PRELUDE TO THE RESOURCE CURSE:

OIL AND GAS DEVELOPMENT STRATEGIES IN CENTRAL ASIA AND BEYOND

By

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INTRODUCTION

To what extent does the size and the type of a country's resource base influence its political and economic development? Why did countries with few vital natural resources in East Asia experience a so-called "economic miracle," while other countries with tremendous mineral wealth in Africa and elsewhere fail to stimulate viable economic growth? These questions lie at the heart of recent debates within the burgeoning scholarship on the political economy of development (e.g. Bates, 1988; Chaudhry, 1997; Gelb, 1988; Haggard, 1997; Karl, 1997; and Shafer, 1994). Yet, this body of literature leaves a key a-priori question unexplored: why and how do states choose to develop their natural resources in the first place? To understand how undesirable political and economic outcomes associated with the "resource curse," such as "Dutch Disease," emerge in resource-rich countries, we refocus the debate on the period in which a state initially discovers its natural resource potential. The strategic choices that a resource-rich state makes at this first stage undoubtedly set in motion their future political and economic developmental trajectories. For example, since the "resource curse" has been linked most recently to state ownership, it is important to first explore the conditions under which states retain or relinquish ownership over their natural resources (Ross, 1999, p. 319-20).

The literature on petroleum-rich states is a case in point. Many of these studies posit a direct relationship between the possession of oil, its development for export, and the emergence of a rentier state, or a state which primarily procures revenue from external sources and then redistributes it to the population as a form of social and political control (see, e.g., Belawi and Luciani, 1987; Karl, 1997). Yet, they fail to address how and why a state initially decides to develop its vast oil and/or gas reserves, either once it discovers them or gains newfound authority over them. For example, under what conditions do states chose to privatize versus nationalize their energy sector, and to involve the international community directly (e.g. through ownership) in the exploitation of their energy reserves versus indirectly (e.g. through borrowing)?

The Soviet Union's collapse in 1991 provides a unique opportunity to address this gap in the literature. This historic event produced not only several newly independent states, but also a new set of oil and gas producers. These include the three energy-rich Central Asian states -- Kazakhstan, Turkmenistan, and Uzbekistan -- which, together with Russia, Azerbaijan, and Iran, make-up the Caspian Basin. The Caspian Basin is estimated to hold the largest oil and gas reserves in the world outside the Persian Gulf; only following the break-up of the Soviet Union, however, were the magnitude and extent of its reserves revealed. Kazakhstan is the second largest oil producer among the former Soviet republics after Russia; its Tengiz oil fields are estimated to contain between six and nine billion barrels of proven oil reserves (USEIA, 1999). Turkmenistan is the second largest producer of gas among the former Soviet republics and the fourth largest producer of oil; it ranks fourth in the world in gas output (WB, 1994b, p. 147). Uzbekistan ranks as the world's eighth largest natural gas producer and has several promising untapped oil and gas fields (USEIA, 1997).

Kazakhstan, Turkmenistan, and Uzbekistan are especially appropriate cases through which to explore these broader theoretical questions because they had almost identical starting points (or initial conditions) when they discovered the potential market value of their oil and gas reserves and assumed control over them. Due to their shared experience under Soviet rule, they hold in common many social, political, and economic legacies, such as the lack of civil society, centralized policy-making, economies based largely on agricultural rather than industrial production, and a vastly underexplored energy sector. When the Soviet Union collapsed, they were all thrust into independence to build nation-states where states previously did not exist and national identities were not well-formed. Moreover, since all natural resources were owned and controlled by the Soviet state, Central Asia’s leaders inherited the same political and institutional structure for the management of their energy reserves.

Yet, despite the aforementioned similarities, they have pursued notably distinct strategies toward developing their energy sector. At one end of the spectrum, for the first several years of

independent statehood Turkmenistan and Uzbekistan continued to insist upon maintaining full state ownership over their respective oil and gas reserves, and to reject the direct involvement of international actors in developing them. At the other end, Kazakhstan completely privatized its energy sector and sold the majority of formerly state-owned oil and gas enterprises to foreign investors shortly after independence.

This variation presents us with a set of striking empirical puzzles. First, why do states with very similar starting points pursue divergent energy development strategies? Second, why would state leaders forgo the opportunity to generate additional revenue from their natural resources, particularly if they could allocate and redistribute this revenue at their own discretion? Considering the loss of financial transfers from Moscow, we would expect Uzbekistan and Turkmenistan to exploit the earning potential of their oil and gas reserves and to enlist the aid of the international community in order to achieve this aim. Third, why do newly independent states willingly give up sovereign control over such valuable natural resources, and hence, the exclusive ability to allocate and redistribute revenue derived from their development? Kazakhstan's strategy is particularly puzzling since the conventional wisdom is that new states should jealously guard their newfound sovereignty (Thomson, 1995).[2] Considering the fact that its oil and gas reserves are its only real potential for economic growth, we would expect Kazakhstan to retain full state ownership and to be more wary of the international community's direct involvement in its energy sector (Birnie and Boyle, 1992, 113).

The purpose of this article is to explain these empirical puzzles and, in doing so, to formulate a broader theory of the initial formation of natural resource development strategies. In short, we argue that state leaders choose energy development strategies based on the domestic constraints they face when they either discover or gain newfound authority over their energy reserves: (1) the availability of alternative sources of rents; and (2) the level of political contestation. These two domestic factors determine the amount of resources that state leaders possess in the status quo versus the costs they must continue to incur in order to satisfy their

supporters and pay-off their opponents. Hence, they also determine the extent to which state leaders must rely on energy sector development to retain their power. Where state leaders enjoy a high degree of access to alternative sources of rents and a low level of contestation, they have sufficient resources to reward their supporters and appease or defeat their opponents. Thus, they can afford to nationalize (or retain state ownership) and to minimize international involvement because they can delay the financial benefits accruing from oil and gas exploitation. Where state leaders have a low degree of access to alternative sources of rents and a high level of contestation, they lack sufficient resources to reward their supporters and appease or defeat their opponents. Thus, they privatize their energy sector with the direct involvement of international actors in order to reap the financial benefits from exploiting their precious reserves immediately.

The article proceeds as follows. First, we assess the extent to which the existing literature is relevant for explicating our puzzle. Second, both building on and departing from this literature, we offer an explanation for why and how states adopt divergent energy sector development strategies, particularly at their initial stages. Third, we apply our explanation to Kazakhstan, Turkmenistan, and Uzbekistan and then consider several of its empirical implications for each state. Finally, to further demonstrate the explanatory power of our argument, we test its capacity to predict energy development strategies in the other two energy-rich post-Soviet states – Russia and Azerbaijan.

ALTERNATIVE EXPLANATIONS

The existing literature does not offer a clear set of alternative explanations to the empirical puzzles outlined above, since neither the literature on petroleum-rich states nor the one on the political economy of development addresses the question of why and how countries initially decide to exploit their energy reserves. The former body of literature is primarily concerned with the negative effects of oil resource wealth on a developing country's domestic economic policies and socio-political cleavages once the inflow of rents has already begun

(Belawi and Luciani, 1987; Chaudhry, 1997; Gelb, 1988; and Karl, 1997). The latter body of literature focuses on political determinants of economic growth in developing countries within the constraints of the international system (Bates, 1981; Haggard, 1990).

