Kashagan Reserves Fall by 76mn barrels." 2008. Business Monitor International. April 1.

⁴⁰ Kaiser, Mark and Alan Pulsipher. 2006. "Business environment still seen as risky in Kazakhstan." The Oil and Gas Journal. July 17, 32.

⁴¹ Nations Encyclopedia. 2009. www.nationsencyclopedia.com.

⁴² According to Nazarbayev, delays at Kashagan forced the government to postpone fulfillment of economic promises made to the public, causing the Kazakh people to suffer. Nazarbayev, Nursultan. "Prosperity, Security and Ever Growing Welfare of all Kazakhstanis." portal.mfa.kz

⁴³ Lesova, Polya. 2007. "Kazakhstan seeks changes to major oil field contract." Wall Street Journal: Market Watch. July 31. www.marketwatch.com.

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Careers, Energy Education and Scholarships Online Databases

AEE is pleased to highlight our online careers database, with special focus on graduate positions. Please visit <u>http://www.iaee.org/en/students/student_careers.asp</u> for a listing of employment opportunities.

Employers are invited to use this database, at no cost, to advertise their graduate, senior graduate or seasoned professional positions to the IAEE membership and visitors to the IAEE website seeking employment assistance.

The IAEE is also pleased to highlight the Energy Economics Education database available at <u>http://www.iaee.org/en/students/eee.</u> <u>aspx</u> Members from academia are kindly invited to list, at no cost, graduate, postgraduate and research programs as well as their university and research centers in this online database. For students and interested individuals looking to enhance their knowledge within the field of energy and economics, this is a valuable database to reference.

Further, IAEE has also launched a Scholarship Database, open at no cost to different grants and scholarship providers in Energy Economics and related fields. This is available at <u>http://www.iaee.org/en/students/List-Scholarships.aspx</u>

We look forward to your participation in these new initiatives.