

COMPARATIVE STUDY OF MINING-SECTOR GOVERNANCE



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Integrity Watch Afghanistan

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1.INTRODUCTION

Afghanistan has substantial proven mineral reserves, but only a nascent mining industry. As the country has a history of poor governance and insecurity, the growth of a mining industry and its attendant revenues poses a challenge to all stakeholders: how to ensure that mining promotes the general welfare of the citizens of Afghanistan and does not invite corruption, mismanagement, environmental degradation, and conflict.

To inform policymaking around mining in Afghanistan, this study derives best practices in mining-industry governance by examining extractive industries and related issues in six comparison countries: Azerbaijan, Burkina Faso, Democratic Republic of the Congo, Kyrgyzstan, Mongolia, Papua New Guinea, and Timor-Leste. These countries were selected for geographic diversity and to reflect a range of soundness of governance in less-developed countries with at least a moderately high dependence on extractive industries. None provides an exact parallel to Afghanistan, but their collective experience can shed light on Afghanistan's opportunities and challenges.

The study employs several complementary methods of investigation: country-level economic profiles, cross-country comparisons of governance indices, and surveys of extractive-industry experts. Section 2 provides overviews of extractive industries, governance, and the economy in each country, based on data from international agencies, foreign governments, and NGOs. Section 3 compiles and compares data on governance and the economy, from cross-country surveys and from international databases. Section 4 reports on a survey of experts on the extractive-industry sectors in the comparison countries, with comparative ratings on an array of measures of interest to potential investors and operators and long-response interviews. Based on these cases, Section 5 identifies the common factors associated with positive and negative outcomes, and the extent to which they are subject to control by the governments and companies involved, with particular attention to those factors that are most relevant to Afghanistan and that are amenable to control by its government. Section 5 recommends steps to implement policies and procedures in Afghanistan that enable these best practices to take root, and a framework for periodic evaluation of adherence to these practices.

COUNTRY PROFILES

This section provides overviews of extractive industries, governance, and the economy in each comparison-group country, based on data from international agencies, foreign governments, and NGOs.

1.1. Afghanistan

1.1.1. Administration, Interpretation, and Enforcement of Regulations

Afghanistan has mining regulations in place, but they are inadequate regarding environmental and social responsibility, rationale for exploitation, and economic growth. They allow for transfer of exploitation licenses, which invites influence peddling in the contracting process. Guidelines for social and environmental impact studies are unclear. Merely referring to the application of "international best practices"—without clearly identifying the best practices—offers an escape route to mining operators. The articles relating to property damage and compensation based on ownership documents are deficient and reflect a lack of understanding of titles and their complexity. The article related to exploration without a permit, which carries a penalty of US \$10,000 is the weakest element and may encourage illegal extraction in high-value mines. The regulation also subjects private land to be declared for mining without any mention of compensation or consultation. The regulations do provide clear guidelines for tendering and bid-process benchmarks for selection and evaluation. They also obligate mining companies to share detailed information on operation and production, and mention obligations of the license holders. The regulations articulate penalties for illegal mining.

The hydrocarbon regulation deals with the oil, gas, and coal sectors. It defines parameters for the state and companies to operate and administers the sub-sector within the natural-resource industries.

Afghanistan as yet has no policy on social and environmental impacts.

Regulatory duplication and inconsistencies (including national/provincial and interdepartmental overlaps) pose challenges to implementing regulations. Afghanistan is a centralized state and decision making flows from the capital, Kabul, to the provinces. Each ministry has its own departments to implement its mandate in the provinces and therefore there is no overlap in the letter of the law. However, due to political configurations and power-sharing arrangements, there is little coordination between the central state and the provinces. For example, the mineral law prohibits illegal mining, but there are 1400 instances of illegal extraction of various minerals where the culprit has been identified but the provincial governments have not intervened.

1.1.2. Legal System

Afghanistan has mineral, hydrocarbon, environment, investment and tax laws besides regulation and policies. These elements of the legal framework have been developed with the technical help of donors such as World Bank and Norway. However, the Mineral Law has already been completely changed twice.

The laws and policies do not provide for transparency, except for the implementation of the EITI process, which has taken longer than required and Afghanistan has not yet been awarded compliant status. Contracting is a five-step process: (1) the letter of interest in response to tender by MoMP; (2) short listing stage, where the competent companies are listed for the second round; (3)

evaluation of proposals of the qualified companies from the first round; (4) selection of company(s) for the final round of negotiation; and (5) the negotiation stage where selected company(s) are entered into negotiation with. The first short listing after receipt of letter of interest is carried out by the MoMP, and the evaluation of proposal is done by members of the inter-ministerial commission, which consists of the Ministry of Mines and Petroleum, Ministry of Finance, Ministry of Economic, Ministry of Commerce and Industry, Ministry of Foreign Affairs, National Environment Protection Agency, and National Security Council. The final negotiation is headed by the MoMP exclusively and the results are shared with the IMC before it is tabled in the Cabinet of Ministers for final endorsement.

The process is not transparent for independent actors such as CSOs and NGOs. Though one of the local CSOs was sent an invitation letter to observe the bid-evaluation process, the CSO refused to be part of merely one process within the spectrum of processes involved in licensing because they felt their partial participation would grant the government legitimacy for the entire contracting process.

Lack of transparency increases opportunities for corruption in the contracting process. Evaluation of bid documents requires certain technical skills to mark each company appropriately but the majority of the members of the IMC are not competent to evaluate bid documents comprehensively. Some members are more competent and have the ability to pursue others compulsively to bring them around to their point of view, while others have to take what the strong members give them.

1.1.3. Environmental Regulations

There is no doubt that the environmental regulations are key to sustainable business in the mining sector. Afghanistan has a good environment law and it has set up an independent agency to make policies and work for the protection of the environment. The Environment Law has an EIA board of experts from different state institutions to assess impacts of activities on the environment. The board is also authorized to look at Environment and Social Impact Assessments of mining companies. The EIA board is authorized to review the documents of companies whose activities can damage the environment and therefore decide to issue a permit for operation or not. The country has a National Environment Impact Assessment Policy. The provision in law is standard, however, on the ground things seem to be not working so well. There are 236 legal licenses awarded by the Ministry of Mines and Petroleum and to date no data on EIA have been published. There are serious challenges to implementation of the law and bringing violators of the code to book.

1.1.4. Disputed Land Claims

Afghanistan has very complex land rights, with many ways to prove someone's ownership over a land. For example a person can have Sharhee Qawala (Government-recognized title). A person can have Urofee Qawala (a title over land vouched for in writing by at least two persons). A person can have title over land if he has inherited or if he has been grazing his animals or if he occupies it for more than 30 years. These have created major hurdles for the government in the past. The land Expropriation Law of 2009 set a mechanism for acquisitioning land for development projects. According to a presentation from a senior officer of the Ministry of Justice they can acquisition land for "public infrastructure (construction of manufacturing institutions, highways, railway, pipelines, extension of communication lines, power-transmission cables, sewerage canalization, water-supply network, mosques and religious schools, and schools, urban plans, and other public welfare entities." However, there are people who have no documents to prove entitlement over land and under the provisions of the law are not eligible to compensation. If looked at from the perspective of social order, when the communities have no dispute over the land and there is harmony this is recognized as ownership of the occupier over that land. Land that is occupied for centuries, with no dispute

over it, and which is acquisitioned for development projects may pose a major challenge if compensation is not paid.

1.1.5. Infrastructure

Afghanistan has witnessed more than three decades of conflict; much of its infrastructure has been damaged and human capital has either been drained or has fallen behind the technological progress made in the past two decades. The country was extensively reconnected through roads to its provinces after the international intervention and eight provinces have airports now. The country imports its electricity needs from Turkmenistan. The roads that were built in the last 12 years have been badly damaged in the ongoing conflict.

The World Bank has a cross-country Resource Corridor Project which is to connect major mining sites and build clusters around each site with its own economy.

The most pressing challenge to the country is its landlocked geography and neighbors that have made it difficult for the country to import and export. The hostile neighbors may easily ask for mining concession from the Afghan government in return for allowing export and import. These issues discourage private investors, especially in the mining sector.

1.1.6. Socio-Economic Community Development

Community engagement has been identified as an important priority by the government and companies; before a project is started and during its life they can see their common benefits in the project and thus not threaten it, but rather provide security for it. CSOs have been calling for community-development projects to improve their conditions and thus expand their choices.

The Afghan government has been promoting this culture and has required some companies, as with the Qara Zaghan Gold contract, to commit to the socio-economic development of communities.

It is imperative to consult communities to seek their views about the kind of projects they need and want. CSOs in Afghanistan have also been calling for consultation with communities that are going to be impacted by mining projects in addition to compensation for their losses. Afghan CSOs have realized that improving the lot of local communities through development projects increases their stake in the project and thus work to protect their interests.

This call for consulting communities in including them in the benefit packages from a mining operator is echoing in rural parts of Afghanistan, which have strong tribal structures. It may deter investors in some cases but some mines in Afghanistan may tempt investors and be ready to pay for the development of local communities.

1.1.7. Trade Barriers

Afghanistan has made it easy to get business licenses. Afghanistan has a clear tax law and manual. It does not impose restrictions on repatriation of profits from the country to foreign companies after the dues are cleared. Afghanistan also applies QEIT to individuals or companies that hold mining or hydrocarbon licenses. The Afghan government charges merely 20% tax on profits. However, the government has to reach transit agreements with some of its neighbors to facilitate export and import.

1.1.8. Political Stability

Political stability is an important issue for investors, as mining is a long-term investment. Afghanistan, despite its mineral wealth, has failed to attract many investors because of its stability. Afghanistan began to build its state institutions with the help of the international community in

2001, however, it continues to face an active war with insurgents and internal ethnic issues continue to breed mistrust and a serious tussle over power. Political power-sharing on an ethnic basis and the fear of dominance by other groups still rules the political pulses in Kabul.

1.1.9. Security

Security is important to investors. Security in rural parts of Afghanistan has been deteriorating and has kept mining companies away. For example the negotiation for one of the biggest mines in the country was concluded long ago and yet the contract is not signed while the company cites security to be an issue. Most of Afghanistan's mining sites are in rural parts of the country and there is an active 12-year long insurgency ongoing making the environment hostile for investment.

