



Kazakhstan: Oil endowment and oil empowerment

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ABSTRACT

Kazakhstan became a petro-state in the 1990s, after signing important oil production agreements with several transnational companies. In recent years, Kazakhstan's government has imposed the revision of former agreements on these corporations. This article contends that said revision has allowed the national players, government and the state oil company, to extend rent-seeking, but that the changes have not been deep enough to attain national oil empowerment. This means that national players do not control the oil cycle – from upstream to export trade – and are unable to secure continued expansion in the oil sector. Both key issues remain in the hands of the foreign companies, although their prominence has diversified following the entry of large Chinese and Russian companies.

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In a global context of rising oil prices, several governments have recently decided to revise previous oil agreements with transnational oil companies (TOCs). This is the case in Kazakhstan, where the very government that signed the original contracts has since imposed such revision, taking advantage of the *sunk* investments made in the previous decade. However, this change in the Kazakh government's relationship with TOCs does not guarantee that the national players (the state-owned oil company and the government itself) are able to autonomously decide on issues regarding the management of Kazakh oil.

The thesis of this article is that initial arrangements turned Kazakhstan into a petro-state, while subsequent renegotiations have allowed national players to extend the rent-seeking benefits of their oil endowment; however, conditions necessary for oil empowerment are still lacking as national players do not control the oil cycle (from upstream to downstream) and are unable to ensure sustained development of the industry. To appreciate the reasons for this situation, two complementary levels of analysis are pursued. The first explores the internal and external factors that influence the government-TOC relationship and which have led to a rent-seeking dynamic. The second addresses the factors that limit national empowerment over the oil cycle.

These topics are of great relevance because they can provide deeper understanding around three important issues. First, a better grasp of the link between political institutions and the economic dynamics of developing countries with abundant oil resources. Second, a new perspective on how the bargaining position of different actors involved in the oil business may change over time. And third, the understanding that governments from countries like Kazakhstan are becoming new players in energy international relations.

The article is divided into five sections. The first considers the literature on resource-abundant countries, in order to present a methodological approach useful in the analysis of nations that are renegotiating oil agreements with TOCs. The second outlines the conditions that turned Kazakhstan into an oil enclave. The third section analyzes those factors that led to changes in the initial conditions: the consolidation of the political elite and the emergence of Russian and Chinese interest in “the oil game”, the main result of which has been to reinforce the rentier position of the ruling elite through revision of oil agreements with TOCs; strengthening national share in the oil sector; and increasing oil revenues from production and

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export. The fourth section explains the limitations that still keep Kazakhstan far from oil empowerment. The final section presents the paper's main conclusions.

Resource-abundant countries: a dynamic approach

From a political economy perspective, there are two main debates going on in literature about resource-abundant countries. There are many overlaps between them but it is useful to present both separately. First, the debate about “rentier states” focuses on the functioning of those political regimes which economies are based on raw material export revenues (Mahdavi, 1970; Beblawi and Luciani, 1987). More recently, the “Resource Curse” debate argues that economies too much dependent on these export revenues are recording poorer economic results than other countries which natural resources are minimal. Some authors consider that this poorer record is due to a negative feedback between institutions and resource rents (Auty, 2001; Gelb, 1998), while others explain that the main problem is the so called “Dutch Disease” that weakens industrial activities and worsens monetary conditions due to the volatility of commodity prices (Weinthal and Luong, 2001).

These works provide many worthy elements for explaining economic dynamics in resource-abundant countries, but their arguments are very often raised using deterministic and unilateral procedures. This occurs when analysis assumes a static character, so that the country's initial factors are taken to determine the future dynamic (rentierism, curse, or disease), or when analysis ignores the role of TOCs as main players for institution building in many countries in Africa, Latin America, and the Caspian Sea region. Departing from these approaches, we argue that the analysis of resource-abundant countries should include: 1) changing (non-static) factors that show the dynamics in the development of such countries; and 2) the role of large foreign companies as key players in influencing the initial conditions – as well as the changing factors – in those countries.

For this reason, these categories of analysis (focusing on rent-seeking or institutional weakness) are not to be taken as static or absolute, but merely as applying to a specific time and place. Thus, the weakness or strength and the explicit functions of a given state may change as the country's external and internal conditions change. This is why Kazakhstan's experience is relevant, as a case study that gives insight into the factors affecting both the evolution of a petro-state and its relations with TOCs.

When a country's ruling elite is in a situation of outright weakness, its bargaining power is minimal. Thus, the elite fall into a subordinate position and is willing to sign any type of agreement with a TOC that will contribute toward strengthening said elite's dominion inside the country. Thanks to such agreements, TOCs gain access to oil under clearly advantageous conditions: exploitation rights in the long run, low tax obligations, freedom to export oil, no limits to profit outflow, while in return the government receives certain payments (taxes, bonuses, and others) from the oil companies, or a share of TOC production via Production Sharing Agreements or joint ventures.¹ Under these conditions, the “paradox of plenty” (Karl, 1997) emerges as oil abundance becomes a key factor in reinforcing weak institutional structures and social divisions.

As much as external developments, a country's internal factors can lead to the modification of linkages between TOCs and national elites. Riches (2003) and Weinthal and Luong (2001) explain that TOCs may play an involuntary role in this process, as their investments increase technological, financial, and organizational capabilities and help to strengthen a country's position as a relevant oil endowment in international terms. This new prominence allows the government to increase pressure on companies (Kérébel and Keppler, 2009). Alternatively, change can arise when a government is replaced, either through elections or through violence, so that the new power elite seeks to gain higher oil rents by improving contract conditions. The same can happen when ruling elites are not expelled but manage to overcome positions of weakness, regaining their political strength and gathering external support for the revision of prior agreements.