Our investigation both departs from and builds upon these two bodies of literature in several ways. First of all, we are concerned with the a-priori question of why state leaders choose particular strategies to develop their energy reserves when they either initially discover or gain newfound authority over these reserves. Energy development strategies not only have an important effect on political and economic conditions in the status quo, but also have a direct impact on the availability and use of rents later. Privatization, for example, may offer state leaders large sums of money in the short-run, yet greatly diminishes state receipt of and control over oil and gas revenues in the long-run. Public ownership, in contrast, often delays monetary payoffs because state leaders must borrow the necessary capital from international sources to develop their resources, but it also enables greater state control over the allocation and distribution of future oil and gas rents.

Second, in light of the above, we measure our dependent variable -- the initial formation of energy development strategies -- along two dimensions: (1) the method of ownership (i.e. whether oil and gas reserves are state or private property); and (2) the degree and form of international participation (i.e. whether foreign companies are involved in oil and gas development projects directly through ownership, production-sharing, and/or building local infrastructure, indirectly as a source of financial and/or technical assistance to the central government, or not at all). Thus, unlike the bulk of literature on petroleum-rich states, we do not view the international community's involvement as a given, but rather, as a product of calculated choice. At the same time, this notion that the type of international involvement matters expands Kiren Aziz Chaudry's observation that different forms of external pressures on resource-rich states produce a different set of domestic political and economic outcomes (Chaudry, 1997).

Third, in investigating this question, our focus is not on the effects of export-led growth or international trade on domestic political and economic outcomes. We are concerned instead with how domestic factors affect energy development strategies. We contend that it is not international factors that drive domestic developmental choices, but rather, domestic factors that determine the degree to and form in which an energy-rich state becomes engaged with the international community. Here, our work is most closely connected to the emerging literature on open-economy politics, which posits: first, that commodity exporters can actually influence international markets, rather than merely the reverse; and second, that the strategies developing countries pursue in order to do so are shaped directly by domestic politics (Bates, 1997).

Yet, fourth, similar to all three aforementioned bodies of literature, we consider two domestic factors key: (1) natural resource wealth and (2) political cleavages. The fact that our dependent variable is the initial decision to develop oil and gas reserves and not the effect of rents once these reserves are already being exported, however, mandates a broader conceptualization of both these factors. The literature on petroleum-rich states, for example, focuses on oil as the primary source of rents. Yet, this fails to take into account other sources for acquiring rents within these states' respective economies, which will undoubtedly influence the timing and method by which leaders decide to exploit their energy reserves. Simply put, the more an energy-rich state can rely on an alternative to developing its newly acquired oil and gas reserves, the more flexibility and leisure it has in deciding how to utilize them. In contrast, the bulk of the literature on resource-rich states assumes that the mere possession of resource wealth engenders rigid and myopic decision-making (e.g. Karl, 1997; Mahdavy, 1970; Mitra, 1994).

Similarly, these studies tend to focus on class as the primary domestic cleavage, to the exclusion of other possible salient cleavages which might have an impact on policy-making and the viability of developmental strategies, such as rural-urban or ethnic divisions (Bates, 1984; Easterly and Levine, 1997). In particular, they look at the impact of export-led economic growth on the relationship between state and business elites *after* the discovery and exploitation of oil

(see e.g. See Anderson, 1987). Their observations thus fail to take into account other forms of political and economic relationships between state and society that exist *before* policies toward the energy sector are fully developed and rents are being realized. Yet, these relationships can create another dynamic, in which the state's ability to utilize its energy reserves is constrained by its existing relationship with society. In many developing countries, this relationship is characterized by well-developed patronage networks, which serve as the primary basis for the distribution of political power and economic resources (see e.g. Anderson, 1986; Bratton, 1989; Eisenstadt and Roniger, 1984; Kaufman, 1974; Lemarchand and Legg, 1972; Schmidt, 1977). Intense contestation among well-defined cleavages, therefore, is a regular part of the political landscape, yet is often overlooked because it occurs in a form that is much less transparent than in Western-style democracies.

Finally, consistent with both the political economy of development and open-economy politics literature, our explanation for the divergence in energy development strategies is based on the premise that economic and political choices must both be considered rational. Thus, what appears to be economically irrational may in fact be politically rational (Bates, 1984; Haggard, 1990). Take, for example, the proposition that immediate privatization of energy reserves offers state leaders "quick cash" whereas development of these resources at a more leisurely pace controlled by state leaders will achieve greater growth in the long-term. If this is largely the case, and there is good reason to believe that it is, then it is economically rational for all states to pursue the latter strategy. Yet, we posit that they can choose not to for equally rational political reasons. In this regard, our approach shares another important similarity with the literature on open-economy politics in that we do not view the state as captured by dominant economic interest groups, but rather, as captured by the interests of its own elites who are primarily concerned with staying in power (Bates, 1998).

EXPLAINING ENERGY DEVELOPMENT STRATEGIES

Our explanation for the choice of energy development strategies begins with two basic assumptions. First, we assume that all state leaders are sovereignty maximizers. Particularly in newly independent states, state leaders prefer more rather than less sovereignty, which translates into more rather than less control over their natural resources. They aim to preserve their recently acquired ability for independent decision-making over their natural resources. We can thus derive their preference rankings over the available set of policy choices:

1. Nationalize (or Retain State Ownership) with Indirect International Involvement **[N_1]**
2. Nationalize (or Retain State Ownership) with Direct International Involvement **[N_2]**
3. Privatize with Indirect International Involvement **[P_1]**
4. Privatize with Direct International Involvement **[P_2]**

Second, we assume that all state leaders are concerned primarily with staying in power, and that in order to do so they must placate those interests that support their rule and appease or defeat those that do not. More specifically, they must continue to satisfy the status quo set of social provisions that the state is expected to provide. This will vary, both in terms of the type of "social contract" and the particular cleavage structure upon which patronage is dispensed in a given state. State leaders in energy-rich states will therefore choose development strategies that enable them to achieve a maximum level of sovereignty over their natural resources without threatening their continued rule.

The ability of state leaders to stay in power, however, depends upon the amount of resources [R] they possess versus the costs [C] of garnering support and paying off opponents, where R is a function of the availability of alternative sources of rents to developing their energy reserves and C is a function of the level of political contestation over the basis for dispensing political power and economic patronage facing them at the time of discovery.[3] State leaders can safely maintain their hold on power when they possess sufficient resources to meet their costs. Their power becomes threatened, therefore, when either R decreases relative to C or C increases relative to R.[4] Under either of these conditions, the ability of state leaders to pursue their most

preferred strategy is constrained because they must generate additional resources with which to pay off their opponents.

Access to alternative rent sources determines whether or not the leadership can maintain current levels of domestic spending without immediately exploiting their oil and gas reserves. Simply put, a state with alternative sources of rent can postpone the development of its oil and gas reserves, whereas a state without alternative sources of rent faces much greater time pressures to generate revenue from its oil and/or gas reserves. The degree of alternative sources of rent in a given state is ascertained by: (1) whether it can develop an existing export commodity independently, that is, without the immediate need for inputs from beyond its borders, including foreign capital; (2) whether or not there already exists an export market for this particular commodity; and (3) whether the export of this commodity is capable of providing a disproportionate share of foreign revenue in the status quo.