1.1.10. Educated Workforce

Afghanistan is in its fourth decade of conflict. The instability in the country started in early 1970s when the country had made substantial progress on human capital. Education and training centers faced violence and destruction and thus the choices citizens had were lost. The international intervention in 2001 led to some revival and new institutions for education and training Afghan citizens. Today Afghanistan has registered an increase in education but it is still lacking in centers for training citizens in skills specific to some jobs such as mining.

1.1.11. Corruption

Corruption is a major factor that increases cost for a company besides delaying a project. Afghanistan ranks 174 in the Transparency International Index survey in 2012.Integrity Watch Afghanistan's annual survey of corruption shows that corruption is the third greatest problem facing the country. Corruption has had an impact on investment and trade and thus directly impacts state revenues. The level of corruption may have a direct impact on mining.

1.2. Azerbaijan

1.2.1. Economic Snapshot

Population (2013): 9,357,000

Nominal GDP (2012): \$72.2 billion¹

Nominal GDP per capita (2012): \$7,850

Gini coefficient (2008): 33.7

HDI score (2011): 0.731 (82nd)

1.2.2. Extractive Industries and the National Economy

Azerbaijan is one of the world's oldest oil producers, with proven reserves of 7 Bbbl of oil and 35 tcf of natural gas; the recent Absheron and Umid discoveries are estimated to hold an additional 15 tcf.² Two fields dominate production: the Azeri Chirag Guneshli (ACG) oil and gas field and the Shah Deniz gas and condensate field.

ACG began production in 1997^{3} , and in 2012 accounted for more than 80% of total oil production. The Shah Deniz field started production in 2006, and allowed Azerbaijan to revert from a

³offshore-technology.com/projects/acg

¹ US \$1 equals approximately 0.78 Azerbaijani New Manat

²eia.gov/countries/cab.cfm?fips=AJ

gas importer to an exporter. In 2017, once the Full Field Development (FFD) is complete, operator BP estimates it will reach a peak capacity of 565 bcf and become one of the largest gas projects globally. In 2003, the oil and gas industry earned the government \$260 million; by 2011, this figure (including) the mining sector reached \$22 billion. Oil and gas revenues provide 65% of government earnings, and extractive resources are 95% of exports.

Mining has declined significantly since the Soviet market for ores was lost. The Ministry of Ecology and Natural Resources (ETSN) has identified more than 625 deposits⁷ of iron, gold, silver, lead, zinc, molybdenum, alunite, and zeolite.⁸ In mid-2009, Anglo Asian Mining restarted the industry by operating the first gold and copper mine and now holds nearly 2,000 square kilometers.⁹

1.2.3. Key Organizations in Resource Extraction

The sector is controlled by the state, and all minerals belong to the government. The State Oil Company of the Azerbaijan Republic (SOCAR) participates in all international groups involved in hydrocarbons, through production-sharing-contracts (PSC). All revenues except taxes are sent to the State Oil Fund of Azerbaijan (SOFAZ), which distributes them to the budget. While the Ministry of Industry and Energy determines international contracts, SOCAR gives hydrocarbon rights to companies participating in development. Both SOFAZ and SOCAR report their revenues and expenditures, and are audited by independent firms. However, details other than ownership are unavailable for extractive resources.

1.2.4. Transparency and Governance

Unclear licensing practices in the minerals sector have led to widespread corruption. The Azerbaijan International Mineral Resources Operating Company (AIMROC), formed by presidential decree in 2006, was awarded 30-year licenses on a series of mining assets in 2007, including the Chovdar gold and silver mine, estimated to be worth \$2.5 billion. Such activities along with low accountability and oppression of democratic principles led RWI(2011) to rank Azerbaijan 40th out of 58 countries in its enabling environment. While ticking the boxes, Azerbaijan has cracked down on officials releasing information on energy/mining companies and is slow to enact freedom of information policies.

1.2.5. Resource Ownership Disputes

The Caspian is surrounded by Russia, Azerbaijan, Turkmenistan, Kazakhstan, and Iran. While Russia and Kazakhstan have agreed to maritime borders to move ahead with the exploration and production, the remaining countries dispute whether the Caspian is a sea or a lake under international law, which affects mineral rights. The Kyapaz field, for example, was discovered by Azerbaijani geologists in 1959 but Turkmenistan claims rights to it. 14

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⁴eia.gov/countries/cab.cfm?fips=AJ

⁵<u>eiti.org/node/61/reports</u> (note, there is an error in the table that is corrected in the graph; the unit of measurement is thousands of US dollars)

⁶revenuewatch.org/sites/default/files/countrypdfs/azerbaijanRGI2013.pdf

⁷eco.gov.az/en/g-mgkx.php

⁸mbendi.com/indy/ming/as/az/p0005.htm#sectors

⁹angloasian<u>mining.com/home/</u>

¹⁰revenuewatch.org/countries/eurasia/azerbaijan/extractive-industries

¹¹revenuewatch.org/sites/default/files/countrypdfs/azerbaijanRGI2013.pdf

¹²rferl.org/content/azerbaijan gold-field contract awarded to presidents family/24569192.html

¹³revenuewatch.org/sites/default/files/countrypdfs/azerbaijanRGI2013.pdf

¹⁴eia.gov/countries/regions-topics.cfm?fips=CSR

1.3. Burkina Faso

1.3.1. Economic Snapshot

Population (2013): 17,800,000

Nominal GDP (2012): \$10.5 billion¹⁵

Nominal GDP per capita (2012): \$602

Gini coefficient (2007): 39.5

HDI score (2007): 0.389 (177th)

1.3.2. Extractive Industries and the National Economy

Burkina Faso is a landlocked country in West Africa with few natural resources and a weak industrial base. About 90% of the population is subsistence farmers. Natural-resource rents account for 11.8% of GDP (2011). However, due to government encouraging foreign investment and favoring the mining industry, gold production doubled between 2009 and 2010 to be the leading export. Other minerals include dolomite, granite, marble, phosphate rock, pumice and related volcanic materials, and salt. The primary foreign investors are Canada, Australia, and South Africa. He International Council of Mining and Minerals scores Burkina Faso at 90.2 out of 100 on its Mining Contribution Index (2012), a measure of how heavily a country's mining industry contributes to its economy.

1.3.3. Key Organizations in Resource Extraction

Hundreds of foreign companies explore for or produce gold. The Canadian lamgold Corp. is the largest private employer, with 2,200 employees. It plans to invest \$600 million to expand mining operations and double processing capacity between 2013 and 2015. ²⁰

Other key gold operations include Australia's Gryphon Minerals, the United Kingdom's Cluff Gold and Rand gold Resources, and Canadian companies Channel Resources, Etruscan Resources, Gold belt Resources, Gold crest Resources, High River Gold Mines, Orezone Resources, Riverstone Resources, and Semafo. Etruscan also explores for copper.²¹

1.3.4. Transparency and Governance

Corruption has historically been pervasive, with a 2012 CPI of 38.²² In 2010 the Prime Minister declared, "we will be merciless" in cases of corruption."²³Recent social unrest and protests against corruption prompted the US State Department to note that security forces routinely contra-

¹⁵ US \$1 equals approximately 479 CFA Francs

¹⁶data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS

¹⁷ndi.org/burkina-faso-mining-oversight

¹⁸minerals.usgs.gov/minerals/pubs/country/2003/uvmyb03.pdf

¹⁹state.gov/e/eb/rls/othr/ics/2011/157248.htm

 $^{^{20}\}underline{theglobe and mail.com/globe-investor/iamgolds-growing-investment-in-burkina-faso/article 4103071$

²¹minerals.usgs.gov/minerals/pubs/country/2006/myb3-2006-bn-uv-tp.pdf

²²transparency.org/cpi2012/results

²³news24.com/Africa/News/Burkina-Faso-to-bust-corruption-20120105

dict the Burkinabe constitution, including imposing harsh prison conditions, arbitrary detention, and restriction of freedom of speech.²⁴

In 2008, the government created the Gold Anti-Fraud Squad.²⁵An NGO called Le Réseau National de Lutte Anti-Corruption has been established to report on corruption and anti-corruption efforts.²⁶A group of parliamentarians has formed the Network of Burkinabe Parliamentarians in the Fight against Corruption (Burkindi), which explores allegations of corruption in mining²⁷.

1.3.5. Resource Ownership Disputes

Burkina Faso's extractive industries are not currently the subject of any international disputes or territorial issues.

1.4. Democratic Republic of the Congo

1.4.1. Economic Snapshot

Population (2013): 75,507,000

Nominal GDP (2012): \$17.7 billion²⁸

Nominal GDP per capita (2012): \$236

Gini coefficient (2006): 44.4

HDI score (2013): 0.304 (186th)

1.4.2. Extractive Industries and the National Economy

Extractive industries continue to play a major part in the economy of the DRC, but have not resulted in substantial nationwide development. The World Bank reports that natural resource rents, which come primarily from mining activities, have accounted for over one-third of GDP (and a far larger portion of revenues) in recent years. However, the combination of inadequate governance and perpetual conflict and instability has left this exceptionally resource-rich land among the world's poorest nations.

Mining is the DRC's predominant extractive industry, and constitutes the majority of global cobalt extraction as well as substantial amounts of diamonds, coltan, tin, and copper, among others. Fossil fuel reserves in the DRC are among the largest in Africa, although crude oil production is roughly 20,000 barrels per day, or about 0.02% of global production. Presently, there is no oil refinery capacity, and the sizeable gas reserves are not tapped.²⁹ Extractive resources revenues totaled about \$876 million in 2010, of which mining companies contributed 63% and oil companies contributed the remainder. Ninety-seven% of mining payments came from five companies, and 73% of oil

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²⁴state.gov/j/drl/rls/hrrpt/2006/78721.htm

²⁵state.gov/e/eb/rls/othr/ics/2011/157248.htm

²⁶ Burkina Faso Mining Laws and Regulations Handbook By Ibpus.com, International Business Publications, USA.

²⁷ndi.org/burkina-faso-mining-oversight

²⁸ US \$1 equals approximately 923 Congolese Francs

²⁹eia.gov/countries/country-data.cfm?fips=CG

payments came from eight companies. Forestry revenues are also significant, but official data are not expected until the December 2013 report to the Extractive Industries Transparency Initiative.³⁰

Valuable Congolese mineral resources are heavily traded on the black market, often to help fund wars in the DRC and its neighbors. "Conflict minerals" are inherently difficult to quantify, but are thought to constitute many millions of US dollars in trade, and have sometimes been extracted from state-owned areas "with the collusion of government officials."31 About 11% of conflict mineral profits reach armed groups directly, 32 thus helping sustain conflicts that have already claimed millions of lives.

