Mining Junior, Major Political Risks

Bridging Structural Challenges in the Mining Sector in Kazakhstan

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Abstract

Within the discipline of international business, institution-based theories on strategic management concentrate on how foreign firms conform to their local operating environment. One of the leading theories extending from such research is the idea that a foreign firm's success in a given country rests on the firm's ability to "bridge" the institutional (or structural) distance between the firm's home country and host country, whether that distance be cultural, regulatory, political, cognitive or any given number of possible structural measures. The greater the gap between home and host country, proponents of institutional distance claim, the more challenging it will be for the firm to be successful in the host environment. In this article, we develop the concept of institutional distance through a single qualitative case study of a junior mining firm, Frontier Mining, initially headquartered in the United States and listed on the London Stock Exchange, but with the vast majority of its operations located in Kazakhstan. We approach Frontier and the concept of institutional distance less through the lens of international business and more through the interdisciplinary lens typical of regional studies: how Frontier conforms to the local Kazakh environment is equally telling for those interested in strategic management as it is for those concerned with the intersection of the international political economy and the domestic political economy of a post-Soviet state in transition.

Keywords

Foreign investors – institutional distance – Kazakhstan – political risk

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Introduction

Central Asia is a politically "risky" region for foreign direct investment, according to both financial and political risk analysts. Uzbekistan, Tajikistan, Kyrgyzstan and Turkmenistan all score toward the very end on most country risk indices, and even Kazakhstan – the clear draw for foreign investors in the region and the geographical focus of this article – is included within the bot- tom half of such rankings, according to, for instance, IHS Global Insight's country risk ratings.[1] Specifically in mining outside of oil and gas Kazakhstan ranks as one of the top 5 countries "where not to invest" among key mining states around the world, sharing this unfavorable status with countries such as Papua New Guinea, the Democratic Republic of Congo, Mozambique and Russia.[2]

And yet, despite being such a seemingly risky investment environment, Kazakhstan is nevertheless home to several foreign firms and multinational enterprises in the mining industry, many of which have been in the country for close to a decade or more. How do we account for their apparent success? Why are they successful in a country in which we would expect them to fail?

Unlike in the largely market and state-oriented disciplines of international political economy and international relations, within the discipline of international business studies (IB) the foreign firm is the dominating unit of analysis, and it is here where competing answers to this puzzle – the deviant case of the successful firm in the so-called risky country – are readily available. Specifically within the field of strategic management, two schools of thought have largely emerged over the years: (1) the resource-based view of the firm, which focuses on a foreign firm's reaction to environmental uncertainty and, importantly, advocates for an active management style that recognizes politics as a resource, not a constraint, wherein government officials can provide (or deny) "permission to trade and invest, protection against sovereign risk, competitive advantages against rivals" and more *in return* for "various economic and noneconomic contributions";[3] and (2) the institutional view, which sees conformity to the

1 IHS, "Country Risk Ratings," *IHS Global Insight*, December 2, 2011.

2 C. Wyatt, and T. McCurdy, eds, "2013 Ranking of Countries for Mining Investment: 'Where Not to Invest,'" April 4, 2013, http://www.dolbear.com/news-resources/documents (accessed April 20, 2013).

3 T.A. Poynter, "Government Intervention in Less Developed Countries: The Experience of Multinational Companies," *Journal of International Business Studies* 13, no. 1 (1982): pp. 9–25; see also W.C. Kim, "The Effects of Competition and Corporate Political Responsiveness on Multinational Bargaining Power," *Strategic Management Journal* 9, no. 3 (1988): pp. 289–295,

institutional environment (government agencies, laws, courts, etc.) as a "survival value" for the foreign firm and argues for following national (or local) rules and norms as a means for increasing the firm's domestic prestige and legitimacy.4

Critically, however – and here is where those focused heavily on regional studies hold great promise – after several years of development of the field of IB, more and more the discipline has begun to admit openly that it by no means maintains a monopoly on understanding the full significance of the firm's place within international and domestic politics. For instance, the editors of a leading IB journal recently put out a "call to arms" for interdisciplinary approaches as the only way forward for "substantive advances in research."5 There has also been a call for more qualitative studies to get past the "large-n" style regressions that tend to dominate the discipline and instead open up the "black box" of a foreign firm's behavior in a given country through qualitative research.6

These are two alarms waiting to be addressed by the rich research disciplines, diverse perspectives, and intensive fieldwork behind the community of specialists focused on Eurasia. Central Asia in particular stands as an aptly suited region for the interdisciplinary study of the foreign firm's interaction with the domestic political economy of countries in transition, drawing on IB, political science, economics, anthropology and sociology. The region has always been considered a powerful intellectual playground of sorts, post- independence, for understanding the clearly separate paths pursued by each state despite the many initial similarities among these former Soviet socialist republics. And Kazakhstan above all makes for a compelling setting to study firm-host country relations, as it is by far the largest draw for foreign direct investment in the region (with some estimates as high as 80% of all FDI to the region),7 the per capita income in the country dwarves that of its neighbors,

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and, J.J. Boddewyn, and T.L. Brewer, "International-Business Political Behavior: New Theoretical Directions," *The Academy of Management Review* 19, no. 1 (1994): 119–143.

4 C. Oliver, "Strategic Responses to Institutional Processes," *The Academy of Management Review* 16, no. 1 (1991): 145–179 (here 148).

5 J.L.C. Cheng, W.J. Henisz, K. Roth, and A. Swaminathan, "From the Editors: Advancing inter-disciplinary research in the field of international business: Prospects, issues and challenges," *Journal of International Business Studies* 40 (2009): 1070–1074 (here 1072 and 1074).

6 Y. Doz, "Qualitiative research for international business," *Journal of International Business Studies* 42 (2011): 582–590 (583).