The level of contestation over the basis for dispensing political power and economic patronage determines the amount of resources that current leaders need to maintain their hold on power. This is measured by: (1) the existence of a cleavage structure that could function as a viable alternative to the current basis for dispensing patronage; (2) whether political parties and/or social movements based on such an alternative cleavage have emerged and gained popular support; and (3) whether these parties and/or movements have in fact made demands for greater resources.[5] In sum, the more intense the challenge to maintaining the existing system for dispensing patronage -- and hence, the dominant cleavage upon which this system is based -- the greater state leaders' need to attain additional resources to maintain power. Particularly in developing countries, the emergence of a potent rival cleavage threatens the existing patron-client networks upon which the economic and political system is based. In doing so, it directly challenges and may even undermine the dominant socio-political structure, which increases the likelihood for social and political instability. Groups based on this emergent cleavage seek to replace the existing patronage network so as to acquire a greater share of state resources. Where

a high level of political contestation exists, then, state leaders must seek an immediate expansion in rents, such that the state can simultaneously reinforce the position of existing elites through whom they maintain political stability and placate the interests of this rival cleavage. For leaders in newly-independent states, this situation is especially difficult because it calls into question the basis for constructing the new state.

The interaction between these two domestic factors -- the degree to which alternative sources of rents are available and the level of political contestation -- shapes which of the four energy development strategies listed above state leaders choose to pursue. This is summarized in Table I below. At one end of the spectrum, leaders in energy-rich states with a high degree of alternative sources of rent and a low level of contestation face the least constraints on their strategic choices. With the financial resources to maintain their status quo support from the dominant cleavage and without the added cost of overcoming a serious challenge to their rule from a rival cleavage, they can afford to postpone oil and gas development. Thus, they can pursue their first rank order preference [N_1] to nationalize (or retain state ownership) and minimize the role of international actors. At the other end, leaders in energy-rich states with a low degree of alternative export potential and a high level of contestation face the greatest constraints on their strategic choices. In addition to a contraction in resources, they face domestic pressures to generate revenue immediately so as to both maintain status quo support and diffuse a potent challenger to their continued rule. Thus, they must adopt their least preferred policy choice [P_2] to privatize their energy sector with the direct involvement of international actors.

In between these two extremes, state leaders can also face a domestic environment in which the degree of alternative export potential and the level of contestation are either both low or they are both high. A low degree of alternative sources of rents combined with a low level of political contestation enables state leaders to adopt their second most preferred policy outcome [N_2] to nationalize (or retain state ownership) and offer the international community a substantial role in developing their energy reserves. Under this scenario, state leaders can pursue a strategy

of state ownership since the absence of competing domestic cleavages makes the need for immediate revenue much less acute. Yet, the international role is substantial because there exists no alternative source of rents with which to maintain their status quo base of support. Foreign investment is therefore necessary to expedite the development of their reserves. Where state leaders have a high degree of alternative sources of rents and experience a high level of political contestation in the status quo, they can adopt their third most preferred policy outcome [P_1] to engage in extensive privatization and involve the international community only minimally. Under this scenario, leaders engage in extensive privatization as a means of maintaining support for their continued rule. By transferring ownership of these resources from the state to private domestic actors, they can both bolster dominant patronage networks and appease the emerging rival one. They are able to minimize the role of international actors, however, because they can rely upon the rents from their alternative exports. In fact, excluding foreign investors from the privatization process enables them to sell off these resources to domestic supporters and/or powerful rivals at below market value.

Table I here

EXPLAINING DIVERGENT STRATEGIES IN CENTRAL ASIA

The divergent energy strategies in the three energy-rich Central Asian states, then, are best explained by the interaction between the degree to which alternative sources of rents are available and the level of contestation over the basis for distributing political and economic resources. In Turkmenistan and Uzbekistan, a high degree of alternative sources of rents combined with a low level of contestation over the status quo basis for dispensing patronage enabled leaders to delay the development of their respective oil and gas reserves. Conversely, a low degree of alternative sources of rents coupled with high level of contestation over the status quo basis for dispensing patronage in Kazakhstan compelled state leaders to relinquish state ownership and to invite foreign investors to develop their oil and gas reserves immediately.

In order to demonstrate this, we first turn to the nature of the social contract and cleavage structure inherited from these three states' common Soviet past. The social contract is the particular public good that the former Soviet leaders must provide in order to ensure their political survival. The cleavage structure serves as the basis for dispensing patronage in order to uphold the social contract. Together, they serve as the backdrop against which decisions are made. We then provide ample empirical evidence to substantiate the following: first, that the degree of access to alternative sources of rents and the level of contestation in Uzbekistan and Turkmenistan, on the one hand, and Kazakhstan, on the other, varied up to and immediately following their independence in the ways specified above; and second, that these differences in domestic conditions directly influenced their respective leaders' decisions to adopt divergent energy development strategies.

Social Contract and Cleavage Structure

The central feature of state-societal relations in post-Soviet states is the nature of the "social contract" created and institutionalized under Soviet rule (Hauslohner, 1987). This social contract formed the basis of expectations and interactions between state and society in the Soviet Union by creating a set of norms, constituency benefits, and political and economic institutions that mediated state-society relations. The Soviet version of the "social contract" was unique in that it was based on a two-tier system: one for the general population and another for political elites. The general population was provided with what were considered "basic needs" (e.g. free healthcare and education, guaranteed employment, and a sufficient pension) in exchange for compliance with the Soviet system, which essentially meant no overt opposition to the regime. Political elites were guaranteed a higher standard of living and professional advancement within the Communist Party or the Soviet government for political support as well as economic performance, depending upon the most valuable sector in their republic or region (*oblast'*).

In Central Asia, the social contract played itself out through a cleavage structure based on regionalism, or identity with and loyalty to the region, in which one lives and works. This system

was embodied in Central Asia's cotton sector, which encompassed nearly all of Uzbekistan and Turkmenistan, and the Kyzl-Orda and Chimkent *oblasts* of southern Kazakhstan. Cotton production served as the crucial link between republic-level and regional-level elites on the one hand, and between regional elites and their local constituencies on the other. It was the basis upon which Central Asian republican leaders could demand and receive added transfers from Moscow. Republican leaders relied upon the regional leaders who, in turn, relied upon district (*rayon*) leaders and farm chairmen to ensure that the cotton harvest was met. A successful harvest brought increased benefits to the region, and hence to regional and local leaders, in the form of additional subsidies for new projects related to the cotton sector (Weinthal, 1998).

The Central Asian states enjoyed not only the most extensive system of social protection under the Soviet Union, but also one that was heavily subsidized by transfers from the Soviet central government (i.e. Moscow) (see e.g. WB, 1993b, p. 106). At independence, regional competition over the distribution of resources continued to define the foundation of Central Asia's political and economic system. Yet, without Moscow to provide the republican leadership with the means to fulfill these expectations, the leaders of these newly independent states were compelled to do so themselves, or risk social upheaval and political instability. Their ability to successfully assume the burden of the social contract depended upon both securing a sufficient source of hard currency after the Soviet Union's collapse and defeating serious challenges to the maintenance of regionalism as the basis for distributing state resources.

Alternative Sources of Rent

The Soviet system of economic specialization and interdependence left the newly independent Central Asian states with varying degrees of access to alternative sources of rents. Those states that produced commodities which depended upon basic inputs from other former Soviet republics, were intended primarily for inter-republican trade, and/or required huge capital investments, for example, were greatly constrained in their ability to develop these goods

following independence -- particularly at a quality that was suitable for export outside the Commonwealth of Independent States (CIS).