1.4.3. Key Organizations in Resource Extraction

The prevalence of "artisanal and small-scale mining" (ASM) operations makes it difficult to ascertain the exact size of the Congolese mining business. Though technically illegal, ASM operations have flourished given the state's regulatory weakness.

There are at least 23 active mining companies, which accounted for nearly 96% of all documented Congolese exports in 2010. The largest of these, Tenke Fungurume Mining, was responsible for 26% of total exports. Over a third of these firms are Canadian (or under Canadian ownership) There are dozens of additional companies, usually of a much smaller scale, which primarily purchase ASM materials rather than extracting their own. As these organizations "do not make significant payments to the Treasury," comprehensive data are not unavailable.³³

1.4.4. Transparency and Governance

Licit trade is plagued by dubious contracting and revenue collection practices, since the state-owned companies that dominate legal minerals trade have entered into many lucrative contracts under opaque conditions. Production- and royalty-related data are available on a regular basis, although environmental and revenue data, when reported, are generally not published. Contracts and revenues seldom receive scrutiny in the legislature, and information on officials' financial interests is not publicly available. In the legislature, and information on officials' financial interests is not publicly available.

The Revenue Watch Institute gave poor ratings to the DRC in all evaluation areas, partly from severe corruption, but primarily from lawlessness and weak governance. In 2012, the IMF suspended a quarter-billion-dollar program with the DRC over concerns about a 2011 deal. EITI also suspended the nation for one year for broader concerns about its disclosures, and, as of April 2013, EITI was still searching for an additional \$88 million in revenue that never reached the intended tax agency. ³⁶

EITI reports that the current Congolese prime minister has supplied a substantial budget for the EITI process,³⁷ and regards compliance as a major policy goal.³⁸ While these efforts may increase the DRC's appeal to foreign investors, the government has recently considered mining code amend-

³⁰eiti.org/news/dr-congo-sobering-figures-on-revenue-from-natural-resources

³¹revenuewatch.org/countries/africa/democratic-republic-congo/extractive-industries

³²globalriskinsights.com/2013/05/27/foreign-enterprises-address-drc-conflict-mineral-trade

³³eiti.org/files/Congo-DR<u>C-2010-EITI-Report-ENG 0.pdf</u> (page 23)

³⁴revenuewatch.org/sites/default/files/countrypdfs/democratic_republic_of_the_congoRGI2013.pdf

³⁵revenuewatch.org/sites/default/files/countrypdfs/democratic_republic_of_the_congoRGI2013.pdf

³⁶bloomberg.com/news/2013-04-24/congo-s-copper-producers-warn-against-sea-change-in-mining-laws.html

³⁷voanews.com/content/drc-probes-88-million-in-missing-mining-revenue/1641658.html

³⁸eiti.org/news/dr-congo-sobering-figures-on-revenue-from-natural-resources

ments that would raise taxes/royalties and potentially mandate a 35% stake in all projects, which it would acquire for free.³⁹ Inconsistent energy supply and poor infrastructure are further challenges for new projects, even though the lure of vast remaining deposits continues to motivate new deals.

1.4.5. Resource Ownership Disputes

As described above, the channeling of mineral resource proceeds to violent groups is a major international concern, and trade with neighboring countries is not well monitored or controlled. However, as issues pertain to the cash than to the resources themselves, the DRC's extractive industries are not currently the subject of any international disputes or territorial issues.

1.5. Kyrgyzstan

1.5.1. Economic Snapshot

5,550,000 Population (2010):

\$5.9 billion⁴⁰ Nominal GDP (2011):

Nominal GDP per capita (2011): \$1,070

Gini coefficient (2011): 33.4

HDI score (2013): 0.622 (125th)

1.5.2. Extractive Industries and the National Economy

Kyrgyzstan's gold reserves are a main source of tax revenue and national income; sizeable antimony and coal deposits remain mostly unexploited.⁴¹ Subsoil-use licenses, held primarily by foreign investors, grew exponentially preceding the 2008 financial crisis. 42 Mining exports have increased rapidly since 2006, rising nearly fivefold by 2011. Mining accounted for about 15% of budget revenues and GDP in 2011, and over half of all exports and industrial output. 43

About 228 known gold deposits⁴⁴ are concentrated in a handful of sites;⁴⁵ the Kumtor mine is the largest deposit by far. It is one of Asia's largest gold deposits and also Kyrgyzstan's largest private employer and foreign investment. 46 Kumtor holds about 6.3 million ounces of proven and probable reserves, and 16 of the nation's 18 million ounces of estimated reserves.

1.5.3. Key Organizations in Resource Extraction

Kumtor is owned and operated by a wholly-owned subsidiary of Toronto-based Centerra Gold, Inc.; the state company Kyrgyzaltyn owns 1/3 of Centerra (soon to change to a 50-50 joint venture⁴⁷). Government payments from Kumtor neared \$164 million in 2011 (62% of 2011 revenues

³⁹globalriskinsights.com/2013/05/27/foreign-enterprises-address-drc-conflict-mineral-trade

⁴⁰ US \$1 equals approximately 49 Kyrgyzstani som

⁴¹lcweb2.loc.gov/<u>frd/cs/profiles/Kyrgyzstan.pdf</u>

⁴²eiti.org/files/Kyrgyzstan-2011-EITI-Report-2.pdf

⁴³eiti.org/files/Kyrgyzstan-2011-EITI-Report-2.pdf

⁴⁴kabar.kg/eng/economics/full/2095

⁴⁵ mbendi.com/indy/ming/gold/as/kg/p0005.htm

⁴⁶infomine.com/minesite/minesite.asp?site=kumtor

⁴⁷rferl.org/content/gold-mine-kyrgyzstan/25131234.html

and 12%⁴⁸ of GDP⁴⁹). It is subject to a simplified tax regime, rendering 13% of gross income to the state plus 1% of revenue to the region's development fund.⁵⁰

Kumtor is party to many environmental controversies. The Financial Times reports that "two government agencies have hit Centerra with separate fines of \$152m and \$315m for alleged environmental damage," which Centerra disputes. ⁵¹ A 1998 disaster saw a Kumtor-bound truck spill thousands of pounds of sodium cyanide into a river, sickening hundreds of people as far away as Bishkek and also causing wildlife deaths. ⁵² However, Kumtor is so central to the Kyrgyzstani economy—its production fluctuations alone have a measurable impact on GDP—that harsh treatment may prove counterproductive.

New foreign investment may also upset the status quo in mining. As in neighboring countries, Chinese firms have extended offers of infrastructure development in exchange for the transfer of mining contracts. As of March 2013, Chinese companies held 79 gold exploration/development licenses, and, already, "about 100 Chinese companies exploit deposits of various minerals. The other hand, amid a recent renegotiation of Kumtor's contract with the state, ongoing protests insist on nationalization of the mine (or, at minimum, a two-thirds state share). These protests have turned violent in, leading to the kidnapping and threatened execution of a regional official in October 2013. President Atambaev dismisses the protests as the work of "political forces wishing to get portfolios' and continue to rob the country." Chinese-operated mines have also seen their share of turmoil since 2011, so it appears the protests are not inherently or specifically anti-Western.

1.5.4. Transparency and Governance

Kyrgyzstan joined the EITI in 2004 and reached official compliance in 2011, with50 of its 56 reporting companies engaged in gold mining. Kyrgyzstan's most serious issues are "significant weaknesses in private sector auditing practices...the majority of the companies had not been subject to financial audits in 2010 and 2011." Furthermore, "[t]he lack of a comprehensive database of all registered license holders also posed challenges for data collection." ⁵⁸

There was initially a \$44.7 million discrepancy between payments and receipts, due to poor accounting by the State Property Fund (the body in charge of the sale of state enterprises⁵⁹) and overstatement by mining companies. However, KPMG's reconciliation eliminated almost the entire discrepancy, with under \$123,000 remaining unaccounted for.⁶⁰ Nonetheless, governance is neither sufficient nor transparent; RWI has yet to incorporate Kyrgyzstan into its Resource Governance Index, but more general evaluations paint an unflattering picture.

⁴⁸eiti.org/news/kyrgyzstan-s-mining-revenues-67

⁴⁹tradingeconomics.com/kyrgyzstan/gdp

⁵⁰eiti.org/files/Kyrgyzstan-2011-EITI-Report-2.pdf (page 11)

⁵¹blogs.ft.com/beyond-brics/2013/<u>03/26/kyrgyzstan-takes-on-mining-group/?</u>#axzz2hXotiqKN

⁵²ipsnews.net/1998/06/environment-kirgizstan-truck-crash-cyanide-spills-deadly-effects/

⁵³blogs.ft.com/beyond-brics/2013/03/26/kyrgyzstan-takes-on-mining-group/?#axzz2hXotiqKN

⁵⁴kabar.kg/eng/economics/full/2095

⁵⁵rferl.org/content/gold-mine-kyrgyzstan/25131234.html

⁵⁶eurasianet.org/node/67190

⁵⁷eiti.org/news/kyrgyzstan-s-mining-revenues-67

⁵⁸eiti.org/news/kyrgyzstan-s-mining-revenues-67

⁵⁹fdi.net/documents/WorldBank/databases/plink/factsheets/kyrgyzstan.htm

⁶⁰eiti.org/files/Kyrgyzstan-2011-EITI-Report-2.pdf (page 4)

Even though protections for investors are generally strong, institutions have a reputation for mismanaging revenues and aid. Indeed, according to a Kumtor official, it "suspects local officials in Issyk-Kul province steal half" of the money paid into the regional development fund. 61A shifting policy environment is a disincentive to investment for nearly 91% of potential investors, as the Fraser Institute reports.

1.5.5. Resource Ownership Disputes

Kyrgyzstan's extractive industries are not currently the subject of any international disputes or territorial issues.