7 "Kazakhstan attracts 80% of FDI to Central Asia, minister says," *Kazakhstan Energy Newswire*, April 8, 2103.

and within the larger Commonwealth of Independent States (CIS), it was the first country to be declared officially as a "market economy" by the United States.8

And as could be anticipated, studies to date on firms operating in the country – be them multinationals, smaller foreign firms, or domestic firms – have thus far affirmed the value of studying the interactions of the firm with its host country through interdisciplinary and regionally-seated approaches. Pauline Jones Luong and Erika Weinthal's work on ownership structure within the Kazakh oil sector, for instance, has produced valuable insights into status quo understandings of the "resource curse," providing evidence that it might not be such a curse after all under the appropriate conditions,9 while on the other side of the spectrum, research on smaller, more domestic firms, such as Gul Berna Özcan's case study on entrepreneurship in Kazakhstan, have increased our understanding of the significance of informal power networks in countries marked by powerful elites.10

In this article, we explore the history of Frontier Mining, a junior mining firm initially incorporated in the US and listed on the London Stock Exchange and focused on gold and copper developments in Kazakhstan. We trace Frontier's experience in the country from its very beginning in the late 1990s up through 2011, drawing mainly on company documents and a series of semi- structured interviews with those both in the private sector and government intimately familiar with the firm's operations. While on the surface Frontier appears to overcome its Kazakh-based political risks by implementing a more "local" management team, a strong undercurrent emerges in our case study that points toward Frontier´s agency as playing a clear role in the firm´s early failures and later successes. In the discussion section that follows we reflect on Frontier's experience in relation to the existing wealth of regional studies focused on Central Asia and greater Eurasia, demonstrating not only how an approach to the region through the lens of the foreign firm can be particularly illuminating to the study of the region itself, but equally how extant scholar- ship rooted in the region can be just as illuminating for the study of IB and strategic management.

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8 G. Gleason, *Markets and Politics in Central Asia, Economies in Transition to the Market* (Abingdon Oxon; New York: Routledge, 2003).

9 P.J. Luong, and E. Weinthal, *Oil Is Not a Curse: Ownership Structure and Institutions in Soviet Successor States* (Cambridge: Cambridge University Press, 2010).

10 G.B. Özcan, "Overcoming barriers: business consulting and lobbying in Kazakhstan," in R. Aidis, and F. Welter, eds, *Innovation and Entrepreneurship: Successful Start-ups and Businesses in Emerging Economies* (Cheltenham: Edward Elgar Publishing Ltd, 2008), 48–68.

The Puzzling Case of the Successful Foreign Firm in the RiskyCountry

In the late 1990s, an American named Brian Savage was working on a project in Kazakhstan funded by the US government to help the country determine radiation levels in the former Soviet nuclear testing grounds of Semipalatinsk. Over the course of the study, the investigators came across significant mineral deposits in areas free of radioactive contamination. Savage saw the opportunity immediately, acquiring over time the requisite subsoil rights to develop two gold and copper deposits under the name Frontier Mining, a company incorporated in the US and eventually listed on the London Stock Exchange.[11]

While Kazakhstan is more commonly known for its sizeable oil and gas reserves, the country is rich in other minerals. Globally, Kazakhstan is ranked in the top three in estimated reserves of uranium and chromium, top five in copper and zinc, and top 10 in lead, iron ore, coal and gold.12 A handful of mining giants tend to dominate the majority of Soviet legacy deposits in the country – that is, Soviet era mining operations that were consolidated and privatized in bulk during the 1990s.13 Kazakhmys (copper), ENRC (chromium, iron ore, alumina and bauxite), ArcelorMittal (iron ore and coal) and Kazzinc (lead, zinc and gold; majority owned by Glencore) maintain an overwhelming share, if not virtual monopoly, on mining and production of its respective mineral (or minerals). Kazakhmys and Glencore (and until recently, ENRC) are listed on London's FTSE 100 (the 100 most capitalized companies on the London Stock Exchange) and Arcelor Mittal is the largest steel manufacturer in the world.14 It is also worth noting that the Kazakh government,

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11 US Department of Energy, *AMPS Mission to Kazakhstan* (US Department of Energy: Office of Nonproliferation and National Security, 1998), DOE/NN/ACNT-98A; Frontier Mining, *Frontier Mining Ltd. Prospectus for Admission to Trading on AIM* (Frontier Mining, 2008) available at www.frontiermining.com (accessed October 10, 2012).

12 Reserve estimates vary by source and both estimates and rankings should be treated only as approximations. See: "Mining Industry," Embassy of the Republic of Kazakhstan to the United States (2011), http://www.kazakhembus.com/index.php?page=mining-industry; Jones, A., Tarta, R. and E. Yukin, "Kazakhstan Mining," *Global Business Reports* for *Engineering and Mining Journal*, December (2012). Estimates noted in here are most ambitious.

13 A.E. Peck, *Economic development in Kazakhstan: the role of large enterprises and foreign investment* (London: Routledge, 2003).

14 (2009) 'Councils, sittings, meetings - President Nursultan Nazarbayev Receives CEO of Glencore International AG Willy Strothotte and Ivan Glasenberg', *Kazakhstan Government News*, Jun. 24, retrieved via *Nexis*.; (2010) 'Glencore plans Kazzinc IPO', *Daily Deal/The Deal*, Aug. 27, retrieved via *Nexis*.; Ferreira-Marques, C. and MacLellan, K. (2011) 'Glencore's record IPO makes muted debut', *Reuters*, May 19.

mainly though not exclusively through the country´s sovereign wealth fund Samruk-Kazyna, owns substantial shares in many of the mining giants in the country.15

Frontier is known as a mining "junior," meaning it is a small mining company primarily focused on exploration and early stage development of mineral deposits. Mining juniors are the riskiest component of the mining industry, designed to absorb much of the geological risk that larger, "major" mining companies are unwilling to take.16 Mining juniors are hyper-sensitive to risk in all forms – geological, financial, operational and political challenges are com- mon and regularly threaten the company's ability to be successful. Frontier thus represents a situation distinctly different from not only the experiences of the larger oil and gas multinationals operating in Kazakhstan, but also the larger traditional mining firms in the country, such as ArcelorMittal, ENRC, Kazakhmys, Cameco or Glencore.

By the end of 2011, Frontier employed over 500 people17 and operated under a series of subsoil licenses in various stages of exploration and development across Kazakhstan, with financial and mining analysts lauding the company's ascendency and future potential.18 How do we account for Frontier's apparent success in such a risky county? Why has Frontier been successful in a country that the mining advisory firm Behre Dolbear specifically labels as one in which "not to invest"?

The institution-based school of strategic management, as mentioned earlier, argues that a firm will be decreasingly likely to be successful in a given country as the institutional distance between the home and host environment increases.19 As such, in many ways Frontier's apparent progress in

15 See for example Kazakhmys PLC, *Kazakhmys Annual Report 2012* (London: Kazakhmys PLC, 2013).

16 For a good overview of the business behind mining, particularly the concept of the min- ing junior in relation to the larger industry, see J. Whyte, and J. Cumming, eds, *Mining Explained: A Layman's Guide* (Toronto: The Northern Miner, 2007); R.G. Eggert, "Mineral exploration and development: risk and reward," Prepared for the *International Conference on Mining: Staking a Claim for Cambodia*, Phnom Penh, Cambodia, May 26–27, 2010.