Turkmenistan and Uzbekistan inherited a high degree of access to alternative sources of rents via their agricultural sector, particularly cotton. First of all, both countries possessed the necessary inputs to produce cotton independently, since they internally manufactured most of the basic inputs for the production and harvesting of cotton. Thus, during the Soviet period, they relied much less on inter-republic exchanges to sustain this sector than any other Central Asian republic, particularly Kazakhstan. Turkmenistan even had several cotton processing plants on its own territory. The exception here, of course, is water, for which they depended upon Kyrgyzstan and Tajikistan. Yet, the introduction of new borders did not fundamentally disrupt the flow of water from the upstream states, Kyrgyzstan and Tajikistan, to the downstream states, Turkmenistan and Uzbekistan, but rather, led to a series of agreements reinforcing the Soviet-era practice of bartering water for energy (Weinthal, 1998).

Second, Turkmenistan and Uzbekistan could generate a disproportionate share of state revenue from the production of cotton alone. These two countries, along with Tajikistan, provided the bulk of the Soviet Union 's cotton supply. Uzbekistan's cotton sector produced more than 65 percent of its gross output, consumed 60 percent of all resources, and employed approximately 40 percent of the labor force in the mid-1980s. It also accounted for about two-thirds of all cotton produced in the Soviet Union (Rumer, 1989, p. 62). A similar picture exists for Turkmenistan; over 40 percent of the population were employed in agriculture, which produced 15 percent of the Soviet Union's total cotton supply in 1988 (Gleason, 1990). At independence, Uzbekistan became the world's fourth largest producer of cotton and Turkmenistan was among the top ten (WB, 1993b, p. xi; WB, 1994B, p. 30).

Third, both Uzbekistan and Turkmenistan were able to secure a profitable export market for their cotton immediately after independence. Cotton production was not only their primary source of revenue from Moscow during the Soviet period, it was also an important source of hard

currency for Moscow, which paid below market value for Central Asian cotton and then re-sold it abroad at market prices or processed it in Central Russia for domestic consumption. Although some raw cotton still went to Russia for final processing following the Soviet Union's collapse, Uzbekistan and Turkmenistan were able to substitute their reliance on Moscow with foreign buyers, as those who had traditionally bought Soviet cotton from Moscow turned instead to Uzbekistan and Turkmenistan. Thus, Moscow no longer served as "the middleman" between these cotton-producing republics and the international cotton traders. Their ability to procure new markets was also facilitated by the fact that they did not need to secure either immediate or large capital investments to export cotton. In 1991, cotton already comprised approximately 84 percent of Uzbekistan's foreign exports, and by 1992, it provided over three-quarters of Uzbekistan's total export revenue alone (IMF, 1992, p. 2; WB, 1993b, p. 24).

At the same time, Turkmenistan was able to supplement its income from cotton exports by continuing to supply gas to other CIS countries via Soviet-era pipelines. Thus, for the first few years after independence, Turkmenistan could gain some revenue from exporting its gas without investing in new pipelines or searching for alternative markets. When the Russian Federation claimed ownership over all Soviet-era pipelines on its territory, Turkmenistan continued to make deals with Russia to supply its southern regions and received in return a quota for Russian gas, which was then exported for hard-currency on behalf of Turkmenistan to European markets (WB, 1994b, p. 21 and 161).

In contrast to Turkmenistan and Uzbekistan, Kazakhstan inherited a low degree of access to alternative sources of rents. It did not produce either an agricultural crop or manufactured good independently that it could export to generate a sufficient amount of hard currency right after independence. As of 1991, agriculture was the second largest sector in the Kazakhstan economy, contributing 36 percent of its net material product (NMP) and employing 18 percent of the labor force (WB, 1993a, p. 130). Yet, agricultural products only accounted for between 8 and 10 percent of total export revenues, ranking far behind projected income from energy exports

(WB, 1994a, p. 20; WB, 1993a, p. 106). In the Soviet system of economic regional specialization, Kazakhstan was designated a main producer of grains, especially wheat, over 80 percent of which was intended for distribution within the former Soviet Union rather than for export (WB, 1994a, p. 20). Approximately 82 percent of the 220 million hectares of agricultural land in Kazakhstan are grazing lands, pastures and rangeland; the remaining 35 million hectares are cultivated primarily for grains. Thus, Kazakhstan lacked a well-established system of foreign buyers outside the former Soviet Union for its wheat.

Kazakhstan's mineral sector also failed to provide it with a viable alternative to developing its energy sector. With independence, Kazakhstan inherited significant deposits of minerals, copper, lead and gold. As part of the Soviet Union, it possessed 90 percent of the total chromium reserves, produced 18 percent of the iron ore, and was the largest copper producer, placing it tenth in the world after the Soviet Union's collapse (WB, 1993a, p. 125). However, unlike the agricultural sector in Uzbekistan and Turkmenistan, the mineral sector in Kazakhstan required huge capital investments upfront to develop them for export. Minerals and mining centers are located predominantly in the northern and eastern *oblasts*, and under Soviet rule they were closely linked to the Russian Federation (RSFSR), which received 60 percent of Kazakhstan's total mineral exports. Even with large reserves of iron ore, the grades were low to mediocre, and as a result, their long-term comparative advantage in world markets was limited and entry-costs for foreign investors were quite prohibitive (WB, 1993a, p. 125). Finally, even those minerals and metallurgical industries that might enjoy a significant comparative advantage on world markets, required investments in infrastructure to build basic transportation networks and repair others while also upgrading antiquated producing technologies (WB, 1993a, p. 126). Thus, Kazakhstan's mineral sector held much less promise and foreign interest than what were widely acclaimed as its immense oil and gas reserves.

Even Kazakhstan's oil and gas sector was highly underdeveloped at independence, especially in comparison to the cotton sector in Uzbekistan and Turkmenistan. According to the

World Bank, Kazakhstan only produced six percent and one percent of the former Soviet Union's total oil and gas production, respectively. Since many of its existing reserves were left unexplored, it required huge capital investments to develop them. This is particularly true of the off-shore sites on the Caspian which are believed to hold the bulk of its energy wealth, and are much more attractive to foreign investors than Kazakhstan's mineral sector (WB, 1993a, p. 8; Interview with Kazakh Caspishelf and OKIOC, December 1997).

Level of Contestation

As mentioned above, under the Soviet system regionalism served as the primary basis for competition over the distribution of resources. Following independence, however, it became possible for other domestic cleavages to emerge and to challenge this regionally-based patronage system. The most likely contender was nationalism, which many have argued was fostered throughout the Soviet Union by its administrative division into ethno-territorial units in which it designated a particular ethnic group as the titular nationality (see e.g., Slezkine, 1994).[6] Yet, not all titular nationalities formed an absolute majority in their respective republics. Where they did form a majority, nationality did not sufficiently differentiate between the population to serve as an appropriate basis for dispensing patronage, since virtually everyone would be eligible for the same amount of political and economic resources. Where they did not form a majority, demands for the dispensation of patronage based on national distinctions were much more likely to provide a source of political mobilization for titular and non-titular nationalities alike (see e.g. Jones Luong, 1997, chapter three).

Uzbekistan and Turkmenistan experienced a low level of contestation in the first several years after independence since neither faced any direct or significant challenges to regionalism (Jones Luong, 1997). First of all, in both states the titular nationality -- Uzbeks and Turkmen, respectively -- formed an absolute majority. In 1989, Uzbeks made up 71 percent of Uzbekistan's total population and Turkmen constituted 72 percent of Turkmenistan's total population, and their presence vis-à-vis other nationalities increased after independence

(Pomfret, 1995, p. 5; Ochs, 1997, p. 333). Due to the substantial outmigration of Russians from both countries, only Tajiks in Uzbekistan and Uzbeks in Turkmenistan constituted what might be considered a significant percentage of their respective state's population after independence.[7] Yet, neither group presented a viable threat to regionalism. The Tajiks in Uzbekistan, for example, were both geographically divided between two *oblasts* (Bukhara and Samarkand) and three cities (Bukhara, Samarkand, and Tashkent) under Soviet rule, and politically divided at independence (Jones Luong, 1997, chapter three).