1.6. Mongolia

1.6.1. Economic Snapshot

Population (2013): 2,893,000

\$10.3 billion⁶² Nominal GDP (2012):

Nominal GDP per capita (2012): \$3,627

Gini coefficient (2008): 36.5

HDI score (2013): 0.675 (108th)

1.6.2. Extractive Industries and the National Economy

Two decades of economic, political, and social transformation have created a strong democratic foundation and high rates of mineral-driven economic growth. However, Mongolia still faces many governance challenges, including faulty administrative processes, poor transparency and accountability, and marked corruption. Following recent elections, a new political and governance atmosphere has opened a window of opportunity for reform efforts. 63

Mongolia's GDP is expected to double within the next few years, ⁶⁴ mostly due to extensive resources of copper, molybdenum, tungsten, phosphates, nickel, zinc, wolfram, tin, fluorspar, gold, silver, and iron, with only 25% of the country having been surveyed. 65 Mining is Mongolia's largest industry, accounting for 55% of industrial output and 66.4% of export earnings in 2009 (up from 35.2% in 2000). 66, 67 In 2010, exports grew by 39.6% (primarily to copper-price increases) and imports by 39.9%, compared to 2009. The external trade balance was in deficit in 2010. Net foreignexchange reserves increased to \$1.95 billion, up by 70%. 68

⁶¹eurasianet.org/node/67045

⁶²US \$1 equals approximately 1670 Mongolian tögrök

⁶³ USAID. (2011). Strengthening Transparency and Governance in Mongolia. Mongolia. The Asia Foundation

⁶⁴ USAID. (2011). *Strengthening Transparency and Governance in Mongolia*. Mongolia. The Asia

⁶⁵infomine.com/countries/mongolia.asp

⁶⁶infomine.com/countries/mongolia.asp

⁶⁷ World Bank. (April, 2009). "Minerals Sector and Macroeconomic Impacts," Mongolia: Mining and Infrastructure Conference

⁶⁸ UNDP Mongolia. (2010). *Changes in the State of Democratic Governance in Mongolia 2009–2010.* Mongolia. United Nations Development Program

1.6.3. Key Organizations in Resource Extraction

Corporate involvement in the Mongolian mining sector is diverse, with 200 companies in the 2011 EITI report, of which 87 are in exploration, 48 mine gold, and 32 mine coal. However, gold-mining companies contributed only \$34 million (2.6%) of the total payments of \$1.3 billion, whereas coal company payments neared \$518 million. ⁶⁹The only active copper and molybdenum miner (Erdenet Mining Corporation) paid more than \$331 million—over 25% of all receipts, and far more than any other single company. ⁷⁰

1.6.4. Transparency and Governance

Mongolians are concerned about weak control mechanisms, low accountability, corruption, and incompetence of civil servants. R1.1% of citizens, 77.1% of civil servants, 79.2% of businessmen and 72.3% of experts believe that corruption is widespread. Mongolia's Anti-Corruption Law is incompatible with the UN Anti-Corruption Convention and the Independent Authority against Corruption is regarded as ineffective.

The proposed Strengthening Transparency and Governance in Mongolia (STAGE) program builds on the previous Mongolia Anti-Corruption Support (MACS) and aims to create a more transparent and accountable supervisory and lawmaking environment while promoting checks and balances. Achieving these goals will contribute to long-term growth and equitable distribution.⁷³

The president established a Citizen Hall in 2009, which improves government decision making through citizen input, allowing for public hearings on proposed legislation and regulations. ⁷⁴

1.6.5. Resource Ownership Disputes

Mongolia's extractive industries are not currently the subject of any international disputes or territorial issues.

1.7. Papua New Guinea

1.7.1. Economic Snapshot

Population (2011): 7,060,000

Nominal GDP (2013): \$17.4 billion⁷⁵

Nominal GDP per capita (2013): \$2,491

Gini coefficient (1996): 50.9

HDI score (2011): 0.466 (153rd)

⁷⁰eiti.org/files/Mongolia-2011-EITI-Report-PartI.pdf

⁶⁹eiti.org/files/Mongolia-2011-EITI-Report-PartI.pdf

UNDP Mongolia. (2010). Changes in the State of Democratic Governance in Mongolia 2009–2010.
Mongolia. United Nations Development Program
Ibid.

⁷³ USAID. (2011). *Strengthening Transparency and Governance in Mongolia*. Mongolia. The Asia Foundation

⁷⁴ UNDP Mongolia. (2010). *Changes in the State of Democratic Governance in Mongolia 2009–2010.* Mongolia. United Nations Development Program

⁷⁵ US \$1 equals approximately 2.60 Papua New Guinean kina

1.7.2. Extractive Industries and the National Economy

Papua New Guinea (PNG) possesses immense natural resources with a strong potential for future exploitation. Gold mining was a major revenue source for many decades, experienced multiple booms and drop-offs in the 1970s and 1980s, and is again on the increase. ⁷⁶ As of 2010, PNG was the world's 11th-largest gold producer. The Golpu project alone is estimated to contain over 831 tons of gold; for comparison, 2011 national gold production was 62 tons. ⁷⁷

Oil and gas revenues constitute nearly a quarter of total revenues,⁷⁸ although decreases in oil production have rendered PNG a very small oil producer (around 30,000 barrels/day, similar to Spain and Belarus).⁷⁹ A forthcoming liquid-natural-gas project is expected to deliver more than 9 trillion cubic feet over its lifetime, which is roughly half-again Canada's annual production. Several further LNG projects are possible, but the sites remain too unexplored to suggest time frames.

1.7.3. Key Organizations in Resource Extraction

The largest mines are the Porgera gold (Barrick Gold), Ok Tedi copper/gold (Ok Tedi Mining Ltd), Lihir gold (Newcrest), Hidden Valley gold (Newcrest-Harmony), and Ramu nickel-cobalt (Metallurgical Corporation of China). Ok Tedi, the largest single company in PNG, has contributed up to 10% of GDP, and in 2011 paid over \$423 million in taxes. The Mineral Resource Authority struggles to keep pace with exploration; in 2012, it had a backlog of 394 pending license applications, in addition to the 282 licenses already issued. Below the company of the company of

Ok Tedi discharged mining waste into a local river for two decades following a dam failure during construction in the early 1980s. Then-owner BHB Billiton withdrew from the project around 2000⁸² following a lawsuit, which remains unresolved.

The Chamber of Mines and Petroleum foresees eight more mining projects in coming years, each run by a different firm and in different phases of exploration/development. The readiest, Solwara 1 (Nautilus Minerals), should commence production in 2014.⁸³ Esso Highlands, an ExxonMobil subsidiary, is the operator of and larger partner (33.2%) in the aforementioned LNG project, alongside three state and three private companies. Seventy-one LNG exploration licenses have been issued, and another fifteen applications await decisions.⁸⁴

1.7.4. Transparency & Governance

RWI rates PNG's revenue governance as "weak." Royalties and taxes are directed to the Mineral Resources Authority and the Internal Revenue Commission, respectively, but "some revenues appear to bypass the treasury and are not reported to parliament." PNG is not yet a member of the EITI, largely explaining its failing grade for Reporting Practices.

Since 2003, PNG has had a unique mineral-taxation regime, characterized by "Government equity backing which allows the State to elect to take up to 30% equity at the development stage,

⁷⁶mra.gov.pg/GeologyMining/MiningHistory.aspx

⁷⁷pngchamberminpet.com.pg/mining-in-png

⁷⁸revenuewatch.org/countries/asia-pacific/papua-new-guinea/overview

⁷⁹pngchamberminpet.com.pg/petroleum-in-png

⁸⁰devpolicy.org/ok-tedi-sdp-20130924

⁸¹pngchamberminpet.com.pg/mining-in-png

^{82&}lt;u>abc.net.au/news/2013-01-07/an-radio-doco3a-ok-tedi/4455092</u>

⁸³pngchamberminpet.com.pg/mining-in-png

⁸⁴pngchamberminpet.com.pg/petroleum-in-png

⁸⁵revenuewatch.org/countries/asia-pacific/papua-new-guinea/overview

part of which is usually made available to landowners and host provincial governments."⁸⁶ A natural-resources fund is scheduled to open in the next few years to hold revenues from natural-gas operations.⁸⁷

In September 2013, parliament voted unanimously to nationalize Ok Tedi Mining Ltd (OTML) and its majority owner, the PNG Sustainable Development Program Ltd (SDP). It has also forbidden OTML from paying the dividend on which the SDP depends, and from accessing its \$1.4 billion trust fund based in Singapore. Adverse effects include halting the SDP's numerous development initiatives, such as social services, rural utilities, hospital improvements, and infrastructure projects in the poor Western Province, which total nearly \$100 million. Beginning

Although addressing BHP Billiton's liability in the environmental disaster is a motivation for expropriation, OTML profitability has recently exceeded all stakeholders' expectations. ⁹⁰The former Chief Economist of AusAID—the only donor in PNG larger than the SDP—points out several further risks of this legislation: subjection of Ok Tedi to the state's historically poor management, a danger-ously anti-business maneuver that flouts existing laws against expropriation, redirection of OTML dividends to notoriously corrupt officials, and the unavailability of the Singapore-based fund for either domestic projects or environmental liability judgments. ⁹¹

1.7.5. Resource Ownership Disputes

PNG's extractive industries are not currently the subject of any international disputes or territorial issues.

1.8. Timor-Leste

1.8.1. Economic Snapshot

Population (2010): 1,067,000

Nominal GDP (2012): \$4.1billion⁹²

Nominal GDP per capita (2012): \$3,641

Gini coefficient (2007): 31.9

HDI score (2013): 0.576 (134th)

1.8.2. Extractive Industries and the National Economy

The IMF reports that "Timor-Leste stands out as the most oil-dependent economy in the world," ⁹³ accounting for roughly 75% of GDP ⁹⁴ and 94% of total revenues. ⁹⁵ Further growth is antici-

⁸⁶pngchamberminpet.com.pg/mining-in-png

⁸⁷revenuewatch.org/sites/default/files/countrypdfs/papua new guineaRGI2013.pdf

⁸⁸ devpolicy.org/ok-tedi-sdp-20130924

⁸⁹pngsdp.com/images/documents/20131015%20Ad%20project%20closure.pdf

⁹⁰ devpolicy.org/ok-tedi-sdp-20130924

⁹¹ devpolicy.org/ok-tedi-sdp-20130924

⁹² The United States dollar is Timor-Leste's national currency

⁹³imf.org/external/np/sec/pn/2011/pn1131.htm

⁹⁴revenuewatch.org/countries/asia-pacific/timor-leste/extractive-industries

⁹⁵revenuewatch.org/sites/default/files/countrypdfs/timor-lesteRGI2013.pdf (page 1)

pated as production expands within the Joint Petroleum Development Area (JPDA), which is shared with Australia, and commences in the Timor-Leste Exclusive Area (TLEA) and at onshore sites. Timor-Leste produces about 100,000 bpd of oil, and possesses proven reserves of 553.8 MM bbl plus 7.1 tcf of natural gas, and unknown offshore resources that remain unproven or unexplored.⁹⁶

Combined oil and gas revenues have been about \$2 billion since Timor-Leste began reporting to the EITI in 2008, reaching a high of over \$3.45 billion in 2011 (note that today's figures are not due for auditing and publication until 2015). Timor-Leste is in full compliance with the EITI, and report auditors have not observed any discrepancies. The Timor-Leste Petroleum Fund, a sovereign-wealth fund into which all oil/gas revenues are funneled, is worth about \$6.9 billion as of 2010. While Timor-Leste's overall budget transparency fared poorly in the 2010 Open Budget Survey, the Fund is subject to regular reporting, as well as auditing by a third party. The National Petroleum Authority and the Petroleum Tax Directorate are also responsible for oil/gas revenue collection.