17 *Annual Report* (Frontier Mining, 2011).

18 See, for instance, the following equity analyst reports recommending "buy" for Frontier Mining based on the company's success: "Frontier Mining: Great time to buy," *XCAP Securities UK Equity Research*, February 3, 2012; "Frontier Mining: Undiscovered junior copper-gold play," *Libertas Partners*, August 26, 2009; and "Digging Kazakhstan: Initiating on Kazakh mining plays," *VisorCapital*, September 12, 2007; all available online at www .frontiermining.com (last accessed October 10, 2012).

19 For a good overview, see V. Hernandez, and M.J. Nieto, "The impact of institution distanceon the international entry modes of SMEs: A two-way effect," presented at the *37th annual*

institutionally "distant" Kazakhstan represents a deviant case, and we would therefore expect its success to be largely attributable to the firm's ability to adapt to the formal and informal institutions that characterize the country, a proposition we will examine in this section in three parts. Frontier was selected as a case study for exactly this reason: deviant case studies provide us with the opportunity to trace the potentially distinct causal pathways that nevertheless lead to the same ultimate outcome (i.e. success) as expected by the institution-based school.20

I begin by briefly setting the home country institutional context of Frontier *ex ante*. I then describe the formal and informal institutional environment in Kazakhstan as it relates specifically to the mining industry, and I close with an in-depth account of the ways in which Frontier seemingly bridged the so- called institutional divides that apparently challenged its ability to be successful. While I aim to demonstrate that over time, Frontier's management changed from largely foreigners to almost completely locals, which seems to lend itself toward supporting the argument of overcoming institutional distance, a closer examination reveals that a parallel trend in changing over the ethnicity of the firm's management was also changing over the firm´s strategies in managing the local political risks associated with operating in Kazakhstan, a clear nod to the role of agency in the firm´s success.

Home Country Institutions

Frontier Mining was initially incorporated in Delaware, US, and listed on the London Stock Exchange's Alternative Investment Market (AIM), and therefore we will assume for the purposes of this case study that the so-called "home" of the firm is two-fold: the institutional environments of both the US and the UK. Thus over the course of the firm's operations in Kazakhstan from 2004 through 2011, the company's home country institutional constraints included the US Foreign Corrupt Practices Act of 1977 (FCPA) and eventually the UK Bribery Act of 2010. The FCPA outlaws corrupt payments to foreign government officials by companies incorporated in the US or listed on a US exchange while the stricter UK Bribery Act outlaws corruption and bribery in all forms, whether it involves foreign government officials or not, as long as one of the parties involved has a "business presence" in the UK. The two laws also differ in that the FCPA allows for facilitation payments, defined as payments made in the "furtherance of

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conference of the European International Business Academy, Bucharest, December 8–10, 2011.

20 A. George, and A. Bennett, *Case Studies and Theory Development in the Social Sciences* (Cambridge: MIT Press, 2005).

routine governmental action," and commonly referred to as "grease," while the UK Bribery Act recognizes no such exception.21

The AIM is a market known for its lower regulations and it was created specifically by the London Stock Exchange for companies operating under riskier circumstances – whether they be financial, political, operational, or a combination thereof.22 Because the company is traded publicly, it is further exposed on the home front not only to the AIM's regulations but to the interests of its shareholders, specifically the expectation that the firm's overriding goal will remain one of profitability. As we noted earlier, the mining junior as a unit of interest is particularly susceptible to financial risks, and thus such firms are under tremendous pressure to prove the profitability of a given mine site to shareholders. We also include here an additional home country institutional constraint faced specifically by Frontier but also by most mining juniors: the Equator Principles, which are certain social and environmental requirements agreed upon by the world's largest investment banks for investment in projects with capital costs of $10 million or more.23 Compliance with these social and environmental requirements is generally verified through an independent third-party in a report known as an "environment and social impact assessment" (ESIA). The ESIA will make a judgment on Equator Principles compliance, which the firm can then include in its application for financing.24

Host Country Institutions, Formal and Informal

For the foreign miner in Kazakhstan, the institutional environment during the period of interest can be broadly divided into constraints that emanated mainly from the national government (i.e. the *Mazhilis*, or parliament, along with the ministries located in the nation's capital of Astana) and those that came from the *oblast akimat* (i.e. the provincial government), though of course

21 See US Department of Justice and Securities Exchange Commission, *A resource guide to the U.S. Foreign Corrupt Practices Act* (U.S. Government, 2012) and UK Ministry of Justice, *The Bribery Act 2010: Guidance* (U.K. Ministry of Justice, 2011).

22 M. Waller, "New AIM firm to dig at nuclear test sites," *The Times*, July 29, 2004; T. Ackerly, and S. Amies, "The Attraction of London's AIM Market," *Outside Perspectives from Covington & Burling*; see also PwC, "Listing in London: A guide to flotation on AIM," *PricewaterhouseCoopers* (2010).

23 See "About the Equator Principles," http://www.equator-principles.com/index.php/ about-ep/about-ep (accessed May 4, 2013).

24 See, for instance, Frontier Mining, "Frontier Mining forms project group to perform ESIA on Benkala copper project," *Frontier Mining*, January 17, 2011; Wardell Armstrong, "Competent person's report on the Benkala copper deposit, Northern Kazakhstan," *Wardell Armstrong International*, Ref. 61-0426, March 2007.

both would interact with one another and both were equally characterized by formal and informal elements, as I will show. From the perspective of the foreign miner, the legislative and regulatory process in the country as it moved from the central to the regional government – from where legislation was envisioned and drafted to where it was enforced – became a source of significant regulatory uncertainty. Well-intentioned, rapid reforms enacted in Astana to make the country more competitive according to international standards were misinterpreted – generally unintentionally – as they were implemented in the *oblast*s (provinces) by poorly trained local regulators. The confusion surrounding the interpretation of Astana's reforms was further complicated by the constant turnover within the provincial government offices, again, often under good intentions but with adverse effects for the quality and consistency of the regulatory institutions on the local level. Overall, this process of poorly implemented rapid reforms led to a situation of high uncertainty within the formal institutional environment, which in turn affirmed for Frontier the value of adapting to Kazakhstan's informal institutional environment in order to reduce the miner's exposure to political risks within the country.