From any of the above scenarios, three results may arise. The first is that changes are not strong enough to modify the status quo. The second is that the government and domestic enterprises manage to secure higher rents (taxes, royalties, bonuses) and other advantages, while key decisions over production and export remain in the hands of the foreign companies, which maintain the right to manage the oil endowment. The third alternative is that national actors move to take control of the main decision levers governing the oil cycle, making conditions worse for foreign companies. This alternative indicates that national oil empowerment has occurred, requiring national actors to take the lead when making basic decisions related to:

- Domestic processes: exploring new reserves, drilling crude oil, and refining petroleum products;
- Outward processes: transport routes, main customers, sales conditions, and distribution of export revenues.

Therefore, oil empowerment implies that national players exercise a significant role in the oil cycle, whether exclusively or in conjunction with foreign companies, with the caveat that this power to decide does not necessarily guarantee better decisions and results. The strengthening of a government's political power is not sufficient for empowerment – the national

¹ Also worth noting are corruption practices that may take the form of money, delivery of arms, or other favors, and which are often hidden by the confidentiality of the contracts signed (Shaxson, 2008; Ngodi, 2005).

company or companies must also possess the technical and financial capacities to explore and exploit domestic natural resources. Consequently, oil empowerment requires that three conditions be met:

- 1) *Sufficient political power to achieve a good bargaining position.* The ruling elite should control the necessary levers to build a stable institutional framework that guarantees its own continuity. This framework includes the capacity to manage the oil sector in a way that is consistent with government objectives.
- 2) *Technological and financial capacity.* The national company (or companies) must have the technological and financial resources to properly conduct oil cycle activities from upstream to downstream.
- 3) *Expanded reproduction of the oil cycle.* The economic management of oil revenues must ensure sufficient reinvestment in the oil sector to increase its production and export capacities. This goal can be compatible with other oil rent outcomes, whatever the political-ideological background of the national elite or its ability to manage these resources.

Kazakhstan: initial agreements and emergence as an oil enclave

In December 1991, following the disintegration of the USSR, Kazakhstan emerged as an independent state with neither the political institutions nor the staff needed to guarantee basic state's functions. This new state came under control of an elite group of regional officials, led by Nursultan Nazarbayev but without internal cohesion. Lacking ideological references, these officials governed over a community with no sign of national identity (Cohen, 2008; Olcott, 2002). The economy was deeply deteriorated and had occupied a peripheral place in the Soviet structure, as was also true of Kazakhstan's energy resources. Moreover, this situation worsened in the early years of independence. Between 1991 and 1995, oil production fell from 570 to 430 thousand barrels/day (b/d), drilled from small fields using outdated technology and transported by antiquated pipes belonging to the Russian network (Van der Leeuw, 2000; Olcott, 2002).

Under these difficult conditions, between 1992 and 1997 the Kazakh elite signed agreements with TOCs to exploit certain large oil fields (Tengiz, Karachaganak), to explore those with the greatest potential (Caspian Sea), and to build transport routes from said fields to foreign markets.² Overwhelmed by urgent need, the Kazakh government assumed a subordinate role in exchange for monetary contributions, including bribes and black payments, and some sporadic attempts were made to arbitrarily change contract terms to increase the personal fortunes of the governing elite. It was expected that in the medium term the exploitation of these oil fields would provide Kazakhoil (the state enterprise) with a certain volume of crude oil for export (corresponding to production sharing agreements³), while state revenues would grow as a result of oil production and exportation.

This was the groundwork that led Kazakhstan to become (from 1998 to 2000) a new international oil actor. Commencement of drilling in Karachaganak and Tengiz prompted a rapid increase in overall oil production, while the opening of the Caspian Pipeline Consortium (CPC) allowed much of that oil to flow for export.⁴ During this time, two happy coincidences arose that helped to change expectations about Kazakhstan oil potential: international oil prices began to spike (from \$13 per barrel in 1998 to over \$28.5 in 2000), and vast offshore oil reserves were discovered in Kashagan⁵

Suddenly, production jumped by almost 100 thousand b/d in 1999, from 540 to 631 thousand b/d, thereafter setting new production records each year and reaching 1.6 million b/d in 2009 (Table 1). Tengiz increased oil output to nearly 450 thousand b/d, while production at Karachaganak rose to almost 240 thousand b/d, consisting mostly of gas condensate. Currently, both fields provide more than 40% of Kazakh oil, and these figures rank Kazakhstan in 18th place among producing countries, with a share of 1.8% worldwide. But the country's relevance is even greater when considering proven reserves, which reach almost 40 billion barrels, thanks mainly to Kashagan⁶ (BP, 2009). This means that Kazakhstan holds 3.2% of world reserves and ranks 9th – ahead of Nigeria and behind only Russia, Libya, and the six major OPEC nations. Because domestic consumption of oil remains low (225–250 thousand b/d), 85% of Kazakh production goes to exports, which have increased as much as extraction, by almost one million b/d in 1998–2009, reaching nearly 1.4 million b/d in 2009.

² Other non-institutional reasons contributing to the government's weak bargaining position may be also considered, such as the high sulfur content of Kazakh oil, or the difficult extraction/operating conditions of some Kazakh reservoirs.