1.8.3. Key Organizations in Resource Extraction

Relatively few companies share in oil production. As of 2011, \$1.99 billion of \$3.45 billion in total payments came from ConocoPhillips. The remaining payments came from a dozen additional firms, the largest of which, Eni, contributed \$401 million between its three sub-entities.

Engineering arguments between certain LNG gas stakeholders (Shell, Woodside, and ConocoPhillips) continue to impede LNG production, ⁹⁸ a problem compounded by political and economic disagreement over whether to route an LNG pipeline from Greater Sunrise to Dili or to Darwin.

1.8.4. Transparency and Governance

In addition to its well administered fund, Timor-Leste also maintains generally fair and transparent processes for bidding and contracting, and publishes broad industry data. A competitive market is a stated priority; the state-owned TIMOR GAP, though not fully operational, promises "to participate in the country's oil industry, but not to monopolize it." ⁹⁹

1.8.5. Resource Ownership Disputes

Australia currently receives a tenth of all revenues from the Joint Petroleum Development Area, pursuant to the Timor Sea Treaty. Over 80% of the massive Greater Sunrise gas fields are located outside the JPDA, and generally on the Australian side of the border, although Timor-Leste does not fully recognize this border, since it was negotiated with Indonesia prior to independence. Moreover, much of the Greater Sunrise area is geographically closer to Timor-Leste than to Australia. Consequently, the two governments agreed to an equal division of upstream revenues from Greater Sunrise projects, in exchange for which Timor-Leste yielded some claims around the existing border.

⁹⁸revenuewatch.org/countries/asia-pacific/timor-leste/extractive-industries

⁹⁶revenuewatch.org/countries/asia-pacific/timor-leste/extractive-industries

⁹⁷eiti.org/files/Timor-Leste-2011-EITI-Report.pdf (page 13)

⁹⁹ revenuewatch.org/sites/default/files/countrypdfs/timor-lesteRGI2013.pdf (page 2)

2. COMPARATIVE GOVERNANCE

2.1. Governance-Indices Overview

The Revenue Watch Institute's Resource Governance Index (RGI) rates several dimensions of oil, gas, and mining governance in major resource exporters, including six of the countries in this study: Afghanistan, Azerbaijan, Democratic Republic of the Congo (DRC), Mongolia, Papua New Guinea (PNG), and Timor-Leste. The RGI's composite score reflects eight indicators of the political and business environment surrounding resource management (note that not all indicators are available for all countries), and is the basis for the overall designations of satisfactory, partial, weak, and failing. Scores are not calculated for individual industries/sectors, so the RGI allows only general comparisons of resource governance, not industry-specific comparisons, e.g., mining governance in the DRC vs. in Papua New Guinea, or petroleum governance in Azerbaijan vs. in Timor-Leste.

Of the six relevant countries appearing in the index, Mongolia and Timor-Leste are labeled "partial," Papua New Guinea and Azerbaijan "weak," and Afghanistan and the DRC "failing." These failures are due in large part to a lack of publicly available mining data and audits, and to extremely low scores in Enabling Environment, which is the broadest measure "of accountability, government effectiveness, rule of law, corruption and democracy." Afghanistan's overall governance suffers further from its non-transparent and unaccountable state-resource companies. Out of more than 240 contracts, only two are with the government. Afghanistan Gas Enterprise is fully state owned and Northern Coal Enterprise is partially state-owned (the state-owned Herat, Ghori, and Jabal Saraj cement works are not currently functioning 101, 102).

Not all RGI data are cause for pessimism—Mongolia's institutional and legal environment and Timor-Leste's reporting practices are generally satisfactory—but the few bright spots are clouded by broader concerns regarding governance, the rule of law, corporate transparency, reporting practices, and so forth. These overarching concerns are consistent with more general governance measurements, such as those reflected in Transparency International's 2012 Corruption Perceptions Index, wherein scores range from Afghanistan's 0.8 to Burkina Faso's 3.8, with 10 representing a completely "clean" environment. This dubious distinction reflects major problems that reach far beyond resource revenue management, which does not bode well for Afghanistan's management of trillions of dollars in potential revenue.

Several of the countries evaluated herein are also near the bottom of the World Bank's latest Ease of Doing Business rankings. Afghanistan and DRC were rated 168th and 181st, respectively, in the vicinity of Burkina Faso (153rd) and Timor-Leste (169th). Others currently have easier business environments, with PNG placing 104th, Mongolia 76th, Kyrgyzstan 70th, and Azerbaijan, the highest-ranking of these states, achieving 67th place. These rankings are not necessarily the result of corruption, but corruption, poor resource governance, and a difficult business environment may all stem from inefficient and opaque bureaucracy.

Natural-resource rents are not yet a major part of the Afghan economy, and represented only about 2.1% of GDP in 2011, with mining revenues under 1% (including oil production from the

 $^{{}^{100}\}underline{eiti.org/news-events/afghanistan-discloses-mining-revenues-contracts\#}$

¹⁰¹pubs.usgs.gov/of/2011/1204/pdf/16B.pdf

¹⁰²afghancementtenders.com

Amu Darya field, it was 1.8% in 2012¹⁰³). However, if even a small portion of the US Geological Survey's estimate of \$1 to \$3 trillion in untapped Afghan mineral resources proves physically and economically available, Afghanistan may find itself dependent on mineral revenues just as Azerbaijan and Timor-Leste depend on petroleum revenues, but with a far less sufficient regulatory environment. A flood of resource revenues is unlikely to be managed in a consistent or transparent manner, unless the state implements drastic (and improbable) reforms in the near future. Given the scale and entrenchment of corruption and lawlessness in the Afghan state, a reasonable first step may be to introduce enforcement reports for state-owned companies, and to audit such reports in accordance with international standards.

According to the Revenue Watch Institute's notes on Afghanistan, the Ministry of Mines "has committed to publish all mining, oil and gas contracts," of which over two hundred are currently available online. 104 Mining-sector statistics are not released on a regular basis, but Afghanistan did submit a 2010-2011 Extractive Industries Transparency Initiative (EITI) report, an independently audited document covering the revenues of the six extractive-industry entities active during that time. (Six companies qualified to report under EITI for reconciliation, but one company did not share its data.) The EITI sheds light on specific revenue concerns, chief among which is the collection of over US \$1.2 million less revenue than the six entities reported. Of this yet-unresolved shortfall, about US \$1 million represents interest tax from the Aynak copper project that appears not to have reached the Ministry of Finance's Large Taxpayer Office. Such discrepancies are probably the result of several resolvable problems, such as inconsistent corporate reporting, non-standard auditing or none at all, and even paper-based accounting systems, all of which magnify the potential for honest mistakes and the ease and temptation of fraudulent practices. One hopes Afghanistan's next EITI report, due in March 2014, will present only minimal discrepancies thanks to the implementation of EITI's administrative and training recommendations.

Additional challenges to development of the mining sector include regional instability, unaccommodating terrain, and poor infrastructure, according to Afghanistan's EITI committee. 105 Indeed, the forthcoming Aynak copper mine is the first major foray into domestic hard-rock mining (the Amu Darya oil-field project precedes it), even though it is not clear that the contract is the most profitable arrangement Afghanistan could have negotiated. But perhaps most worrisome of all is the longstanding presence of illegal mining operations, which have financed a multitude of disparate groups over the last three decades:

Amidst the headlines of several lucrative mining contracts signed between Afghanistan and multiple international mining firms from China and India, 106 the proliferation of illegal excavations by violent entrepreneurs threatens and stunts the natural growth of Afghanistan's burgeoning mining sector. In May 2011, Afghanistan's parliament cited security shortcomings, infrastructure and technicality problems as the most serious obstacles in developing Afghanistan's mining sector. "Mafia groups are making use of mines more than the Afghan government," Gul Ahmad Azimi, an Afghan senator, said during the session. 107

¹⁰³ World Bank. 2013. "Afghanistan Economic Update" (page 4)

¹⁰⁴eiti.org/Afghanistan

¹⁰⁵eiti.org/files/Afghanistan-2010-2011-EITI-Report.pdf (page 7)

¹⁰⁶ Indian companies have since scaled back their interests in mining in Afghanistan.

Seebusinesstoday.intoday.in/story/afghanistan-mining-potential-opportunity-india/1/194175.html andindianexpress.com/news/india-s-mining-foray-in-afghanistan-on-hold/1188509

¹⁰⁷ctc.usma.edu/posts/afghanistans-conflict-minerals-the-crime-state-insurgent-nexus

Afghanistan's challenges are plenty: a bureaucracy that may prove too corrupt and feckless for thorough enforcement of mining-industry regulations, poor monitoring/reporting practices that impede outside observation, widespread illegal operations, and some of the most difficult business environments and infrastructure imaginable, to name a few. In the worst case, all these factors may create a vicious circle wherein the few foreign investors willing to mine Afghan lands are able to secure extraordinarily generous concessions, undermining the revenue or development benefits the state sought by awarding contracts in the first place.

2.2. Comparative-Governance Data

Here we present comparative-governance data for the comparison countries. Many intergovernmental organizations and international NGOs, such as the World Bank, Transparency International, and the Revenue Watch Institute, collect data and conduct surveys in consistent fashions across countries and over time. These measures allow for baseline comparisons on basic demographic and macroeconomic measures that bear on governance, as well as direct measures of governance. The selected measures reported here indicate how the comparison countries performed over the previous decade, in governance, quality of life, macroeconomics and finance, business environment, and political framework (note that not all measures are available for every country in every year, and that the most recent data for the time-series measures are from 2011).