Second, neither witnessed the emergence of social movements and/or political parties based on an alternative cleavage structure, including nationalism.[8] The leaderships of both countries moved fairly quickly to establish a politically repressive environment in which the central government formed its own successor to the Communist Party and used it to bolster existing regionally-based patronage networks (Jones Luong, 1997, chapter four).[9] In Turkmenistan, no rival political party or broad-based social movement formed to challenge this state of affairs (see e.g. Ochs, 1997, p. 323-28). Two vibrant opposition movements did emerge in Uzbekistan shortly after independence – *Birlik* (Unity) and *Erk* (Freedom). Yet, neither was based on national affiliation; rather, they garnered their primary source of support along regional lines. Moreover, since 1992, both groups have been brutally suppressed (see Fierman, 1997; and Jones Luong, 1997, chapter four). As a result, Turkmenistan and Uzbekistan's leaders faced very few demands for either greater autonomy or more resources based on nationality.

In contrast to Uzbekistan and Turkmenistan, Kazakhstan faced a high level of contestation over the continuation of its regionally-based patronage system. First of all, at independence, the combination of near ethnic parity between Kazakhs and Russians along demographic lines and their division along geographic lines created a great potential for nationalism to emerge. Ethnic Kazakhs represented less than half the population in their titular state and were located primarily in rural areas and in the southern and western parts of the country. Russians and other Slavs comprised the other half of the population and were located

primarily in the major cities and in the North along the border with Russia. Economic factors contributed to the salience of these ethnic divisions. On the one hand, the fact that northern Kazakhstan is tied to Russia economically reinforced its dual ethnic and political allegiances. On the other, the cotton economy in the South is connected more closely to the other four Central Asian states (Jones Luong, 1997, chapter three; see also Olcott, 1993).

Second, both before and after independence, several social movements and political parties based on nationality emerged throughout the country. Several movements and parties representing ethnic Russians and other Slavs were founded in the northern and eastern *oblasts*, while those representing Kazakhs were formed in the southern and western *oblasts*.[10] Moreover, most of these organizations established their headquarters in the capital at the time (Almaty), where they could voice their demands directly to the Kazakhstani government or simply attract attention to their cause. Some Russian “nationalist” parties and movements, for example, called for the annexation of Kazakhstan’s northern and eastern oblasts to Russia, or demanded outright secession from Kazakhstan; others claimed their right to greater political and economic autonomy within Kazakhstan. Meanwhile, Kazakh “nationalist” parties and movements called for greater linguistic and institutional privileges for Kazakhs, such as elevating the status of the Kazakh language over Russian and filling governmental posts with Kazakhs (Jones Luong, 1997, chapter three; see also Olcott, 1993 and 1997).

Domestic Conditions and Energy Development Strategies

In short, state leaders in Turkmenistan and Uzbekistan, on the one hand, and Kazakhstan, on the other, chose to adopt divergent energy development strategies in response to the different set of domestic constraints documented above. This direct causal relationship becomes evident when one examines the following: (1) the pace at which decisions were made regarding energy sector development since independence; (2) which sector has dominated the economy and/or provided a disproportionate share of state income; and (3) how this income is actually spent -- i.e. whether it is used to reward supporters and defeat or pay-off challengers.

First, concerning the pace at which decisions were made, we should find that Kazakhstan was much more impetuous than either Turkmenistan or Uzbekistan in pursuing the development of its energy sector. This is indeed the case. Kazakhstan's leadership began courting foreign companies to invest in its oil and gas reserves immediately after independence. Its first step was to replace Moscow in negotiations with Chevron over rights to develop the Tengiz oilfields in the northwestern part of the country. Upon doing so, state leaders indicated to Chevron that they were "eager to maintain Chevron's interest… and active role" in the development of these well-endowed oilfields and, by 1993, successfully concluded an agreement to jointly develop them (Interview with Chervon, December 1997). During this time, Kazakhstani state leaders also engaged in talks with other prospective foreign investors to develop their oil and gas reserves for export (Interviews with oil and gas representatives, March and December 1997). They also increased their efforts to attract more foreign investment, which included adopting the necessary legislation as well as environmental and safety regulations (Interviews with Hagler-Bailly, March and December 1997). These efforts were so great that in the early 1990s many foreign oil and gas companies switched their original focus from Russia to Kazakhstan, where they could expedite business transactions more securely. The success of the Tengiz agreement, in particular, opened the door for subsequent foreign investors in Kazakhstan's energy sector (Interview with Chervon, December 1997). As a result, by 1998 Kazakhstan was "the largest recipient of foreign direct investment in per capita terms among the CIS countries," which was heavily concentrated in the energy sector (WB, 1998, p.4).

The move toward privatization, as well as the actual privatization process itself, also occurred at a very rapid pace. In October 1994, Prime Minister Akezhan Kazhegeldin was appointed expressly to carry out this task. Under his direction, the Kazakhstani government sold off the bulk of its shares in oil and gas enterprises to a variety of foreign companies between July 1996 and July 1997. [Refer to Table II below.] Even members of the international community, who widely supported the decision to privatize as an economic strategy, expressed surprise and

concern at the speed with which Kazakhstan privatized its energy sector (Interviews with Mamishev and McNamara, March 1997). Foreign investors in particular noted that state officials were so eager to sell-off their assets, that they were actually undervaluing their oil and gas resources (interviews, March and December 1997). In the hopes of generating additional income from its energy sector as quickly as possible the Kazakhstani government also deliberately prioritized the sale of those fields which hold proven and the most substantial oil and gas reserves. In June of 1993, for example, British Gas and the French Oil Company Agip won exclusive negotiating rights to develop the Karachaganak oil and gas fields in Western Kazakhstan, which produces about half Kazakhstan's total gas output (WB, 1993a, p. 111). Less than two years later, the Kazakhstan government announced the tender to sell the state's holdings in the other three oil and gas "giants" -- the Joint-Stock Companies Yuzhneftegas (an oil and gas company in Southern Kazakhstan), Aktyubinskneft (an oil company in Western Kazakhstan), and Shymkentnefteorgsintez (an oil refinery in Southern Kazakhstan) (Chervinsky, 1994, p. 13).

Table II here

In contrast, Uzbekistan and Turkmenistan have been recalcitrant toward foreign involvement of any kind in their respective energy sectors since independence. On the governmental side, this includes resisting the adoption of appropriate legislation for foreign investment. As one executive working in the region commented: "The Uzbeks and Turkmen are much slower [than the Kazakhs], dragging their feet on [oil and gas] legislation" (Interview with Hagler-Bailly consultants, 1997). For prospective foreign investors, this has amounted to prolonged negotiations and repeated delays in beginning any real profit-generating activity. Both Texaco and Enron, for example, arrived in Uzbekistan in 1994, but waited several years before the government would engage in serious negotiations with them, and their activity has remained "insignificant" since then (Interview with Enron, March 1997). The experience of Enron further demonstrates that Uzbekistan's state leaders are not "eager" to develop their oil and gas reserves, particularly with an active role for foreign investors. In order to gain government approval for

exploration and development of oil and gas in fields with known reserves (Gazli and Kandin fields near the Turkmen border), Enron had to promise first to develop oil and gas in less valuable or unproven fields (Gadzhak and Kadasai fields in the Surkhandarya region) (Interview with Enron, March 1997). Similarly, the activity of foreign investors in Turkmenistan has been severely restricted by government policies and unorthodox practices. Argentina's Bridas and Holland's Larmag, for example, both invested substantial amounts in joint ventures with the Turkmenistan government to develop oil fields, and yet, were never actually able to begin drilling. The government not only periodically denied them export licenses, it went as far as to unilaterally re-write their contracts without notice (Interviews with oil and gas representatives, December 1997). Turkmenistan's leaders also have resisted the development of what are likely to be its most substantial reserves in the Caspian Sea. It has thwarted interested foreign investment both by routinely delaying a resolution to the legal dispute over the Caspian and by indefinitely postponing international tenders for both gas fields and oil reserves in its section of the Caspian Sea.