³ A Production Sharing Agreement (PSA) was signed to exploit Tengiz for 40 years through a joint venture created by Chevron (50%), Exxon (25%), Kazakhoil (20%), and Russia's Lukoil (5%). Meanwhile, exploitation of Karachaganak was granted for 40 years to an international consortium dominated by British Gas and Agip (32.5% each), Chevron (20%), and Lukoil (15%). (Cohen, 2008; Olcott, 2002).

⁴ The CPC can transport 1.3 million bpd of crude over 1,550 km, from Tengiz to the Russian Black Sea port of Novorossiisk. Half of the consortium is owned by the governments of Russia (24%), Kazakhstan (19%), and Oman (7%), with the other half divided between Chevron (15%), Lukarco (12.5%), Exxon (7.5%), Rosneft-Shell (7.5%), Agip (2%), BG (2%), Oryx (1.75%), and KTO (1.75%).

⁵ The discovery of Kashagan was a positive event for the oil Kazakh oil sector, but it was just a "discovery" and no actual development/production happened at that time.

⁶ In addition to the 13 billion barrels estimated at Kashagan, there are favorable expectations around other Caspian fields that are as yet unevaluated. The largest proven reserves are onshore at Tengiz, Karachaganak, and Aktobe. (EIA, 2008).

Table 1

Crude production of the major companies: thousands of barrels per day.

	2001	2003	2005	2006	2007	2008	2009 ^a
Total	836	1,111	1,297	1,426	1,484	1,554	1,607
Tengizchevroil	251	256	272	267	280	350	447
Karachaganak	80	119	207	208	233	252	237
Uzenmunaigas	84	106	132	135	135	132	126
Aktobemunaigas	65	93	117	119	118	117	122
Mangistaumunaigas	88	97	114	115	115	112	115
Kazgermunai	16	31	38	58	61	62	64
Turgai Petroleum	30	56	60	68	70	71	64
PetroKazakhstan-Kumkol	73	99	61	74	70	74	62
Embamunaigas		53	56	56	56	56	55
Buzachi	–	–	15	27	32	33	38
Karazhanbasmunai	25	39	45	47	39	45	38
Karakudukmunai	6	7	10	14	20	24	29
Others	118	155	170	238	255	226	210

^a Data from November 2008 to November 2009. Source: *Energy Intelligence*, 2009.

Therefore, since TOCs began investment in Kazakhstan, the country has developed into an oil exporting scenario of international relevance, and this relevance will certainly increase in the near future as more reserves are discovered.

Changes to a new scenario; causes and results

Two change factors: political consolidation and the entry of new partners

The consolidation of oligarchic power

As the economic situation improved, increasing oil export revenues strengthened the ruling elite. Oil revenues rose from \$6 billion to \$41.5 billion between 2000 and 2007 (Government and Political Risk Services – PRS, 2008), making possible GDP growth at an average rate of 10% annually. These economic results gave more credit to government policies and fed Nazarbayev's "modernizing" propaganda. In turn, oil sales favored the extension of rent-seeking through budgetary activity.

Public revenues and expenditures rose rapidly, and the government proved willing to share these rents with local and regional leaders.⁷ In addition, a growing share of public expenditures (up from \$4 billion to \$25 billion between 1999 and 2007) was earmarked for social services, housing, and transportation, as well as for fostering public employment. This extended network of territorial and social clientelism, very much favored by the country's small population, at 15.5 million, increased the power stability of the elite led by Nazarbayev (Najman et al., 2008; Makhmutova, 2007). At the same time, the population felt the benefits of the oil boom through other channels, as export growth enabled increased imports of consumer goods (Daly, 2008).

The other pillar supporting the consolidation of the elite at the head of state has been the construction of an authoritarian political framework. A 'presidential constitution' gave Nazarbayev major legislative as well as executive powers, so that other political bodies were subject to indisputable Presidential decisions. This one-man leadership model was then extended to Nazarbayev's family and other unconditional supporters who took control of the main levers of economic power, the repressive state apparatus, and the media. Within this opaque sphere, Kazakh's political, social, and economic oligarchy has perpetrated numerous acts of abuse, nepotism, and kleptomania (Bowyer, 2008; Djalili and Kellner, 2005).

At the same time, this autocratic power has played other significant roles. It has ensured the stability of a unitary state against the fractional temptations of certain economic groups and ethnic clans. Faced with an overly fragmented Parliament following successive parliamentary elections, President Nazarbayev's electoral endorsements have played a stabilizing role. The presidential summit has meanwhile formed the backbone of a weak network of institutions that did not previously exist, allowing some space for the exercise of public freedoms and political debate, the perimeter of which is limited by the authoritarian features of Nazarbayev's regime (Bowyer, 2008; Olcott, 2005).

A third element favoring the political elite has been its ability to manage international relations. What Nazarbayev termed "multivector" policy involves the expansion of external linkages with the region, with Arab countries, and with the U.S. and other Western powers, that have praised Kazakhstan's modernizing image and growing openness to foreign oil investment (Weitz, 2008; Kérébel and Keppler, 2009). But the most decisive vector of this foreign policy points to Kazakhstan's two largest neighbors, Russia and China; notorious improvements in relations have admitted large oil companies from both countries into the exploitation of Kazakh resources.

⁷ Local revenues and expenditures increased their share in the state budget from 2003 to 2008, from 35% to 45% (revenues) and from 0% to 53% (expenditures). (PRS, 2008).