Not surprisingly, most measures are somewhat correlated. That is, for the most part, countries that perform relatively well on one perform relatively well on others. In part this is due to imperfect separation of measures, i.e., two different measures capture the same quantity and so are necessarily correlated. But, in large part, countries that are well managed in one respect tend to be so in others. Nonetheless, there are examples of less-developed countries that improve their governance (with development to follow), as well as resource-rich countries with rapidly growing economies that are poorly governed (and, of course, those very resources may constitute a curse and contribute to poor governance).

2.2.1. Governance Indicators

Voice and Accountability reflects the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. The estimate of governance ranges from approximately –2.5 (weak) to 2.5 (strong) governance performance. Voice and Accountability indicates that the countries listed in Figure 1 performed poorly in voting and freedom of speech from 2002 to 2011.

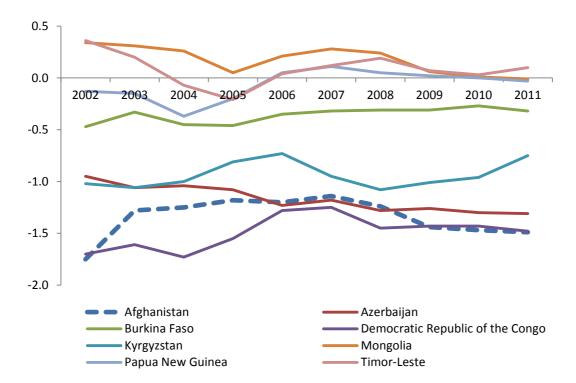


Figure 1. Voice and Accountability

Data Source: Worldwide Governance Indicators, World Bank, 2013

All the year-to-year and secular variations are small and there are no obvious lessons to be had, other than that civil rights are resistant to rapid improvements. Mongolia, although receiving the highest scores, had none over 0.5. Citizens in Timor-Leste and Kyrgyzstan gained more power in this indicator since 2010. DRC performed very poorly. Up to 2007, Afghanistan improved, but then declined. Excluding Azerbaijan and Mongolia, each country slightly improved in voice and accountability; these are also the two countries with the greatest economic growth (see Figure 11), testing the hypothesis that economic growth leads to liberalization.

Government Effectiveness reflects the quality of public services, the quality of civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. The estimate of governance ranges from approximately –2.5 (weak) to 2.5 (strong) governance performance. Figure 2 shows that from 2002 to 2011, all eight countries had negative scores in government effectiveness, a poorer performance than the world average rate.

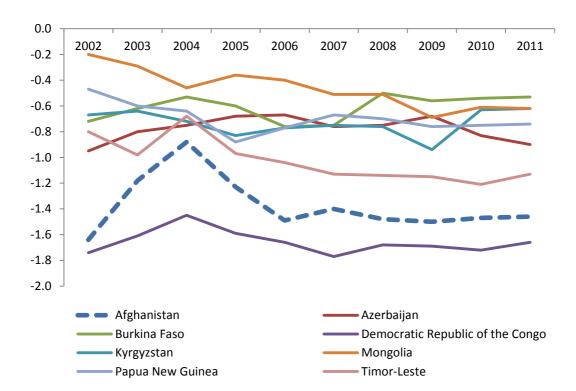


Figure 2. Government Effectiveness

Data Source: Worldwide Governance Indicators, World Bank, 2013

Although continuing to decrease, Mongolia maintained the best performance until 2008 when it dropped from -0.20 (2002) to -0.51 (2008). It then continued to decline to -0.62 in 2011. Meanwhile, Burkina Faso slowly increased from -0.67 (2002) to -0.53 (2011) PNG, Kyrgyzstan, and Azerbaijan remained steady during this period, between -0.6 and 0.1. Timor-Leste, Afghanistan, and DRC performed most poorly. Except for a slight spike in 2004 (-0.68), Timor-Leste dropped sharply from -0.80 (in 2008) to -1.13 in 2011. Afghanistan enjoyed a large improvement during the first three years, with its negative score reducing by half (from -1.64 in 2008 to -0.88 in 2009). Yet in the next two years Afghanistan dropped sharply to 1.49 in 2006, and the score remained roughly the same up to 2011. DRC was the lowest ranked throughout, at around -1.7 (-1.45 in 2004).

Regulatory Quality reflects the ability of the government to formulate and implement sound policies and regulations that permit and promote private-sector development. The estimate of governance ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance.

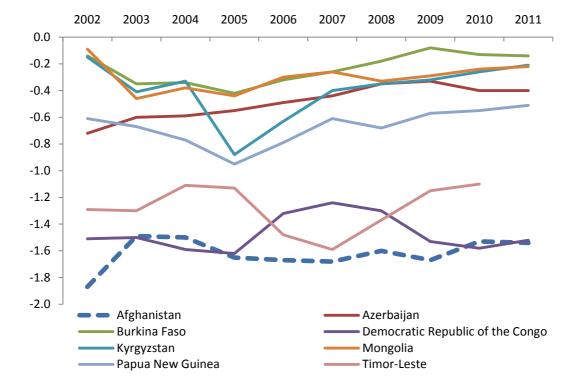


Figure 3. Regulatory Quality

Data Source: Worldwide Governance Indicators, World Bank, 2013

Regulatory Quality indicates that countries listed in Figure 3performed poorly in government regulations implementation from 2002 to 2011, because none had positive scores, although several show slight secular improvement. Implementation of government policies and regulations in Burkina Faso and Mongolia was better than in the other six up to 2011. Kyrgyzstan and PNG dropped substantially in 2005 and 2006. While Timor-Leste had a decrease in 2007, DRC increased from 2006 to 2008, and then declined again. Although receiving the lowest score, Afghanistan improved faster than the rest in regulatory quality. The countries fall into two groups; the lower-performing group, with Timor-Leste, DRC, and Afghanistan, includes those in or recently emerging from major armed conflict, suggesting that regulation is difficult to improve in an environment of civil strife.

Rule of Law reflects the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. The estimate of governance ranges from approximately –2.5 (weak) to 2.5 (strong).

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 0.5 0.0 -0.5 -1.0 -1.5 -2.0 -2.5 Afghanistan Azerbaijan Burkina Faso Democratic Republic of the Congo Kyrgyzstan Mongolia Papua New Guinea Timor-Leste

Figure 4. Rule of Law

Data Source: Worldwide Governance Indicators, World Bank, 2013

Rule of Law indicates that the countries listed in Figure 4performed poorly in law and contract enforcement from 2002 to 2011. Excluding Mongolia, which achieved positive scores in early years, the seven others consistently received negative rankings. The rule of law improved most in Burkina Faso, while Mongolia and Kyrgyzstan declined most. Azerbaijan and DRC achieved a minor improvement, whereas all others noted a slight decrease. Overall, Burkina Faso and Mongolia performed slightly better law than the others, while Afghanistan performed very poorly.

Political Stability and Absence of Violence reflects the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. The estimate of governance ranges from approximately -2.5 (weak) to 2.5 (strong)

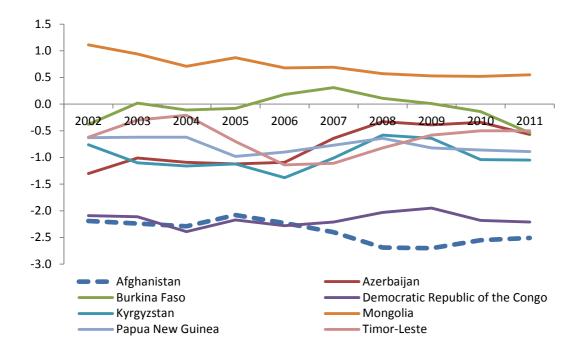


Figure 5.Political Stability and Absence of Violence

Data Source: Worldwide Governance Indicators, World Bank, 2013

In Figure 5, Political Stability and Absence of Violence indicated that most of the countries performed poorly from 2002 to 2011. As the only country that received positive scores during this period, Mongolia performed well. Most governments scored from 0 to −1.5. Scoring, on average, below −2.0, DRC and Afghanistan performed poorest. Notably, stability in Afghanistan has been extremely unstable according to this measure since 2008, as its scores of political stability and absence of violence fell below even the lowest estimate of governance ranges.

Control of Corruption reflects the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. The estimate of governance ranges from approximately –2.5 (weak) to 2.5 (strong).

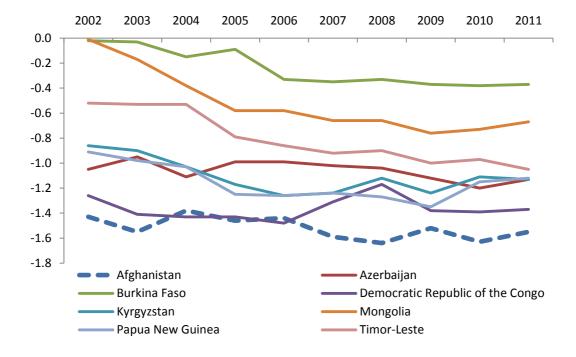


Figure 6. Control of Corruption

Data Source: Worldwide Governance Indicators, World Bank, 2013

Control of Corruption indicates that all countries listed in Figure 6 performed poorly from 2002 to 2011. None received positive scores, nor improved overall. Burkina Faso, Mongolia and Timor-Leste decreased profoundly compared to the other five. Despite the fact that Kyrgyzstan and PNG improved somewhat in 2010, overall control of corruption decreased. Corruption control in Afghanistan fluctuated over this period. Overall, Burkina Faso and Mongolia responded slightly better than the other six countries, while Afghanistan performed very poorly. The better-performing countries (Burkina Faso, Mongolia, and Timor-Leste) declined more significantly over this period than did the worse-performing countries, suggesting that countries have a basic floor of corruption control below which they are unlikely to drop.

The Transparency International Corruption Perceptions Index measures the perceived levels of public-sector corruption in a given country and is a composite index, drawing on various expert and business surveys. The CPI ranks countries/territories based on how corrupt their public sector is perceived to be. The CPI scores countries on a scale from 0 (highly corrupt) to 10 (very clean).