I begin on the national level, where during this period Kazakh President Nursultan Nazarbayev publically called for the creation of "the most attractive conditions for investors" within the country,25 explicitly setting his goals for improving the country's investment environment within the context of the World Bank's *Ease of Doing Business* index rankings (EDBI), among others. From 2006 to 2012, the country advanced an impressive 39 spots in the rankings, however, such rapid "progress" – essentially pushing legislative reforms through the *Mazhilis* at an alarming rate – would come with significant institutional consequences on the local level.26 Specifically, the national government's pace of reform had the adverse and unintentional effect of creating a legislative environment that changed at such a rate that local regulators could not keep up, or worse, the legislation itself would often be "inconsistent with other acts" or marked with typos, as the managing partner of one consulting and accounting firm relayed to me, allowing for multiple, competing interpretations of a given law or series of laws.27

While such acts like tax code reform in 2008 may have been well-intentioned, good intentions in the country's capital led to confusion in the

25 *Investor's Guide: Kazakhstan* (Astana: Ministry of Industry and New Technology, 2010), 3.

26 *Doing Business* (Washington, DC: World Bank, 2006); *Doing Business* (Washington, DC: World Bank, 2012).

27 Source-1, February 15, 2011; for source details, see "Appendix: semi-structured interview source details".

local *akimats*, and not just on taxes but across the full range of regulations concerning a mining operation like Frontier. This was largely due to a lack of training at the local level in the wake of such legislative reforms paired with the fear of quick reprisal for any mistakes that would favor the foreign operator at the expense of the government. One mid-level manager from the Ministry of Industry and New Technology (the MINT, responsible for regulating the mining industry) explained to me, half-joking, that "it's a problem of what we call a 'human factor'." He admitted that there are some situations "where the law does not consider all the issues, or there is some kind of error" that would then lead the ministries to release "instructions" to local governments that were then further confused by the local regulators and inspectors. While acknowledging at the time that "we sit here in Astana and sometimes we don't know about all these problems," the manager nevertheless noted that the local level regulators were "not very competent,"[28] an observation echoed by mining juniors including by a source familiar with Frontier.[29]

At the same time, in Kazakhstan during this period the president maintained the power to appoint *oblast akim*s, and in turn these regional leaders (akin to governors) maintained the power to appoint district level leaders as well as staff the *akim*'s machinery (the regulators, inspectors and general staff of the *oblast akimat*), a formal governing process with significant implications for informal power structures within the country. Researcher Rico Isaacs has described this framework as following a system of "interconnected patron- client relationships" that extended from President Nazarbayev all the way down to the local level, a system specifically designed to maintain loyalty among all levels of leadership within the country,[30] and marked by consider-able corruption.

For foreign firms such as Frontier, the role of the *oblast akimat* in this patron-client system was significant for two reasons. First, in Kazakhstan during this period the powers to provide and inspect general permits and licenses were seated at the regional level (outside of the subsoil licenses, which came from Astana). Formally, the revenue from such permits and licenses was cycled back into the regional *akim*'s budget, but informally, firms were often required to make facilitation payments (or "grease") to these local permitting or regulatory officials in line with sustaining the local patron-client system that characterized the *akimat*. Second, the foreign miner was required to spend a given

28 Source-4, February 10, 2011.

29 Source-10, February 17, 2011.

30 R. Isaacs, *Party System Formation in Kazakhstan: Between formal and informal politics* (London: Routledge, 2011), 64.

amount each year on social projects within its area of operations. For these social projects to be tax deductible, the miner would need to sign a "Memorandum on Social Cooperation" with the *oblast akim*, which essentially outlined the social projects agreed upon by the *akim* and the miner for the year. In practice, this process provided the *akim* with a way to reward local elites and thus maintain local stability – the agreement to build a school, for instance, would be contracted out to a local construction firm picked by the *akim*, with an inflated budget, or in the most extreme cases, the school might not be built at all.

Complicating this system of locally-seated institutional power was the fact that government officials within the country – at all levels – were regularly rotated into different offices, often in different regions, under a policy aimed publicly at reducing corrupt practices but recognized informally as a method for ensuring no single leader at any level became too powerful (mainly from drawing rents from locally operating firms, as described above) and thus capable of succeeding his or her superior. This has been widely observed before among the regional *akim*s and the ministers in Astana, where Nazarbayev continually shuffled these officials to new positions,31 but the same system existed within the regional governments themselves, all the way down to the local police officer being moved from district to district.32

The constant rotation of employees had the unintended consequence of further preventing individuals from developing expertise in a particular field, whether it was in taxation, environmental regulation, business development or investment attraction. Over a ten year period, an individual could hold ten distinct positions as unrelated to one another as "deputy director of traffic safety" and "head of external relations and protocol."33 One consultant for mining juniors in Kazakhstan described to me, for instance, the great difficulty in finding a single individual within the local *akim*'s office that understood at a minimum "the process of business," because "they have no clue about mining practices, absolutely no clue, and it's very difficult to explain to them why you need to do this, this and that." At least an individual versed in business can

31 See, for instance, S. Cummings, *Kazakhstan: Power and the Elite* (London: I.B. Tauris, 2005).

32 Source-5, March 24, 2011.

33 Eastern Kazakhstan Akim, "External Relations and Protocol Department," *Eastern Kazakhstan Akim Official Website*, 2011, http://www.akimvko.gov.kz/en/rule/akimat-vostochno-kazaxstanskoj-oblasti/apparat-akima-vostochno-kazaxstanskoj-oblasti/otdelyi-apparata-akima/otdel-vneshnix-svyazej-i-protokola/personyi/sembinov-erzhan-altaevich.html (last accessed April 14, 2013).

"understand – at least he can hear you," this consultant continued, and then he or she could in turn explain the situation to the person who was actually in the relevant decision-making position.34 Such a trend was affirmed by the management of another mining junior operating in the country, equally attributing the root of the problem to the constant "changes in the management of the *akimat*," under which "every new manager brings in a new team,"35 resetting the points of contact for a local mining operation.

Bridging the Distance

According to the expectations of the institution-based school of strategic management, the greater the institutional distance between Frontier and Kazakhstan, the "more difficult it will be" for the miner "to understand the host environment," and thus the miner's success relies on its ability to bridge this divide by adapting the firm's own organizational practices to host country requirements.36 I now return to Frontier's experience in Kazakhstan up through 2011 to test this proposition against the firm's actions.