Second, we should also see a divergence among these three states regarding their dominant economic sector after independence. In Uzbekistan and Turkmenistan, we should find that state leaders have prioritized agriculture, particularly cotton, over all other sectors, including the energy sector. This means that agriculture/cotton both generated a disproportionate percentage of state revenue as well as received the most foreign investment and domestic attention. Conversely, in Kazakhstan we should find that the energy sector has dominated the economy since 1991. Thus, it should have replaced all other sectors in terms of its contribution to state revenues as well as the share of foreign investment and domestic attention.

The empirical evidence provides little doubt that either cotton remains the dominant sector in the economy, or that it provides a disproportionate share of state revenue in Uzbekistan and Turkmenistan. In both states, the area under cultivation for cotton production has actually increased or decreased only minimally since independence. Turkmenistan has continually

increased the area of irrigated land since independence, half of which is dedicated to cotton production alone, and called for extending the Kara Kum canal so as to irrigate another million hectares of land for cotton and food production (Weinthal, 1998; WB, 1994b, p. 130). The government began to export cotton immediately after the break-up of the Soviet Union, when Russian and other former Soviet republics refused to pay world market prices (WB, 1994b, p. 130). Since then, cotton has become Turkmenistan's "major cash crop" (WB, 1994b, p. 123). Although it contributes less to the central budget than gas exports in absolute terms, it has provided an increasing amount of state income since 1991 whereas revenues from gas exports have declined significantly (Interviews with USAID and U.S. Embassy, December 1997). Uzbekistan has decreased the amount of land where cotton is grown, but only to the extent that was absolutely necessary; that is, due to the poor quality of land, which became oversalinized and infertile in many areas during the Soviet period, and the need to increase food production so as to maintain subsidized prices. The government deliberately relies on cotton as both the largest source of its hard currency and revenue, despite the environmental legacy of cotton monoculture under the Soviet Union, and appears likely to do so with minimal reform for as long as possible (Synovitz, 1997; Interview with USI, February 1997). Between 1993-1997, Uzbekistan was the world's 5th largest producer of cotton, 79%-95% of which was exported, earning it second place among the world's cotton exporters (USDA/FAS, May 1999).[11]

In addition, to the extent that international activity has been solicited at all, it has been primarily in those sectors related to cotton-production. Following independence, both Uzbekistan and Turkmenistan received the bulk of international assistance in the agricultural sector through loans and grants from the World Bank and the European Union (TACIS). This is also the case concerning foreign investment. One of the first foreign contracts signed in Uzbekistan involved cotton production and sales through a British company. Shortly thereafter, the Eisenburg Group of Israel also negotiated a deal with the Uzbekistani government to provide new irrigation technology in exchange for cotton (Weinthal, 1998). Turkmenistan has also continually "pushed"

international aid and foreign investment toward supporting and expanding its textile industry (Interview with U.S. Embassy, December 1997). In addition, international donor organizations and foreign cotton companies have established pilot farm projects in both countries in order to improve the quality of cotton production.

The situation in Kazakhstan is also consistent with the aforementioned expectations. That the government has received the bulk of its revenue from selling-off the rights to exploit its oil and gas reserves to foreign companies since independence is clear to observers on the ground. As Ruslan Mamishev of the World Bank remarked: "the government [of Kazakhstan] has been selling off energy assets with the intention of getting short-term gains to fill the holes in its budget" (Interview with Mamishev, March 1997). Moreover, the Kazakhstani government has increasingly shifted its limited resources toward the energy sector and away from other sectors. Since independence, the investment priority of the government has clearly been revitalizing its oil and gas fields and building pipelines. Between 1990 and 1995, the oil industry alone accounted for 40 percent of all sectoral investment; the energy sector (including electric power generation and coal) made-up 60 percent of total sectoral investment (Broeck and Kostial, 1998, p. 69). By 1998, while "[c]apital investments in the national economy [had] shrunk by 89 percent compared to 1991, nine out of every ten industrial enterprises [had] stopped work, and livestock numbers [were] half of what they used to be in 1991," investment in the energy sector continued to grow by comparison (IMF, 1998, p. 44).

Finally, we should find that state leaders are utilizing the income generated from their respective dominant economic sectors -- i.e. cotton in Uzbekistan and Turkmenistan and energy in Kazakhstan -- primarily to retain their hold on power through rewarding supporters and defeating or paying-off challengers. In Uzbekistan and Turkmenistan in particular, we should thus see only very minor changes in the cotton sector after independence, since this is integrally tied to the regionally-based patronage system. In Kazakhstan, however, we should find that

privatization has served principally as a means of empowering regional leaders and appeasing or defeating nationalist groups. The empirical evidence also substantiates these outcomes.

Both Uzbekistan and Turkmenistan's state leaders have continued to retain tight control over their respective cotton sectors. In fact, the Uzbekistan government has only minimally loosened its control over any aspect of the agricultural sector, including production and distribution, despite the stern recommendations of international lending organizations (WB, 1993b, p. 116; Synovitz, 1997). Cotton in particular is controlled by state commodity boards that set artificially low prices at which the government purchases cotton and then resells it for world market prices to foreign countries (WB, 1993b, p.121).[12] Likewise, there has also been no real change in Turkmenistan's agricultural sector as a whole, including its state and collective farm structure. Since independence the "[p]roduction of cotton and other key crops [has remained] controlled via state orders that set production quotas and prices..." (WB, 1993b, pp.123, 130). In fact, aside from wheat, cotton is the only agricultural product whose output level remains based on production quotas arbitrarily handed down from the central government, just as it was during the Soviet period (Interview with U.S. Embassy, December 1997).[13] Its equivalent of a marketing board is the Ministry of Agriculture, which has successfully "[learned] how to market Turkmenistan cotton to a sophisticated world market" (WB, 1994, p. 130).

Maintaining full state control over cotton production and sales has not only enabled state leaders in Uzbekistan and Turkmenistan to use the proceeds from cotton export at their discretion, it also has allowed them to reinforce regionally-based patronage networks. To even begin to dismantle this sector would threaten the very foundation of state-societal relations, which depended upon a delicate balance of power between the regions themselves. Moreover, since cotton cultivation is extremely labor intensive, shifting away from agriculture would increase unemployment, and hence, threaten the very social and political stability that state leaders are eager to maintain (see e.g. Gleason, 1990).[14] This sheds light on state leaders' reluctance to develop the energy sector simultaneously, since oil and gas production would

potentially displace agriculture as the basis for determining the distribution of political and economic rewards among regions. One clear manifestation of this is that the influence of both the Ministry of Agriculture and governors of cotton producing regions increased after independence (Interviews with TACIS and USI, February 1997).