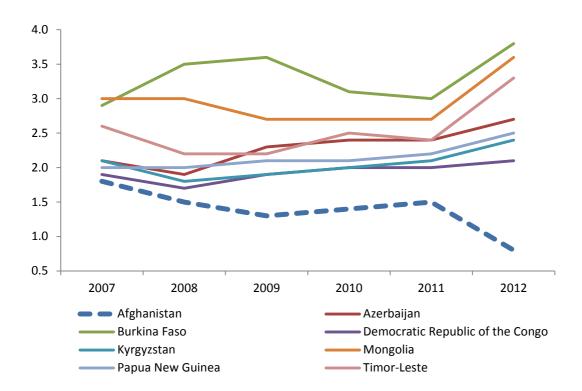


Figure 7. Corruption Perceptions Index

Data Source: Transparency International, 2013

The CPI indicates that all countries observed in Figure 7performed poorly in public-sector transparency from 2007 to 2012, as all received scores no higher than 4.0. The relative ordering of the countries is similar to that of the World Bank's rating (Figure 6), as are the overall flat trends from 2007–2011, but the World Bank does not have 2012 data to compare with the sharp upticks for the better-performing group from 2011–2012. Compared to the other countries, Burkina Faso, Mongolia and Timor-Leste were more transparent, especially after 2011. While most countries have slightly improved transparency, Afghanistan has weakened profoundly, and received the lowest scores.

Afghanistan has a long history of corruption, reinforced by a weak central government and many opportunities—principally the opium trade, but also import monopolies, foreign assistance and military contacts, and mining contracts—for warlord control of the regions and payoffs to regional governors, border and security officials, and ministerial authorities. While extractive industries and economies differ in many respects from the agricultural opium economy, not least of which is that the underlying activity is not inherently illegal, a culture and framework of corruption that are sustained by the opium economy presents a significant challenge to controlling corruption in growing mining and hydrocarbon sectors: when authorities are accustomed to abusing their official powers for personal gain in one—very large—sector of the economy, it is difficult to impose and enforce effective controls in another sector. Nonetheless, legitimate extractive industries entail many procedures and institutions (tenders, licensing, inspections, etc.) that are not present in the

illicit opium industry, so, to the extent they are being newly created or implemented they need not necessarily suffer the taint of the narcotics trade.

2.2.2. Quality of Life Indicators

The Human Development Index measures development by combining indicators of life expectancy, educational attainment and income. It sets a minimum and a maximum for each dimension, called goalposts, and then shows where each country stands in relation to these goalposts, expressed as a value between 0 (weak) and 1 (strong).

1.00 0.90 0.80 0.70 0.60 0.50 0.40 0.30 0.20 2005 2006 2007 2008 2010 2011 2012 2009 Afghanistan - Azerbaijan Burkina Faso Democratic Republic of the Congo Mongolia Kyrgyzstan - Papua New Guinea Timor-Leste

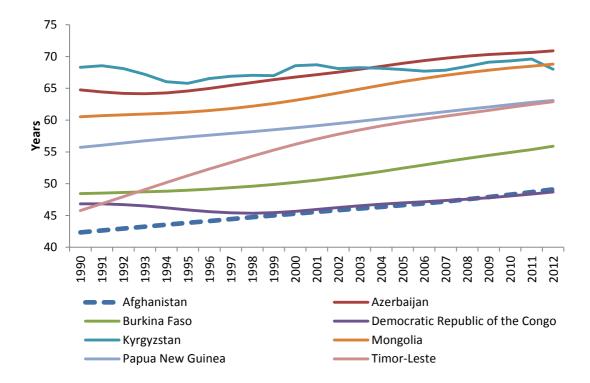
Figure 8. Human Development Index

Data Source: United Nations Development Programme, 2013

Figure 8indicates a human development index among the eight countries from 2005 to 2012 (excluding Azerbaijan which lacks data before 2010). Overall, all countries enjoyed a slow but steady increase of social development. Azerbaijan, Mongolia, and Kyrgyzstan maintained a score higher than 0.6, while Timor-Leste increased from 0.4 in 2005 to 0.58 in 2012. Afghanistan, Burkina Faso, and DRC ranked last, with scores under 0.4.

Life Expectancy is the number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life. Life expectancy may be affected by the growth of extractive industries in two ways. On the one hand, increases in GDP and industrialization due to their growth can improve access to medical care, hygiene, and education, all of which are associated with longer life expectancy. On the other hand, mining and hydrocarbon extraction tend to be highly polluting industries, and mining jobs have high mortality rates (especially in DRC where there are essentially no worker protections).





Data Source: World Bank, 2013

Figure 9demonstrates the trend of life expectancy in the eight countries from 1990 to 2012. Excluding Kyrgyzstan, where life expectancy fluctuated over the years observed (due to the sharp decline in healthcare and nutrition in the post-Soviet breakup), generally citizens in the other countries have increased their life expectancy over the past 22 years. Until 2012, Azerbaijan was ranked highest, with 70 years, followed by Kyrgyzstan and Mongolia with 68 years. Life expectancy in Timor-Leste and PNG was 63 years in 2012, with Burkina Faso at 56 years. Citizens in DRC and Afghanistan had the lowest life expectancy (49 years in 2012) although Afghanistan has caught up with DRC, which has seen the world's worst death rate from armed conflict in the past two decades—which conflict has been driven and sustained in large part by mineral resources in the country's eastern provinces.

2.2.3. Macroeconomic and Financial Indicators

Gross Domestic Product at purchasers' prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. GDP does not fully reflect the full benefits and costs of mining, as it accounts only for the stream of resources out of the ground and into the marketplace, and ignores environmental costs to be imposed in the future, the costs of conflict driven by competition for resources or enabled by resource rents, and other manifestations of the so-called Dutch disease. Taking the much broader view, nearly half of the world's GDP can be attributed to mining, either directly (approximately 10%) or through the services that mined products provide (approximately 35%). ¹⁰⁸

Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single-year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign-exchange transactions, an alternative conversion factor is used.

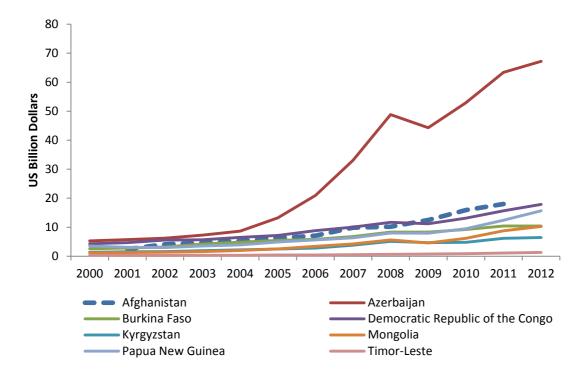


Figure 10. GDP (Current US\$bn)

Data Source: World Bank, 2013

Figure 10demonstrates GDP of the eight countries from 2000 to 2012. Azerbaijan experienced a dramatic boost from \$5 billion in 2000 to \$49 billion in 2008. After a short recession in 2009, the GDP of Azerbaijan continued increasing to \$67 billion in 2012; while the other seven countries' GDP grew far more slowly during the years observed; this phenomenal growth (the world's fastest in this period) is due entirely to the completion of pipelines that allowed the exportation to Europe of

¹⁰⁸http://www.miningweekly.com/article/global-mining-drives-45-plus-of-world-gdp-cutifani-2012-07-04 Caspian Basin (including Azerbaijani) oil and gas. Until 2011, Afghanistan¹⁰⁹maintained the second highest GDP among the eight countries, yet its GDP (\$18 billion)¹¹⁰ was less than one third of Azerbaijan's (\$63 billion). Timor-Leste, by far the smallest of the countries, ranked last, but saw considerable growth from 2000 (\$0.32 billion) to 2012 (\$1.29 billion).

GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars.

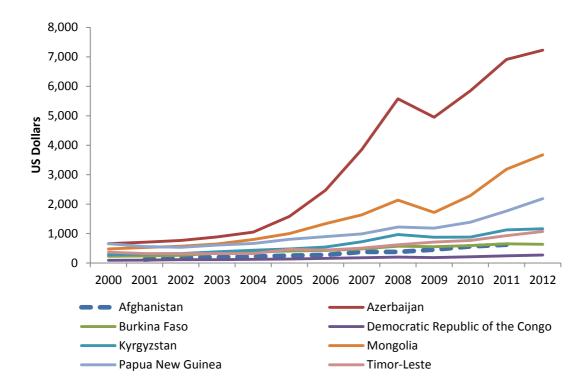


Figure 11. GDP Per Capita (Current US\$)

Data Source: World Bank, 2013

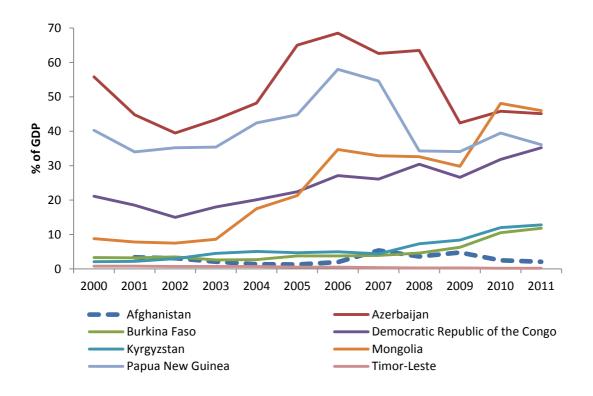
Compared to Figure 10, in Figure 11 Azerbaijan still had the highest GDP per capita, with a profound increase over the years observed. Mongolia ranked second, with a much less dramatic increase (as shown in Figure 12, this was due in large part to rapid growth in the mining sector's share of the economy). An interesting difference in comparison to Figure 11 is that Timor-Leste witnessed a slight growth in GDP per capita, while DRC(by some measures the world's poorest country) registered negligible improvement due to its more rapid population growth.

Total Natural-Resources Rents are the sum of rents from oil, natural gas, coal, minerals, and forests (of the comparison countries, only DRC has a substantial share of GDP from forestry, and nearly all of that is illegal logging).

¹⁰⁹ There are no data recorded for Afghanistan's GDP in 2012.

¹¹⁰ In 2010 and 2011, Afghanistan received the equivalent of its GDP in foreign assistance. Although this assistance does not show up directly in national income accounting, as it is spent in Afghanistan it boosts GDP.