The strategy of Russian and Chinese companies

In the 1990s, immersed in an internal reorganization process, the government and oil companies of China passively watched the entry of TOCs into Kazakhstan. Much the same happened in Russia, although Russian companies enjoyed the advantage of historical ties with and geographical proximity to the Kazakh fields. Thus did Lukoil win a minority presence in Karachaganak and Tengiz, while Transneft, Lukoil, and Rosneft all took shares in the Caspian Pipeline Consortium, though not without some heavy geopolitical wrangling.

Later, however, the eventual reaction by Russian and Chinese companies came armed with powerful weapons. The strength of the Russian position was bolstered by:

- i) its large size and the political support of the Putin administration;
- ii) the fact that many Caspian fields have no clear border demarcation between the two countries; and
- iii) the fact that most oil export routes flow through Russian territory (Kandiyoti, 2008; Torbakov, 2007).

Thanks to this privileged bargaining position, Lukoil won the right to exploit several onshore fields in Karaluduk, Turgai Petroleum, and Buzachi, the last two shared with China's National Petroleum Company (CNPC) and, more importantly, the rights to develop offshore fields such as Khvalynskoye, Tsentralnove, and Tyube-Karagas; meanwhile, Rosneft participates in Kurmangazy. In the case of transport, Russian companies have used their dominance⁸ to question the (dubious) option of moving oil across the Caspian Sea to link with the BTC pipeline that connects Baku–Tbilisi–Ceyhan, the Turkish port.

Chinese strength meanwhile consists of three different aspects:

- i) the nation's huge investment potential due to the surplus generated by foreign trade;
- ii) the technological and financial capacity of its oil companies; and
- iii) the state goal of ensuring coverage of its growing oil import needs.

The first step forward came in 1997, when the state-owned CNPC acquired 60% of the company which then operated the Aktobe field. This share rose to 85% after a new purchase in 2003, thereby giving CNPC control of Kazakhstan's third largest active oil field.

Chinese purchases have increased since 2005. First, CNPC acquired PetroKazakhstan, Kumkol South, and parts of Turgai Petroleum Buzachi and Kazgermunai. Afterwards the same group bought half of Karazhambasmunai CNPC, also taking MangistauMunaiGas, one of the most important Kazakh fields. In addition, through PetroKazakhstan, CNPC is co-owner of the Shymkent refinery and Atasu-Alashankau pipeline (Olcott, 2007; Raballand and Andrés, 2007), and it is involved, both exclusively and in collaboration with other companies, in the exploration of several offshore fields which reserves may be large, such as Darkham and Zhanazhol. Meanwhile, Sinopec, another Chinese oil company, has granted a loan to modernize and expand the Atyrau refinery.

In the face of this rapidly increasing Chinese presence, political and economic circles in Kazakhstan have expressed mixed feelings. On the one hand, they demonstrate some concern around Chinese control over parts of the Kazakh oil business. On the other hand, they appreciate the fact that Chinese companies are major investors in oil and other sectors, acting as good partners and complying with environmental and tax regulations. Moreover, China gives preferential treatment to Kazakhstan in its commercial and investing bilateral relations,⁹ as well as within the Shanghai Cooperation Organization (Weitz, 2008; Peyrouse, 2007).

Three results: revision of former agreements, enhancing KMG, and more room for rent-seeking

At length, Kazakhstan arrived at a new economic and oil scenario, where the consolidation of the political elite and the opportunities offered by Russian and Chinese oil interest enabled the ruling oligarchy to propose new objectives. During the nineties, the weakness of the Kazakh government did not prevent it from trying to revise oil contracts, but under the new scenario government goals became more ambitious, and qualitatively different. The new objectives were to develop a policy specifically oriented toward revision of oil agreements with TOCs, to strengthen national share in the oil sector, enhancing the role of KazMunaiGas (KMG) as a stakeholder, and to obtain greater income from production and oil exports.

Renegotiation of oil agreements

The government's attitude began to change in 2002, when Chevron was accused of environmental crimes. This set off increasing tensions in the major fields, some of which have given rise to intense conflicts that are motivated by three main issues.

⁸ Two thirds of oil exports from Kazakhstan move through Russian pipelines or by way of the CPC, which belongs to Russian companies.

⁹ China allocates soft loans to develop Kazakh energy, transport and communication infrastructures with the condition of using Chinese techniques and equipment. The construction of the Moinkah hydroelectric plant is a good example of this type of agreements (Kaukenov, 2009).