To begin, by 2005 the firm operated under a very specific subsoil contract that detailed exploration, production and investments across a strict schedule – as one manager for a junior also operating in Kazakhstan described the situation, the contract would be "very strict, and you should be at any time in compliance."37 The various schedules tended to be listed in 2 to 2½ year timeframes, and if at any time the miner anticipated needing to operate outside of this schedule, it would need to renegotiate the contract with the relevant ministry back in Astana,38 which in itself would take several months and therefore deviations from the schedule essentially needed to be anticipated several months before they were likely to occur. Aside from the natural geological challenges that Frontier may have encountered during this time period that would require the firm to renegotiate the subsoil contract, there were a series of licenses and permits indirectly related to maintaining the subsoil schedule that required approval from the local *akim*, as I noted earlier. So in other words, as a manager familiar with Frontier's operations described, "you have the national regulation looking after your performance on the subsoil [contract] and the locals looking at [your operations] in their place

34 Source-6, March 15, 2011.

35 Source-7, March 16, 2011.

36 T. Kostova, S. Zaheer, "Organizational legitimacy under conditions of complexity. The case of multinational entreprises," *Academy of Management Review* 24, no. 1 (1999): 64–81.

37 Source-7, March 16, 2011.

38 In 2005 this would have been the Ministry of Energy and Mineral Resources.

[of authority] – construction, the use of cyanides…everything related to your operational place, and everything is controlled."39

Access to cyanides was a sticking point in 2005 that caused the company serious delays and illustrates well this tension. According to an individual familiar with Frontier's operations at the time, episodes like the cyanide delay were common and due to "Western managers," sent to Kazakhstan who "ignored all the small things like regulation and tried to concentrate on doing things for the shareholders as opposed to the right way based on regulations."40 This is a direct reference to these Western managers' overwhelming focus at the time on production at the cost of "small things." After all, as we noted earlier, it would be in moving from the exploration to the production stage that a junior miner would prove to potential investors on London's AIM that it could produce gold or copper at a profitable margin.

This rush, however, without the due deference to the regulatory process, was often what would put foreign miners like Frontier in jeopardy on the local level. Lawyers in Kazakhstan described similar situations in which the miner – unwilling to wait for the proper licenses – acted in a way or imported a particular chemical without a permit that would then expose the firm to government interference. "They come to us and we say that if you came to us earlier you wouldn't have had this problem," one Almaty-based lawyer with clients in the mining industry relayed to me.41 My source familiar with Frontier's operations agreed. "Not paying attention to the small things" and instead "trying to push" was a mistake for the firm during this time period that in the end lengthened the waiting period.42 That said, the situation was further complicated by the fact that regulatory or licensing agencies would take much longer to respond to a given request than legally mandated in the absence of, for instance, grease or outright bribes. "Theoretically you could sue," the Almaty-based lawyer described, but "as a practical matter you'll never sue them because you'll never get the consent."43 In other words, bringing a lawsuit would lead to a negative local reputation which in turn would further expose the firm to the operational risks of the local permitting office.

By the fall of 2008, then CEO Brian Savage was forced to recognize that the production delays at the Naimanjal site were "not technical in nature,"

39 Source-10, February 17, 2011.
40 Source-10, February 17, 2011.
41 Source-8, February 15, 2011.
42 Source-10, February 17, 2011.
43 Source-8, February 15, 2011.

admitting that the site proved to be a "more challenging project than anticipated."44 In early 2009, Savage would step aside as CEO and chairman in place of an individual named Erlan Sagadiev, a young, talented Kazakh with a record of business success in Kazakhstan.45 Under Sagadiev's leadership, other Western managers who had been with the firm since the early years would be swapped out for Kazakh operators, or what the institution-based school of strategic management interprets as the re-making of the firm as "more domes- tic," as in, more Kazakh.

According to one mining consultant in Kazakhstan, the key to success in the country during this period was for the firm to have "someone within the organization spending 99% of their time with local officials or national officials" in order to minimize operational risks,46 and Erlan Sagadiev became that individual on the national (i.e. central government) level.47 Sagadiev was appointed CEO and chairman of Frontier after successfully purchasing and turning around a failed dairy enterprise during Kazakhstan's privatization period in the early 1990s.48 According to a researcher familiar with the success of this earlier enterprise, the company "encountered relatively few problems with corruption because the firm [was] managed by a well-connected Kazak (sic)," that is, Sagadiev, whose father was at the time the president of Kazakhstan's Academy of Sciences, connections that had allowed the firm "to be left alone by local officials who would normally solicit bribes."49

Under Erlan Sagadiev's leadership, Frontier's subsoil licenses were routinely updated with minimal government delay, the firm's annual reports highlighted the strengthened management of the firm,50 and on a critical acquisition for the firm in which the Kazakh government had right of first refusal, the government waived this right and the new acquisition became wholly owned by

44 Frontier Mining, *Interim Results* (Frontier Mining, 2008).

45 "Frontier Mining Ltd Directorate Change," *London Stock Exchange Aggregated Regulatory News Service*, February 9, 2009.

46 Source-9, March 7, 2011.

47 Source-10, February 17, 2011.

48 "Frontier Mining Ltd Directorate Change," *London Stock Exchange Aggregated Regulatory News Service*, February 9, 2009.

49 W.D. Dobson, "Policy and management lessons for dairy exporters and investors in foreign dairy-food business – What did we learn in the past decade?" Paper presented at the annual meetings of the *International Agricultural Trade Research Consortium*, Auckland, New Zealand, January 18-19, 2001, 21–22.

50 Frontier Mining, *Annual Report* (Frontier Mining, 2008); Frontier Mining, *Annual Report* (Frontier Mining, 2009).

Frontier51 (a rare exception to the government's typical behavior both in mining and oil and gas52). In Frontier's first year under Sagadiev, the firm was able to cut overhead costs at its operations by 50%, a feat attributed to Frontier's "new and stronger management team"53 that happened to be more heavily staffed with Kazakhs. This trend would continue up through 2011, and would include focusing more heavily on the "small things," such as maintaining strong personal relations on the local level, something that was "very important," as described to me by one source because there were often "some misunderstandings" between Frontier and the *oblast* government on issues, not surprisingly, like permits or regulations. "This is why it is important to have someone who is local," the individual continued. "If you need something, some permits, just send it to the local person and compare how quickly it is done."54

When such misunderstandings would occur, "one option is fighting with the person who is [interpreting] the regulation," bringing in lawyers, for instance, as is the Western approach, but this was less necessary with a strong Kazakh management team. Instead, there was "the other way," which was to "sit with the person," talk out the problem and determine a way forward to fix it. "That person is easier to talk with if [you're] Kazakh," according to this same manager familiar with the firm's operations. In fact an even more successful practice exercised by Frontier during this time was to sit down with the local inspectors beforehand – to address potential misunderstandings before they occurred – in order to "come to a good agreement," the manager explained, "so if you do it this way, you will not have questions with him tomorrow."55

The 2011 appointment of Yerbulat Tastanov as Head of Government Relations at Frontier demonstrates well the type of local profile capable of ironing out any so-called misunderstandings. Tastanov's career in mining stretched back to the 1960s when he was a researcher and eventually the Dean of the School of Metallurgy at the prestigious Kazakh Polytechnic Institute. With independence he held key posts at various state aluminum operations in the country that would in due course be packed together into Eurasian Natural

51 "Frontier Mining hopes Kazakhstan to rule on Coville deal in March or April," *Trend Daily Economic News*, Mar. 9, 2011; "Frontier Mining Ltd receives approval for completion of acquisition of Coville Intercorp Ltd's 50 percent interest," *International Resource News*, April 11, 2011.