The empirical record also confirms that privatization in Kazakhstan has served as a means of both bolstering the position of regional leaders and addressing the demands of potent nationalist groups. Indeed, this is evident in the privatization process itself. First of all, patterns of foreign investment reflect the government's conscious desire to take care of the population's "basic needs" (i.e. to fulfil the social contract) as well as to maintain stability and support in the regions. Kazakhstan's leadership not only has deliberately sold-off oil and gas companies in those regions that have been hardest-hit by the Soviet Union's demise, but also has expected foreign companies to assume [social and economic] responsibility for [the well-being of] these regions. For example, the first former Soviet oil and gas company to "go on the market," Yuzhneftegas, is located in one of the country's poorest regions, Kyzl-Orda oblast. Written into the new owner's (Hurricane Hydrocarbons) contract were the sum total of social obligations and economic costs to maintain the company and surrounding area. These include guaranteeing full employment [at a much higher rate than the average Kazakhstani worker], the payment of back wages, building and/or maintaining hospitals and schools, as well as sponsoring local soccer teams.[15] Moreover, although their contract was negotiated and signed at the national level, they need to negotiate with the regional governor (*akim*) on an on-going basis as new social and economic demands arise. Not only did they have to get the *akim*'s "approval" for the initial purchase, they also have to keep him involved in decision-making. The regional governor can "make it difficult" for them if they do not by "send[ing] over the tax inspectorate" (Interviews with Hurricane, March 1997).

Nor is Hurricane Hydrocarbon's experience unique. In fact, the process for negotiating and winning contracts was predicated upon international companies establishing both a desire

and ability to provide a wide range of social services in addition to maintaining full employment and paying back wages. As one consultant working in Kazakhstan's energy sector summarized: "the companies who win the contracts are the ones who can give the government the greatest immediate satisfaction" (Interviews with USAID, March and December 1997). This satisfaction concerns direct bonuses to central officials before any exploration or production has actually begun as well as full relief from social and economic burdens at the regional and local levels.

This common practice of foreign companies assuming social costs has not merely served to relieve the government of its fiscal burdens in the regions, but to overcome the initial opposition to privatization from regional leaders and oil and gas enterprises managers. In fact, central authorities continually reassured both these groups that they would benefit directly from privatization, promising that the foreign companies would both invest in the necessary technologies to increase production, rebuild infrastructure, and in many cases guarantee employment and the payment of back wages (see, e.g. Sharipzhan, 1997).

Second, privatization was used deliberately as a tool to acquire large sums of immediate cash and discretionary funds with which to counter nationalist forces. One salient example of this is the direct use of proceeds from oil and gas industry sales to build the new capitol, which many argue is a major part of the government's effort to prevent secession of the Russian-dominated North and East. The creation of Kazakhoil in particular made this possible, since it provided a legal means for the government to set aside a portion of this company's account acquired through oil exports to satisfy its own aims. Kazakhoil is estimated to have spent $25-30 million on improvements in Astana (Staff , 1998, p. 8). The President of Kazakhoil himself admitted that "a major portion of the oil dollars are being invested in the construction of the new capitol" (Editor, 1997).

EXPLAINING ENERGY DEVELOPMENT STRATEGIES IN POST-SOVIET STATES

In order to demonstrate the explanatory power of our argument beyond Central Asia, we explore its predictions (summarized in Table I above) for the other two energy-rich post-Soviet states -- Azerbaijan and the Russian Federation. These two states are similar to the Central Asian states in that they both inherited large oil and gas reserves, analogous institutional structures, and the Soviet-style social contract based on a regional distribution of resources. Key differences in the domestic constraints that their respective leaders faced immediately after independence, however, predict that they adopted very different energy development strategies.

Azerbaijan

Azerbaijan shares with Kazakhstan the lack of a viable alternative to energy as a primary source of rents. Oil production was its primary contribution to the Soviet economy. Although Azerbaijan produced cotton during the Soviet period, it was a minuscule amount of the USSR's total output (7%) in comparison to Uzbekistan (62%) and Turkmenistan (15%) (Gleason, 1990).[16] Moreover, after independence, both Azerbaijan's small agricultural and industrial sectors required large capital investments and significant restructuring before either could compete on the world market. These economic problems were compounded by a prolonged war with neighboring Armenia, which caused a virtual halt in production and drained any excess revenue from these two sectors. Thus, Azerbaijan's state leaders were under a great deal of pressure following independence to generate revenue from its only existing resource that could draw widespread international interest, and hence, foreign capital -- oil -- particularly its vast offshore reserves in the Caspian Sea (Hoffman, 1998).

Yet, like Uzbekistan and Turkmenistan, Azerbaijan's system of political and economic patronage based on [long-standing] regional divisions has continued unchallenged since independence (see e.g. Hoffman, 1998; Kechichian and Karasik, 1995; Suny 1993). The titular nationality of Azerbaijan -- Azeris -- constituted an absolute majority of the population in the late 1980s and its dominance actually increased after independence as the war in Nagorno-

Karabakh drove out Armenians and spurred an influx of Azeris from neighboring republics.[17] Although Azerbaijan witnessed the emergence of a Popular Front that called for revitalizing the Azeri language and a secessionist movement in the Armenian enclave of Nagorno-Karabakh in the late 1980s, neither directly competed with or threatened regionalism. President Heydar Aliev's political successes, for example, have been attributed to his origins in Nackhichevan, the most prominent region in the country, and his support from several "semi-democratic movements" based on regional affiliation (Hoffman, 1998; Kechichian and Karasik, 1995). Moreover, similar to cotton in Uzbekistan and Turkmenistan, oil production has historically overlapped with political and economic influence in Azerbaijan. It therefore remained politically expeditious for state leaders to redistribute rents from oil exploitation based on well-established regional patron-client networks. This enabled them to maintain their regional support base without privatizing the energy sector.

Thus, if our argument is correct, we should find that Azerbaijan's state leaders chose to retain full state ownership over their energy reserves and to invite direct international involvement in developing them. This is indeed consistent with the empirical reality in Azerbaijan since its 1994 cease-fire with Armenia. Foreign investment in the energy sector grew "from $15 million in 1993 to $546 million in 1996" and "double[d] in 1997" (USEIA December 1997). Contracts with international oil companies, which constituted "80 percent of total foreign investment" in 1997, also served as the country's primary source of revenue (USEIA December 1997). None of these contracts, however, involve the privatization of either oil fields or production. Rather, they are a combination of joint ventures and production-sharing agreements in which the country's State Oil Company (SOCAR) is the largest shareholder (Menon, 1998, p. 12). In fact, SOCAR was formed in 1992 precisely to enlist the aid of international oil companies to reverse the decline in oil production since 1987 without relinquishing state control over the energy sector (World Bank 1998). By 1996, it had already succeeded; from 1994 to 1996, oil increased as a percentage of exports from 33.9 percent to 66.4 percent (Hoffman, 1998).

Russian Federation

Similar to Uzbekistan and Turkmenistan, the Russian Federation inherited an economic resource base that provided an alternative source of rents to the energy sector. First of all, Russia's economy was initially the least disrupted by the Soviet Union's collapse. It retained the largest industrial base, the main inputs for which were located on its own territory. Russia was thus able to focus on the privatization of its medium-size and large state enterprises as a source of revenue generation and economic recovery in the first few years of independence. The industrial sector also served as both a potential source of exports and a source of foreign investment (Dabrowski and Antczak 1996; Boycko 1995). Second, due to its sheer size and structure alone, it inherited a much more diversified economy than the majority of Soviet republics.[18] This allowed newly-independent Russia to devolve a significant amount of responsibility for economic performance to its constituent units (i.e. republics, territories, and regions), some of which performed better than others (see e.g. Stoner-Weiss 1997). Finally, like Turkmenistan, Russia's energy sector did not require any immediate investment to generating revenue. It could continue to export oil and gas to Europe for hard currency through existing pipelines, as well as to extract transfer payments for the oil and gas shipped via its pipelines by other former Soviet republics.