- Compliance with environmental legislation. Chevron agreed to pay a fine of \$600 million, followed by another fine in 2007 for ignoring rules on sulfur storage. Another environmental conflict in 2005 with Canada's Hurricane led to that company's decision to sell PetroKazakhstan, which was later acquired by China's CNPC (Peyrouse, 2007).
- The continuous amendment of tax laws. The new code adopted in 2004 altered the tax regimes of both Production Sharing Agreement (PSA) contracts and the Excess Profit Tax. At the same time, the government has introduced new taxes on natural resource exploitation and oil exports, with subsequent revisions that left open the option of applying the general tax regime to PSA contracts that had been initially exempt. Moreover, oil companies are now forced to fund social programs and other bonuses to local communities, beyond previous agreements (OECD, 2006; Olcott, 2007; Najman et al., 2008).
- The state has forced the entry of the national company (KMG) into private oil projects. In 2004, a law was passed on PSA agreements which replaced the 1995 law and stated that KMG would thereafter take a 50% stake in future consortia. Moreover, demands for goods and services by these consortia were to meet a minimum of local content. A year later, when British Gas (BG) decided to sell its share (16.7%) in Kashagan, the government claimed that KMG should obtain this quota, thereby ignoring the right of partners to first refusal, accorded by the contract. After a period of negotiation, agreement was reached on the purchase of 8.3% by KMG, with the other companies in the consortium permitted to buy the remaining 8.3%. But the controversy gained new force when in 2007 the leader of the consortium, Agip, announced that oil drilling in Kashagan would be again delayed due to technical difficulties. After rejecting Agip's explanation, the Kazakh government demanded a payment to compensate the country for the negative effects of this new delay, also proposing to increase KMG's share in the consortium. After several months in which Kashagan activities remained stalled, an agreement was reached in January 2008 that included the main government demands.¹⁰ Above all, parties accepted a leading role in the consortium for KMG, which share rose to 16.81% (for an additional \$1.8 billion), or just slightly above the shares held by the largest original partners: Agip, ExxonMobil, Shell, and Total (16.66%). Meanwhile, ConocoPhillips and Inpex reduced their shares to 8.28% (Campaner and Yenikeeff, 2008).

Thus, the revision of TOC agreements has led to ensuring the primacy of Kazakh law, increasing government oil revenues and enhancing KMG's role as a player in Kashagan and other fields. This has called into question two basic principles that had initially attracted Western investors: property rights and the stability of the tax regime. The irony was that the bargaining position of said investors was now much weaker (the so called obsolescence bargain¹¹), merely because they were the owners of very high-value specific assets that had been invested in Kazakhstan in the 1990s.

Emergence of KMG as a vertically integrated state-owned company

In 1997, the Kazakh government transformed its erstwhile Ministry of Oil and Gas into two state-owned companies: KazTransOil and Kazakhoil, while most of the smaller oil companies were privatized. Later, the government decided to concentrate all its petroleum activities into one company. Thus, the two companies dedicated to oil and gas transport were merged in 2001 to create Transneft Oil and Gas (TOG). The next year, Kazakhoil and TOG were also merged to create KazMunaiGas (KMG), a national company that now owned all public oil assets, including national shares in international consortia (Olcott, 2007; Cohen, 2008).

KMG's largest subsidiary is KazMunaiGas Exploration Production (KMG-E&P), which deals with drilling activities, domestic distribution, and export trade. Emerging in 2004 from the merger of the two state companies working the Embai and Uzen fields, only 62% of its capital belongs to KMG, while the other 38% was privatized through the Almaty and London stock exchanges. KMG-E&P holds state shares in Kazgermunai (50%) and Karazhamnbasmunai (50%), while KMG is the national shareholder in Tengiz (20%), PetroKazakhstan (33%), Kasahagan (16.88%), Zhambai (50%), Kazakhturkmunai (51%), and other minor fields.

KMG owns the transmission network (TGO) that distributes crude and petroleum products within the country. It is also the owner of the shipping company that moves oil across the Caspian Sea. It holds 22% of the CPC pipeline ownership and half of the Alashankau-Atasu pipeline. It also owns the Atyrau and Pavlodar refineries, and half of the Shymkent one. Finally, marketing activities and services are conducted through KMG Trade House and other minor subsidiaries (KMG-E&P, 2009).

Enhancing methods to collect oil rents to develop the rentier economy

The new government bargaining position and the reorganization of the national sector have expanded the state's capacity to collect oil revenues. On one side, royalties and other fees were replaced in 2008 by the Mineral Extraction Tax (MET) that taxes both domestic and foreign production by from 5% to 18% (in different steps ranging from 5,000 to more than 100,000 b/d). In turn, the VAT levies domestic transactions at a uniform 12%, while export duties have been converted (since 2008) into a tax ranging between 7% and 32% that becomes effective when international prices rise above \$50/barrel. Finally, companies must pay a small fee for employees' social security, while the profit tax has fallen in recent years from 30% to 20%. To all these contributions must be added fines, bonuses, and advance payments from foreign companies.

¹⁰ The claim was for US\$10 billion, but it ended at between \$3.2 and \$5 billion, according to the fluctuating international oil price, in a range between \$65 and \$90/barrel.

¹¹ This term was suggested by one of our anonymous referees.

It is difficult to measure the impact of the tax burden on businesses, since fiscal measures undergo continuous changes both in tax rates and in which companies are subject to tax payment (Jeffrey et al., 2003; Philip et al., 2010). Often a general provision is followed by bilateral negotiations between the government and each company, giving rise to specific and diverse agreements and making the tax act discretionary. The information provided by government and businesses does not allow analysis of the tax impact on foreign companies. However, there is evidence that these obligations are not overly burdensome to TOCs, even despite late changes, as it is estimated that national actors (government, KMG, and local communities) will receive 60% and TOCs 40% of long-run cumulative profits from Karachaganak and Kashagan. This means that the Kazakh share will be significantly lower than in Middle Eastern and European countries. For example, the Norwegian ratio is 80%–20% (Angelier, 2008).

It is easier to assess the impact of oil taxes on the state budget (Makhmutova, 2007; Najman et al., 2008; IMF, 2009). Public revenues from the oil sector rose from 2.2% of GDP in 1999 to 12% in 2008, and from 18% to 44% of the state budget (IMF, 2009). Thus, the state surplus has ranged between 4% and 6% of GDP despite the high growth in public expenditures. Therefore, public oil revenues have fed the Kazakh rentier economy and the consolidation of its ruling oligarchy.