52 See, for example, G. White, "Kazakhmys says government stake 'not a worry'," *Telegraph*, October 12, 2010; "Kazakhstan to increase take in Kashagan oil field," *Ria Novosti*, January 14, 2008.

53 Frontier Mining, *Annual Report* (Frontier Mining, 2009), 5.

54 Source-10, February 17, 2011.

55 Ibid.

Resources Corporation (ENRC), one of the largest mining operations in the country.56 Under the previously described system of local government that did not promote specialization among regulators – or as one Kazakh mining consultant put it less eloquently, "because they are idiots"57 – an individual like Tastanov, whose background and experience commanded a level of respect and authority, was seemingly just the profile to ensure inspectors and Frontier interpreted the sector's various laws in the same way.

Frontier also brought in a Kazakh banker named Yerlan Aliyev to join the firm's ranks and pursue a policy of moving away from London's AIM and Western investors as the primary sources of capital and toward Kazakh and Russian sources of financial support, loosening the Western-imposed institutional constraints that would have come with funding from an internationally recognized bank. For instance, Sagadiev controlled Zere Group JSC, a Kazakh-based holding company focused on entrepreneurial activity in oil, gas, mining and education that provided in 2009 a $10 million loan to Frontier at a time "critical to reinvigorating the financial health of the Company."58 It would repeat the $10 million loan facility in 2010 and would eventually become a major shareholder in Frontier. And Aliyev's appointment as a non-executive director likely opened the door to Russian financing, specifically from Sberbank from which Frontier received a $29 million loan toward the end of 2011.59 Aliyev had previously worked in high positions for a variety of Kazakh and Russian banks operating in Kazakhstan.60

Together these moves made the firm less accountable to its Western shareholders and traditional views on corporate social responsibility, and also lifted significantly Frontier's need to respond to larger institutional constraints associated with the international banking community, namely the Equator Principles.61 In 2010, for instance, Frontier acknowledged that its Benkala site was not Equator Principles compliant but that it planned on making the necessary changes in the near future, though as time progressed and financing from banks associated with the principles became less necessary (Sberbank, for

56 See "Frontier Mining: Directors," http://www.frontiermining.com/company/directors.html (accessed May 4, 2013); B. O'Donovan, "Frontier Mining appoints Tastanov as government relations director," *Metal Bulletin Daily Alerts*, April 15, 2011.

57 Source-6, March 15, 2011.

58 "Frontier Mining Ltd Directorate Change," *London Stock Exchange Aggregated Regulatory News Service*, Feb. 9, 2009; Frontier Mining, *Annual Report* (Frontier Mining, 2009).

59 "Frontier Mining agrees US$29 mln financing for expansion of Benkala copper mine," *Proactive Investors*, January 12, 2012.

60 See "Frontier Mining: Directors".

61 See "About the Equator Principles".

instance, did not participate in the Equator Principles, nor did Zere Group), compliance became unnecessary, and by the end of 2011, despite initial promises to the contrary, Frontier remained non-compliant.62

A turn to Russian- and Kazakh-sourced funding also coincided with the firm's re-domicile from Delaware in the US to the Cayman Islands.63 So, for instance, whereas other foreign firms exposed to the US regulatory environment and operating in Kazakhstan would typically be deeply concerned with how and where their social contributions would be spent and would be particularly unwilling to simply "cut checks" – behaviors influenced by share- holders and especially by external regulatory structures such as the aforementioned US FCPA64 – Frontier chose under its new leadership to "not deal with the details," on social contributions, and instead to "simply [send] the money to the funds,"65 as described to me by a manager familiar with Frontier's operations, such as the firm's $1.5 million liability to the Astana Fund or the
$1.6 million payment to the Nazarbayev Education Fund,66 along with various small projects for local *akimats*.67

Discussion: Only a Matter of Becoming more "Kazakh"?

Broadly speaking, Frontier behaved during this time period exactly as the extant scholarship on institutional distance would expect: the firm adapted to its local operating environment by cycling out Western managers for host country nationals; the firm moved away from the institutional constraints of the international banking system and toward the less restrictive borrowing

62 Source-11, via e-email, September 20, 2010; see also J.E. Conway, "New political risks arise with next generation of metals mining in Kazakhstan," *Central Asia – Caucasus Institute Analyst*, November 9, 2010; "Frontier Mining Ltd Commencement of ESIA," *London Stock Exchange Aggregated Regulatory News Service*, January 17, 2011; "The Equator Principles & Sustainability," Eco-Coach blog, January 28, 2011, http://www.eco-coach.com/blog/2011/01/28/the-equator-principles-sustainability/ (last accessed on October 18, 2012); Source-11, via e-mail, October 17, 2012.

63 Frontier Mining, "Press Release: Completion of Re-domicile," *Frontier Mining*, December 17, 2010.

64 J.E. Conway, "The risk is in the relationship (not the country): Political risk management in the uranium industry in Kazakhstan," *Energy Policy* 56 (2013): 201–209.

65 Source-10, February 17, 2011.

66 Frontier Mining, *Annual Report* (Frontier Mining, 2010, 2011).

67 These were described to me by Source-1 (February 15, 2011) but are not detailed in any of the company's annual reports.

standards of Russian and Kazakh lenders; and instead of remaining frustrated by the bureaucracy at the local and national level, the firm leveraged the country's informal, elite-driven power networks to reduce operating expenses and minimize production delays. But a closer reading of Frontier's experience during this time period reveals a series of valuable research threads for future development. How to reconcile Kazakhstan's apparent formal institutional success, according to World Bank measures, that is yet so clearly challenging for foreign miners to navigate? And what are the consequences of a rapidly changing formal institutional environment for the country's informal institutions? Further, is "success" so easily accounted for by switching out a firm's management for host country nationals with elite connections? Is it as straight- forward and deterministic as simply not being a foreigner? Here I examine these questions against Frontier's experience during this time period but also by drawing on the existing scholarship from within the region.