Yet, similar to Kazakhstan, after independence Russia experienced a high level of political constestation between: (1) regional cleavages based on the country's primary administrative-territorial divisions and (2) divisions based on nationality.[19] Since independence, these two cleavages have often intersected in the form of separatist regional leaders who launched a drive for secession based on ethnic and territorial claims (see e.g. Treisman, 1997 and Gorenburg, 1998). Many such movements, not coincidentally, have been in those regions that possess significant oil and gas reserves, such as Bashkortostan, Chechnya, the Komi Republic, Tatarstan and Tyumen, wherein regional governements have demanded some degree of control over these reserves and/or used their energy wealth as a basis for threatening secession.

Privatization, therefore, could serve to appease these demands, and hence, maintain the support of both regional and nationalist leaders.

Thus, we should find that Russia's state leaders chose to privatize the energy sector with only a minimal or indirect amount of international involvement. This has indeed been the case since independence.[20] As of 1993, the Russian oil industry was reorganized into several private vertically-integrated companies (VICs), several regionally-based companies, and the state-owned enterprise Rosneft. Foreign companies, however, were essentially excluded from this process. The government has also failed to create an atmosphere conducive to attracting and maintaining foreign investment in the energy sector. Although President Boris Yeltsin eventually approved legislation allowing the establishment of production-sharing agreements in 1995, for example, many foreign companies still consider this law inadequate. Thus, foreign investment in the energy sector actually declined in 1995 and 1996 to "roughly half of 1994 levels" and remained primarily in the form of joint ventures as late as 1997 (Watson, 1996; USEIA, August 1997).[21]

CONCLUSION

This article brings us a step closer to understanding the underlying political and economic causes behind the so-called "resource curse" by providing a theory of the initial formation of natural resource development strategies. While development strategies, including the method of ownership and the form of international involvement, have been closely linked to negative political and economic outcomes across resource-rich states, the previous literature fails to address why and how do states choose to develop their natural resources in the first place. We argue that state leaders' policy choices are already constrained at the time of discovery by two domestic factors (1) the degree to which leaders have access alternative sources of rents; and (2) the level of political contestation. The analysis and evidence presented above confirms that this is both the best explanation for divergent energy development strategies in the Central Asian states and an accurate predictor of energy development strategies in Russia and Azerbaijan.

Table I: Domestic Determinants of Resource Development Strategies

		Level of Contestation	
		LOW	**HIGH**
Degree of Access to Alternative Sources of Rents	**HIGH**	$\mathbf{N_1}$	$\mathbf{P_1}$
	LOW	$\mathbf{N_2}$	$\mathbf{P_2}$

Table II: Energy Sector Privatization in Kazakhstan

Date	Company	Fields or Enterprise	% Shares
July 1996	Vitol Munay	Shymkent Oil Refinery	85%
August 1996	Hurricane Hydrocarbons	Yuzhneftegas JSC	90%
May 1997	Medco Energy Corporation	Mangistaumunaygaz JSC	85%
June 1997	Chinese National Petroleum Co.	Aktyubinskneft JSC	60%
July 1997	Chinese National Petroleum Co.	Uzen Oil Fields	60%

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NOTES

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[1] The authors would like to thank Dan Dresner, Matt Evangelista, Geoff Garrett, Dmitry Gorenburg, Henry Hale, Steve Hanson, Yoshiko Herrera, Victoria Murillo, Jack Snyder, and Josh Tucker for useful comments on an earlier version of this article. Our fieldwork was made possible due to two *Collaborative Grants in Sectoral Policy* provided by the National Academy of Sciences, National Research Council, Office for Central Europe and Eurasia, Washington, D.C.. We would also like to thank our domestic host institutions in Kazakhstan, Turkmenistan, and Uzbekistan, and members of the international community working in these states for their assistance. We alone take full responsibility for the content and analysis herein.

[2] We are defining sovereignty here as Thomson does -- independent policy-making authority.

[3] "Discovery" here connotes both the actual initial discovery of oil reserves and the transfer of authority over existing reserves through independence or regime change.

[4] In somewhat more formal language, state leaders will retain power when the ratio of R to C is greater than or equal to 1, and lose power when the ratio of R to C is less than 1.

[5] For example, if this alternative cleavage is nationalism, these demands might constitute secessionist attempts and/or claims for greater autonomy.

[6] The notion that cleavages based on nationalism were more likely to emerge in the former Soviet Union is also consistent with the theory of collective action, which suggests that those seeking to organize will do so based on pre-existing forms rather than create wholly new ones.

[7] The exodus of Russians from Turkmenistan, for example, reduced this population from the 2nd largest (after Turkmen) at 9% to the 3rd largest (after Uzbeks) at 6.7%. See Ochs, 1997, p. 333.

[8] Some might argue that the one exception here is the Islamic Renaissance Party (IRP). Yet, since Uzbeks and Turkmen are predominantly Muslim, religion also did not serve as a viable alternative to regionalism. In fact, the IRP was itself a regionally-based party; its supporters were concentrated in the Namagan and Andijon Oblasts.

[9] These successors are the Democratic Party of Turkmenistan and the Peoples' Democratic Party of Uzbekistan.

[10] Russian and Slavic groups included: the Cossacks of Uralsk, *Edinstvo* (Unity), Organization for the Autonomy of Eastern Kazakhstan, *Russkaya Obschina* (Russian Community), *Lad* (Harmony), and the Society of Slavonic Culture. Kazakh movements included: *Alash*, *Azat* (Freedom), and Zheltoksan (December).

[11] NB: USDA notes that no official trade data is available since Uzbekistan's cotton is sold to shippers rather than end-users.

[12] Although farmers in Uzbekistan are only required to sell 50 percent of their cotton to the state, in practice they are forced to sell almost all of it to the state because they have no direct links to foreign buyers. This allows the state to continue buying cotton at way below its market value.

[13] Turkmenistan ended all production quotas on agricultural goods in 1996, with the exception of wheat and cotton.

[14] This was the rationale for delaying the mechanization of agriculture under the Soviet period.

[15] Hurricane Hydrocarbons is the single largest employer in the region. In 1997, its employees received approximately US$750 a month, or about four times the average monthly salary.

[16] Its primary agricultural product since the 1970s was not cotton, but grapes, the production of which declined in the 1980s under Gorbachev's anti-alcoholism campaigns.

[17] In 1989, Azeris represented 82.7% of the country's populations; by 1997, their number increased to approximately 90%. See: Kaiser 1994; and USEIA December 1997.

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[18] The Russian Federation consists of 89 constituent units -- 21 autonomous republics and 68 autonomous territories and regions.

[19] In 1989, Russians constituted 81.5% of the Russian Federation's entire population, but ethnic minorities formed a majority in ten of the country's autonomous republics. See: *First Demographic Portraits of Russia*, 1993, p. 24.

[20] For more details, see Jones Luong, 2000.

[21] NB: Of the 111 joint ventures in the oil and gas sector that existed in July 1997, only 35 were actually engaged in primary oil production, and these accounted for only 5 percent of Russia's total output. See USEIA, August 1997.