The predatory vs distributive character of the elite's rent-seeking policy is subject to different interpretations, depending on one's understanding of the role played by the National Fund. This Fund was established in 2001 and is controlled by Nazarbayev (Kalyuzhnova, 2006). It receives the majority of oil revenues, so that in recent years it received about 40% of tax revenue, or equivalent to 10% of annual GDP.¹² Funding in 2008 increased to \$27.6 billion, or above 20% of GDP, but it is difficult to know how and by whom these funds were managed.¹³

Currently, the National Fund's status is becoming more complex following the merger of Samruk and Kazyna (SK). Samruk is a holding company created in 2006 to integrate the large state enterprises with KMG at the head, in order to ensure the strategic direction of the economy. Kazyna is a sustainable development fund created in 2005 to carry out programs of economic modernization and diversification. After the 2008 merger of these two institutions, the asset value of the new, combined SK was equal to 45% of GDP. SK receives KMG dividends, both for its own operations and for their rights in affiliated enterprises, while the National Fund is financed via tax revenues. However, in 2009 this fund transferred \$9 billion to SK, of which \$5 billion were given on loan and the other \$4 billion as capital injection, making the National Fund the shareholder in SK. Apparently, these resources are being used to cope with economic recession and the reorganization of some major banks (IMF, 2009; Olcott, 2009).

A rentier economy based on oil endowment, and handicaps to oil empowerment

The previous section reveals deep changes in Kazakh economic and political life as well as the crucial importance of oil throughout. These changes have enabled the Kazakh oligarchy to take more clear advantage of the country's "oil endowment"; but the oligarchy has failed to ensure national control over the oil cycle, and this leaves them far from reaching "oil empowerment", defined as the second alternative at the beginning of this article. Achieving oil empowerment depends on the national players meeting two basic requirements: effective control over oil production and foreign trade, and the technological and financial capacity to promote expanded reproduction of oil activity.

Limited control over production and foreign trade

Domestic processes

Crude production. Table 1 shows production trends of the twelve largest companies, which account for over 85% of oil output in Kazakhstan. The ranking of these companies by assets ownership and production levels in 2009 leads to the four following groups:

- Six are one-hundred-percent foreign firms and provide some 600 thousand barrels per day, or about 40% of oil production; these are Karachaganak, Aktobemunaigas, Mangistaumunaigas, Turgai Petroleum, Buzachi, and Karakudukmunai.
- Four are jointly owned firms and provide 600 thousand b/d, of which 440 thousand belong to foreign companies and 160 thousand to KMG and KMG-E&P. These are Tengizchevroil (80–20%), Kazgermunai (50–50%), PetroKazakhstan (66–33%) and Karazhanbasmunai (50–50%).
- Two belong to KMG-E&P and provide less than 200 thousand b/d, or around 12%. These are Uzenmunaigas and Embamunaigas.

¹² According to the 2007 Fund balance, 91% of revenues came from the oil sector and the rest were profits from investment of Fund revenues. 62% of oil revenue came from a profit tax on domestic firms and PSAs, 16% from royalties, 11% from foreign companies subject to the Excess Profit Tax, and 10% from bonuses, export taxes, and quotas in government PSA agreements. Source: www.minfin.kz.

¹³ Kalyuzhnova (2011) and different reports of the Revenue Watch Institute (www.revenuewatch.org) give some interesting insights on this issue.

- The remaining 13%, at about 225 thousand b/d, comes from fifty private companies, some of which depend on foreign capital. Among them, only one (Kazakhoil-Aktobe) produces as much as 20 thousand b/d, while only seven yield more than 5 thousand b/d (*Energy Intelligence*, 2009).

Therefore, oil production falls under the undisputed dominance of foreign companies drilling over 80% of Kazakh oil and owning two-thirds (having deducted the share held by national companies that form part of international consortia). The remainder corresponds to KMG and other enterprises.

Refining. Most of the 240 thousand b/d of petroleum products are refined in the three plants owned by KMG. However, this production level is modest, using old technology and yielding products (70% residual fuel and diesel) of low quality bound for domestic consumption or exchange with Russian border regions.

Reserves. Onshore reserves are estimated at 15 billion barrels, of which Tengiz controls about 9 billion, Karachaganak more than 2 billion, and Buzachi and Aktobe over a billion each. As regards offshore reserves under the Caspian sea, the Kashagan field exceeds 13 billion barrels; in other fields, first estimates are promising but with no proven figures in Darkham, Kurmangazy, Tseltralnove Nursultan, Istatai, Satpayev, Tyube-Karagas, or Abai. Excluding Tengiz and Kashagan and totaling the small contributions from Emba, Uzen, and other fields, KMG and KMG-E&P's reserves are at less than 5.5 billion barrels. Therefore, national companies control no more than 20% of proven Kazakh reserves, and this minor position should persist or even diminish because TOCs, as well as Chinese and Russian firms, are receiving most of the rights to explore new fields under the Caspian.