Formal vs. Informal Institutions

Clearly the World Bank's *Ease of Doing Business Index* (EDBI) was not accurately capturing the business environment as experienced by Frontier during the time period of interest. That said, we can also say with confidence that the central government's goals during this time period were well-intentioned – that is to say, the relevant ministry officials, such as those within the Ministry of Industry and New Technology, were genuinely committed to improving the business environment. This finding dovetails neatly with existing scholarship on the EDBI, particularly the work of Sam Schueth and Georgia's meteoric rise in the EDBI during roughly the same period. Scheuth argues that the "EDBI's methodological myopia makes it possible to game the system of measuring economic competitiveness by legislating dramatic improvements in rankings, which may not reflect prevailing relations between firms and the state."[68] Frontier's case zeroes in on these "prevailing relations," providing clear evidence that rapid changes from the country's center (aimed at the EDBI, for instance) without the necessary investments at the periphery, where new legislation is both interpreted and enforced, exposes a firm to high regulatory uncertainty, complicating a firm's ability to comply with legislation. And further, as a consequence of this high regulatory uncertainty, the country's informal networks become that much more relevant in minimizing political risks: the ability on the local level for regulators to interpret legislation with

68 S. Schueth, "Assembling International Competitiveness: The Republic of Georgia, USAID, and the *Doing Business* Project," *Economic Geography* 87, no. 1 (2010): 51–77 (here 61).

great latitude allows such interpretation to serve as either a reward or a penalty for the behavior of locally operating businesses.

In this sense, mapping EDBI rankings against, for instance, Transparency International's Corruption Perceptions Index may be particularly illuminating in identifying a cluster of countries that remain highly corrupt despite progressing on EBDI measures.69 In these countries, the quick pace of regulatory reforms may actually be exacerbating corruption and the significance of informal networks – ambiguity leads to opportunity. Such observations mesh well with existing studies within the region that focus on the role of informal networks in times of uncertainty. Victoria Koroteyeva and Ekaterina Makarova, for instance, document how "enterprising individuals" within Uzbekistan during the country's transition to an independent state leveraged the inefficiency of the country's formal institutions to enhance the value of traditional networks.70 Gul Berna Özcan has equally demonstrated in her research on contemporary Kyrgyzstan and Kazakhstan the value of elite networks as a source of continuity during periods of uncertainty and as a method for enhancing a firm's likelihood of success.71 And on a broader level, informal networks and associated corrupt activities in countries with ambiguous regulatory environments have actually been described as "efficiency-enhancing" at times in the sense that they provide an avenue to circumvent the formal institutional environment that may otherwise challenge the firm's ability to be successful in a given country.72 Coming back to existing scholarship within IB, the implications for the institution-based school of strategic management are clear: in assessing a country's institutional environment, deference must be paid not only to formal institutions, but to their dynamic nature (perhaps in the name

69 The Economist plotted precisely these two datasets against one another to argue that lower corruption = better EBDI ranking – not to highlight, as we argue here, that rapidly moving up the EBDI may expose foreign firms to increased corrupt practices, or that firms operating in a highly corrupt country that moves quickly up the EBDI likely rely on informal networks to maintain success. See "Daily Chart: Taking Care of Business," *The Economist*, Oct. 23, 2012. See also A. Cooley, "The Emerging Politics of International Rankings and Ratings," Presentation provided for *Columbia University's International Politics Seminar*, February 28, 2013.

70 V. Koroteyeva and E. Makarova, "Money and social connections in the Soviet and post-Soviet Uzbek city," *Central Asian Survey* 17, no. 4 (2007): 579-596.

71 G.B. Özcan, "Surviving uncertainty through exchange and patronage networks: a business case from Kyrgyzstan," and "Overcoming barriers: business consulting and lobbying in Kazakhstan," in R. Aidis, and F. Welter (2008).

72 S. Li and J. Wu, "Why some countries thrive despite corruption: The role of trust in the corruption-efficiency relationship," *Review of International Political Economy* 17, no. 1 (2010): 129–154.

of "reform"), their intra-institutional relations (i.e. between the center and the periphery) and also to the relationship between the formal and informal, and the consequences of that tension for the foreign firm.

Going Domestic

The mistake to make in Frontier's case is to accept unequivocally that simply making the firm more "Kazakh" made it more successful – what is essentially the core proposition within research on institutional distance. If we recall, Frontier's early challenges in Kazakhstan were often associated with the firm's impatience, or what one manager referred to as an inability to appreciate "the small things." In other words, the firm's problems were often a direct result of the firm's own actions, and thus we seem to be failing to appreciate fully the role of agency in the firm's success (or early failures). Much of the Kazakh managers' later success with local regulators was due to the simple fact that they took the time to literally sit down with the local regulators and ensure that both the firm and the local *akimat* were interpreting the legislation in the same way. These individuals were also highly qualified in their own right, and it would thus be misleading and, quite frankly, insulting to imply that their success was simply due to their ethnicity. And while it may be true that this conversation is easier to have if the local manager is Kazakh, certainly the Western managers could have followed a similar strategy.

In fact, other foreign mining companies in Kazakhstan do exactly that, and with success. Cameco, for instance, is known for flying Kazakh regulators and ministry officials out to the uranium miner's other operations in the US and Canada as a way of sensitizing the Kazakhs to the firm's global regulatory environment. Instead of becoming more "Kazakh," in some ways Cameco aims to make the Kazakh regulatory environment more "international."[73] As such, so-called "domestic legitimacy" may be less about becoming more domestic and more about becoming more trustworthy – with trust being inculcated among the firm and regulatory officials in a number of possible ways. Just as others have demonstrated the value of informal networks under conditions of uncertainty as noted above, trust has also been described as a valuable resource in navigating an ambiguous regulatory environment.[74]

But Frontier's early impatience also points to a larger problem, captured well in the reflections of the Almaty lawyer who regularly faced clients with local compliance problems: the idea that foreign clients perceive Kazakhstan as an environment in which they can take shortcuts. In this sense, Kazakhstan

73 Conway (2013).

74 G. Hodgson, "The evolution of socioeconomic order in the move to a market economy," *Review of International Political Economy* 1, no. 3 (1994): 387–404.

and, say, the US may be institutionally closer on some measures than foreign operators realize (e.g. on the need to wait for a permit before pushing ahead on a regulated activity), but it is the foreign operator's misperception of the local business environment that gets the firm into trouble.