Outward processes

In part due to the landlocked position of the country, oil export distribution is even more asymmetric than production, since KMG-E&P and other, smaller firms supply Kazakh refineries in Atyrau and Shymkent.¹⁴ Thus, foreign companies accounted for 73% of the 1.3 million b/d sold abroad in 2008, while domestic companies sold the other 27%. Meanwhile, crude oil transport routes are under Russian control; adding Transneft shares (in Atyrau-Samara and CPC) to Lukoil and Rosneft shares (in CPC), Russian companies own two-thirds of export pipelines. Moreover, TOCs control another 9% of CPC, while half of the Atasu-Alashankou pipeline is owned by CNPC. Accordingly, KMG controls less than 20% of oil exporting routes¹⁵ (*Kandiyoti*, 2008; *Tsereteli*, 2008).

Most of Kazakh crude flows from Russian ports (Primorsk and Novorosiisk) to European countries. The European Union directly receives half of Kazakh oil, but this proportion is actually higher because another 30% of crude is bought by Russian companies that then sell the oil to the EU and other European countries.¹⁶ Another increasingly important destination is China, which currently receives 14% of Kazakh oil exports. Concerning this current geographic distribution and its future evolution, KMG can have very little influence due to its minority position both in foreign sales and transport routes.

Therefore, it is clear that KMG and other Kazakh bodies exert only minor control over the oil cycle; decision power and its benefits belong to the foreign companies. On one side, Chevron leads with almost 17% of oil production and 20% of exports, while Agip, BG, and other TOCs contribute jointly to production and export with slightly lower percentages. On the other hand, CNPC and other Chinese companies have 23% of output and 26% of exports, while Lukoil and other Russian companies share 8% and 9%, respectively. Additionally, Russian firms enjoy majority control over transport.

The current account reveals a major consequence of this high foreign predominance (*Table 2*). Oil exports rose from \$7 billion to \$41.5 billion between 2003 and 2008, while at the same time rent outflows deriving from foreign oil investment increased from \$1.4 billion to \$16.6 billion. Service payments also increased, with most linked to TOC demands fulfilled by companies like Halliburton and Raytheon. Other imports, such as equipment and inputs purchased by TOCs, also rose.

Thus, crude oil exports increased by \$34.5 billion, while payments for oil investments rose by \$15 billion, and other payments for goods and services by no less than \$5 billion. Consequently, the net increase in oil contributions to the Kazakh economy was less than \$15 billion – a significant figure but far below that expressed by export data (*Arysraberov*, 2009).

National agents cannot guarantee continued widening of the energy sector

The minority position of KMG and other Kazakh firms in oil production and export reveals the nation's technical and financial inability to control oil cycle and secure sustainable growth in the sector. National companies lack the technology and financial resources needed to:

¹⁴ The Pavlodar plant, located in the northeast, is supplied with Russian crude from Omsk.

¹⁵ CPC pumps half of oil exports from the Tengiz and Karachaganak fields, while the Atyrau-Samara carries another third coming from Karachaganak, Aktobe, and other areas of the northwest. Atasu-Alashankou moves less than 200 thousand b/d (13%), and the rest of exports are swaps with Russia (Orenburg) and Iran (Neka refinery) and a small amount of oil shipped to Baku *Cole* (2008).

¹⁶ EU imports grew rapidly between 2000 and 2007, from 200 to 700 thousand barrels per day, making Kazakhstan the sixth supplier to the EU.

Table 2

Kazakhstan's current account balance: billion dollars.

	2003	2004	2005	2006	2007	2008	2009 ^a
Exports	13.2	20.6	28.3	38.4	48.4	72.0	43.2
Oil and condensate gas	7.0	11.4	17.4	23.6	28.1	41.5	24.4
Imports	9.6	13.8	18.0	24.1	33.3	38.5	29.0
Trade balance	3.7	6.8	10.3	14.6	15.1	35.5	14.2
Services balance	-2.0	-3.1	-5.3	-5.9	-8.1	-6.6	-5.0
Income balance	-1.7	-2.9	-5.7	-9.5	-13.1	-18.9	-10.5
Income to direct investors	-1.4	-2.4	-4.6	-7.7	-11.3	-16.6	-6.8
Current transfers	-0.2	-0.5	-0.4	-1.2	-2.2	-1.0	-1.0
Current account balance	-0.3	0.3	-1.1	-2.0	-8.2	7.0	-2.3
% GDP	-0.9	0.8	-1.8	-2.5	-7.8	5.1	-2.1

^a IMF forecast. Source: IMF (2009).

- i) exploit the main onshore fields;
- ii) explore and drill Caspian fields;
- iii) improve refining processes to provide more and better petroleum products; and
- iv) build pipelines and other transport routes for crude export.

This technological and financial failure is due to a combination of historical and structural problems plus other more recent circumstances. On the one hand, the underdevelopment inherited from the Soviet period drives Kazakhstan toward the typical primary-export economy dynamic. On the other hand, the post-Soviet transition has been led by a political elite largely concerned with consolidation of its own power. The oil boom has helped to improve the socio-economic situation, to spread rentierism, and to reorganize the oil sector, but without driving the economy toward comprehensive structural transformation. As a matter of fact, two simultaneous processes have guided this trend.

The economy has deepened its oil dependence

Currently, oil and gas production contributes 45% of industrial value, equivalent to 20% of GDP; adding other mining operations (coal, uranium, metals), this share approaches 25% of GDP. And the economic impact is even greater, as some services (transport, finance) are also related to such mining activities. Moreover, oil contributes 60% of export revenues, rising to 85% when other minerals are included, or equivalent to more than 40% of GDP. This overwhelming primacy of oil leaves the economy dependent on international price fluctuations, making it prone to "Dutch disease" effects and to subsequent, even more negative consequences when the bonanza comes to an end and trade deteriorates sharply.¹⁷ Meanwhile, the technological capacity remains minimal and the country still lacks the industries and services linked to economic development.

The rentier dynamic has not pushed the oil sector

The oligarchy and local elites have driven rising incomes to various destinations: some convenient, others spurious or predatory. Public spending directed toward fulfilling economic, social, and administrative goals has performed with different degrees of efficiency, leading to different results (Olcott, 2009; Akimov and Dollery, 2008; Arysranberov, 2009). However, oil incomes have not been reinvested in the oil sector. KMG-E&P pays high income taxes and more than 40% of its profit. After-tax profits go to reinvestment (61%) and dividends (39%) among KMG and its private shareholders, while KMG after-tax profits go entirely to Samruk, which is the state shareholding company.

Therefore, tax requirements and current company operations leave only a small margin for Kazakh reinvestment in the oil sector. The most important method of expanding state presence in the oil sector has been through purchasing stake shares (Kargermunai, Karazhanbasmunai, Kashagan), or through requiring certain foreign companies to cede a major share when buying a company, as was the case with PetroKazakhstan-CNPC. In the former case, it appears that purchases have been partly financed with resources that KMG had previously provided to the state, while another, probably larger, portion seems to have been borrowed from abroad. This is one, but certainly not the only, reason that the country's external debt grew so rapidly between 2003 and 2008, rising from \$23 billion to \$109 billion, finally representing about 80% of GDP.

Such purchases of stakes confer rights over a share of profits but do not affect significant progress in KMG's or KMG-E&P's technological and financial capacities, because both organizations remain outside the prospecting and drilling activities taking place in the major fields. Therefore the companies have no opportunity to acquire advanced equipment, or to assimilate the technical and organizational skills that foreign companies employ. If domestic firms fail to advance in financial and technical training, the oil sector will not escape from foreign dependence, and the responsibility to develop most upstream and downstream activities will be necessarily ceded to Western, Russian, and Chinese companies.

¹⁷ In addition to the difficult management of oil price declines, slowing growth in 2008 and the recession in 2009 were compounded by the consequences of speculative bubbles around financial and real estate sectors (Akimov and Dollery, 2008; Arysranberov, 2009).

Conclusions

First

As it has occurred in other countries during this last decade of rising oil prices, Kazakhstan's experience demonstrates the reversibility of oil agreements between TOCs and extremely weak governments that initially assume a subordinate negotiating role. TOC investments enabled Kazakhstan to become an oil scenario of some international significance, and this fact, together with other domestic and external conditions, weakened the bargaining position of the TOC and strengthened that of the Kazakh government for the revision of former agreements. The Kazakh experience shows the need to introduce dynamism into the analysis of petro-state economies, in order to assess the changing flexibility of governments in their relations with TOCs.

Second

In the case of Kazakhstan, the consolidation of a national oligarchy has been encouraged not only by domestic political events but the economic effects of an oil boom that attracted Russian and Chinese companies. In this context of increasing oil reserves and production, the emergence of new players does not necessarily imply tougher competition, but in a landlocked country like Kazakhstan there is no doubt that Chinese and Russian strategies have strengthened the bargaining position of the national elite in order to diversify its foreign partners.

Third

The consolidation of political power and the opportunity to choose new partners have provided the government with leverage that enables it to review former agreements with TOCs. This has allowed the government to take better advantage of the country's oil endowment, collecting higher oil revenues and increasing KMG presence in several joint ventures.

Fourth

However, foreign companies maintain control over the oil cycle, while domestic actors play a minority position. Rent-seeking has not changed KMG's technological and financial weakness, and the state-owned company is not yet able to guarantee expanded reproduction in the sector. Thus national oil empowerment has not been achieved. Primary control of the oil cycle belongs to Chevron, CNPC, Lukoil, and other foreign companies, that are now leading Kazakhstan's "success story" in terms of increasing production and adding new production and export capacities.

Fifth

Kazakhstan will continue enhancing its position as an international oil scenario over the next decade. In that time-frame, Tengiz and Karachaganak will reach their peak production, at 700 and 500 thousand b/d, respectively, while Kashagan will start first-phase production, reaching 400–500 thousand b/d; other fields, such as Kumangazy, will be able to ratify what are now mere estimations. Thus, Kazakhstan could more than double its current export capacity through 2020, to above 3 million b/d (Tsereteli, 2008).

Sixth

This scenario will provide more room for rent-seeking, although total oil rents will depend on international price trends. Still, these greater benefits from the country's oil endowment do not imply that national players will be able to reach oil empowerment. For that to happen, two conditions must be met: KMG-E&P's participation in crude drilling activities in the major onshore and offshore fields, and reinvestment of a greater share of oil profits, in order to strengthen the national oil sector.

Seventh

It is very likely that further negotiations with foreign companies will take place, either to increase the national company's shares in major upstream projects, or to expand the rent-seeking dynamic. The government has two main strengths: the diversity of partners hoping to reach agreements, and the increasing need of TOCs to expand, or at least maintain, their limited shares on world reserves. In their entirety, TOCs own only 10% of world reserves, sharing another 7% with various national companies (Jaffe and Solingo, 2007), while Russian companies have 6% and Chinese just 1.5%. For this reason alone, all companies currently involved in Kazakhstan need to remain there, just as assuredly as the Kazakh players need to attract foreign companies.

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