Partnering with Elites

How much of Frontier's success can we attribute to Sagadiev being at the top? First of all, reducing Sagadiev's father to simply president of the Academy of Sciences is a gross understatement. Kenzhegali Sagadiev was a prominent figure in the early 1990s formation of the pro-Nazarbayev political party known as the Union of People's Unity of Kazakhstan (SNEK), and SNEK was an early advocate for a strong presidential system and played a key role in supporting Nazarbayev's push to dissolve parliament in 1993, which opened the door for the president to pass the 1995 constitution (strengthening the presidency) and move forward with his privatization plans. SNEK is also widely recognized as the precursor to Nur Otan, Nazarbayev's political party that long dominated the parliament (in 2011, for instance, every member of parliament was a member of Nur-Otan).75 While it is true that Kenzhegali Sagadiev was president of the National Academy of Sciences from 1994-1996, more notably in 2004 he became a deputy of the *Mazhilis* as the chairman of the Finance and Budget Committee and in 2007 as the chairman of Nur-Otan's Council on Diversification of the Economy within the *Mazhilis*.76 Though it is beyond the information cut-off date of this study, it is important to note that Sagadiev, the son, stepped down from his position at Frontier in late 2012 to become the Economic Policy Advisor to the Prime Minister of Kazakhstan, further affirmation of the both his capacity and strong political connections.77

While it is likely accurate to say, therefore, that Frontier's association with the Sagadiev family decreased the firm's exposure to opportunistic behavior by both the local and national government, it is equally important to realize that a strong elite-level association with a firm may only serve as a short-term attribute for success. For instance, during the privatization of the Karaganda Metallurgical Enterprise (a large steel manufacturing plant in central Kazakhstan), an Austrian firm formed a joint venture with a Kazakh elite, Bulat

75 Isaacs, 57.

76 "Biographical Summary of K.A. Sagadiev," University of International Business (Kazakhstan) website, cached copy of webpage as it appeared on October 3, 2012.

77 "Frontier Mining CEO Erlan Sagadiev steps down," *Positions and Promotions*, December 7, 2012, http://www.poandpo.com/who-is-promoted/frontier-mining-ceo-erlan-sagadiev-steps-down/ (last accessed on December 15, 2013).

Abilov, but when Abilov fell out of favor with President Nazarbayev, he was unable to prevent the enterprise's renationalization just over a month after the joint venture had been awarded the contract.78 And in 2009, the then Canadian uranium miner Uranium One suffered a 40% dive on the Toronto Stock Exchange when its own associated Kazakh elite, Moukhtar Dzhakishev, also fell out of favor with Nazarbayev and was arrested on corruption charges.79 The point here is that elite level politics is a dangerous game to play, with allegiances regularly shifting as competitors are assessed and reassessed, and thus a firm's strategy of allying with a local elite may hold certain short-term bene- fits at the cost of long-term risks. This is noteworthy for further research into institutional distance because it seems to indicate that in some instances, becoming more domestic may in fact increase the firm's long-term exposure to government interference.

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The extant scholarship within the institution-based school of strategic management appears to have a strong grasp in predicting firm success in a given country: the greater the institutional distance between the home and host country of the foreign firm, the less likely the firm is to be successful in its operating environment. But while this may be the case within "large-n" datasets aimed at achieving statistically significant results, what our particular case study shows is that an in-depth, qualitative investigation into a foreign firm's presence in a given country can prompt new questions on how institutions interact with one another within the country, why they need to be treated as dynamic, and why the parsimonious proposition of simply becoming more "domestic" as a survival value for the firm may not be entirely accurate. Frontier is but one interesting case among many fascinating examples of foreign firms operating in the region, waiting to be explored through an interdisciplinary framework. In this sense, Kazakhstan as a country and Central Asia as a region both serve as an ideal space for further investigating the intersection of the foreign firm or the multinational enterprise with the domestic political economy of a country in transition.

78 "Dispute flares over management of major steelworks," *Kazakhstanskaya pravda*, June 24, 1995, from *BBC Summary of World Broadcasts*, July 1, 2995, retrieved by Nexis; Cummings, 45; M.B. Olcott, *Kazakhstan: Unfulfilled Promise?* (Washington, DC: Carnegie Endowment for International Peace, 2002), 138.

79 C. Nuttall, "ANALYSIS: Kazatomprom corruption probe engulfs head, Canada"s Uranium One," *Business News Europe*, June 1, 2009.

Appendix: Semi-Structured Interview Source Details

All interviews are described in the table below with the date and location of the interview, along with a description of the interviewee at a level of detail sufficient to allow the reader to appreciate the individual's access to information and his or her perspective (and possible biases), but not too detailed to allow the individual to be identified. All subjects interviewed were guaranteed anonymity. Interviews were recorded in all instances, unless the subject specifically requested that the interview not be recorded or the interview happened by chance and recording equipment was not available. In limited instances, an individual may have said something during the interview and then asked not to be specifically quoted because it would allow the individual to be identified even if the quote remained anonymous; such requests were always honored. Subjects were selected for interviews based on their access, perspective and, of course, willingness to speak.

Source Number	Source Description	Interview Date	Location
1	Partner (audit) with first hand experience auditing / advising mining firms in Kazakhstan	February 15, 2011	Almaty
2	Director (audit) with first hand experience auditing / advising mining firms in Kazakhstan	February 17, 2011	Almaty
3	Manager (audit) with first hand experience auditing / advising mining firms in Kazakhstan	February 17, 2011	Almaty
4	Head of the Division on Foreign Direct Investments, Committee on Investment, Ministry of Industry and New Technology	March 10, 2011	Astana
5	Program manager at local university	March 24, 2011	Karaganda
6	Managing director of mining consultancy serving foreign and domestic mining firmsin Kazakhstan	March 15, 2011	Almaty
7	Operations director of mining consultancy serving foreign and domestic mining firms in Kazakhstan	March 16, 2011	Almaty
8	Partner (lawyer) with first hand experience in Kazakh law applied to foreign firms	February 15, 2011	Almaty

(*Continued*)

Source Number	Source Description	Interview Date	Location
9	Consultant for IGOs in Kazakhstan with mining sector focus	March 7, 2011	Astana
10	Director of finance for mining junior in Kazakhstan	February 17, 2011	Almaty
11	Chief financial officer for mining junior with operations in Kazakhstan	October, 17, 2010; September 20, 2012	email