Figure 12. Total Natural Resources Rents (% of GDP)



Data Source: World Bank, 2013

Natural-resource rents as a share of GDP reflect three factors: the extent of minerals extraction, the market prices of those minerals, and the performance of that country's non-mining sectors. Figure 12 demonstrates the changes of each country's total natural-resources rents as a percentage of GDP from 2000 to 2011. Both Azerbaijan and PNG relied heavily on their total natural-resources rents, and they share a similar fluctuation over the 11-year period. In 2000, 56% of GDP in Azerbaijan came from natural-resources rents, while PNG's were 40% of its GDP. After a short recession in 2002, both countries experienced a boost in the next three years and then dropped to 45% and 36% in 2011 respectively. The rapid increase in Azerbaijan reflected both increased oil and gas production as new fields came online and high world prices for oil before the 2008 financial crisis, after which global demand and prices fell. Natural-resources rents as a percentage of GDP in Mongolia increased from 8% in 2000 to 46% in 2011, while DRC increased from 21% in 2000 to 36% in 2011; in both countries, as well as in Burkina Faso and Kyrgyzstan, mining output has increased steadily and prices for their products have increased or maintained their levels, driven primarily by demand from China (for infrastructure and manufactured export goods)—and there has been little economic growth outside of extractive industries.

Profit tax is the amount of taxes on profits paid by the business. Total tax rate measures the amount of taxes and mandatory contributions payable by business after accounting for allowable deductions and exemptions as a share of commercial profits. Taxes withheld (such as personal income tax) or collected and remitted to tax authorities (such as value added taxes, sales taxes or goods and service taxes) are excluded.

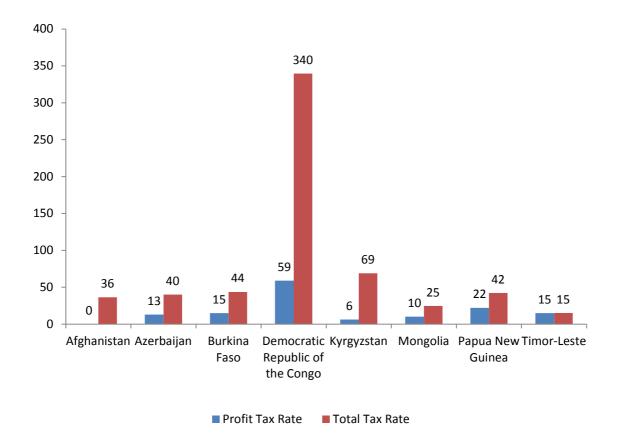


Figure 13. Profit Tax Rate and Total Tax Rate (% of commercial profits), 2012

Data Source: World Bank, 2013

Figure 13 shows the comparison between profit tax rate and total tax rate among the eight countries in 2012. Overall, the other seven countries excluding DRC have a relatively low profit tax rate. Afghanistan had zero as its profit tax rate, which means that the total tax rate in Afghanistan was not based on the companies' commercial profits. To the contrary, Timor-Leste's profit tax rate (14.9%) almost equaled its total tax rate (15.1%), which indicates that the rate companies in Timor-Leste paid taxes was mainly based on their commercial profits. Kyrgyzstan had the highest total tax rate excluding DRC, with only one tenth of its total tax rate being the profit tax rate. As for DRC, its profit tax rate was 59% of commercial profit, almost three times of the second highest profit tax country Burkina Faso (22%). In 2012, DRC's total tax rate was 340% of its commercial rate, while the average total tax rate in the world was only 45%. ¹¹¹

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¹¹¹Doing Business. (2012). "Paying Taxes." <u>doingbusiness.org/reports/global-reports/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB12-Chapters/Paying-Taxes.pdf</u>

While, all else equal, foreign investors and mining operators would prefer lower taxes to higher, tax rates and the relative share of total taxes assessed on corporate profits does not appear to be strongly associated with the extent of mining operations or other measures of economic growth or governance. That is, the nominally better and worse performing countries do not appear to be distinguished by their tax structures and rates, and Afghanistan's zero tax on profits has not attracted disproportionate interest in investment.

2.2.4. Business Environment Indicators

The Strength of Legal Rights Index assesses the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The index ranges from 0 to 10, with higher scores indicating that these laws are better designed to expand access to credit.

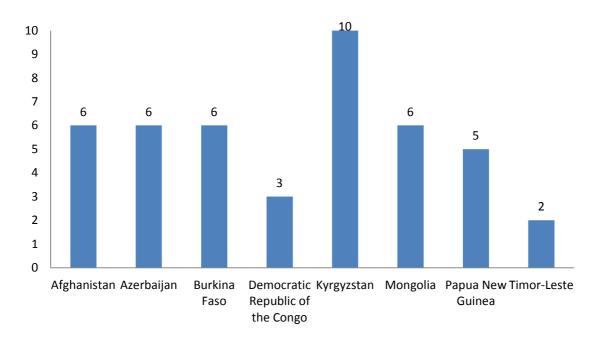


Figure 14. Strength of Legal Rights Index, 2012

Data Source: World Bank, 2012

Figure 14demonstrates how well the rights of borrowers and lenders were protected by collateral and bankruptcy laws in 2012. Kyrgyzstan performed best with a score of 10 in strength of legal rights. Afghanistan, Azerbaijan, Burkina Faso, and Mongolia shared the same score of 6, while PNG was 5. Timor-Leste and DRC performed poorly, with 2 and 3 respectively. These data suggest that strong legal rights are neither necessary nor sufficient for a healthy mining sector, and that Afghanistan is comparable in this regard to the better-performing countries.

The Strength of Investor Protection Index measures the strength of minority-shareholder protections against misuse of corporate assets by directors for their personal gain. The Strength of Investor Protection Index scores countries on a scale from 0 (weak) to 10 (strong).

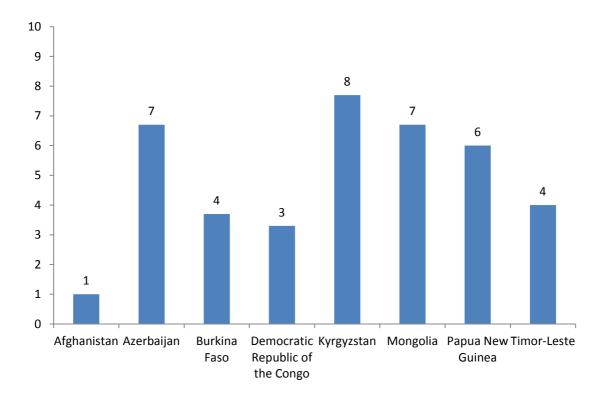


Figure 15. Strength of Investor Protection Index, 2012

Data Source: World Bank, 2012

Figure 15demonstrates how well minority shareholders were protected in 2012. Kyrgyzstan again performed best with a score of 8, followed by Mongolia (7), Azerbaijan (7), and PNG (6). Timor-Leste, Burkina Faso, and DRC performed relatively poorly with scores under 5. These data suggest both a greater inter-country variation than with Strength of Legal Protection and a slightly stronger association with overall high performance. Afghanistan scored a 1 in strength of investor protection, which indicates a notable deficiency in this measure and a likely significant deterrent to foreign mining investment in partnership with domestic shareholders.

2.2.5. Political Framework Indicators

Public Sector Management and Institutions Cluster Average includes property rights and rule-based governance; quality of budgetary and financial management; efficiency of revenue mobilization; quality of public administration; and transparency, accountability, and corruption in the public sector. It ranges from 1 (low) to 6 (high). Definitions of each indicator are explained in Figure 17.

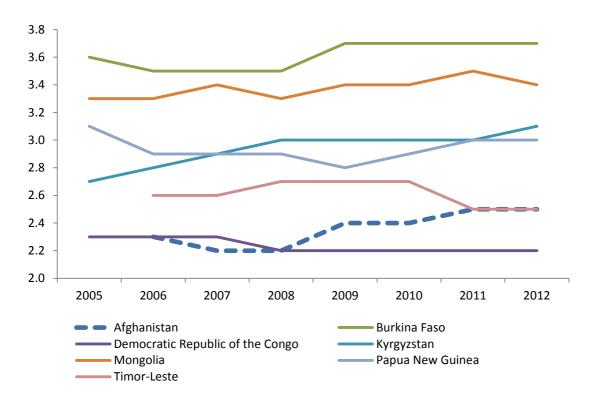


Figure 16. Public Sector Management and Institutions Cluster Average (CPIA)

Data Source: Country Policy and Institutional Assessment, World Bank, 2012

Figure 16demonstrates the general situation of public-sector management and institutions by using the cluster indicator weighted by five composite indicators in different areas of the public sector. Overall, from 2005 to 2012, these ratings were quite stable (note that the vertical scale goes only from 2.0 to 3.8, thereby exaggerating small and probably insignificant changes). Burkina Faso and Mongolia performed slightly better than the other six countries, with Burkina Faso achieving 3.7 (2009–2012). Mongolia scored second with only slight fluctuations around 3.3 and 3.4 from 2005 to 2012. PNG and Kyrgyzstan remained around the mid-scale value of 3. Timor-Leste, Afghanistan, and DRC performed relatively poorly; Timor-Leste dropped from 2.6 in 2006 to 2.5 in 2012, while Afghanistan increased from 2.4 in 2006 to 2.5 in 2012. DRC fell from 2.3 in 2005 to 2.2 in 2007 and remained the lowest ranked through 2012.

This measure is strongly associated with the general perception of better- and worse-performing countries in mining-sector governance, which suggests that extractive industries tend to be governed in a similar fashion to governance overall, but the direction of causality is unclear. The lesson for Afghanistan may be that reform and better governance in the mining sector will lead to improvement in governance overall, or that improvement in the mining sector will require first a general elevation of performance overall.

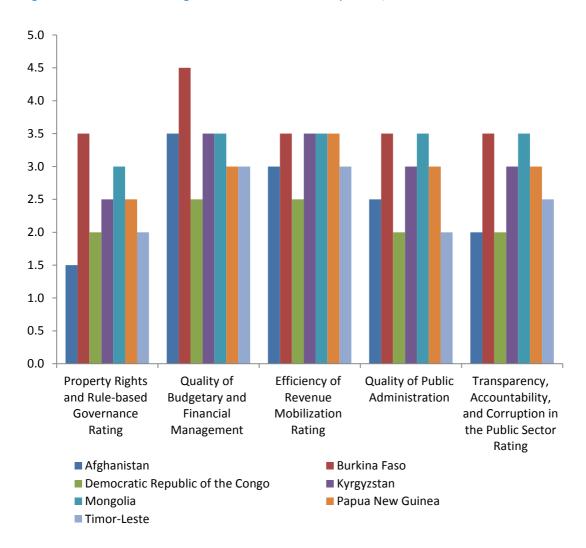


Figure 17. Public Sector Management and Institutions Components, 2012

Data Source: Country Policy and Institutional Assessment, World Bank, 2012

Property Rights and Rule-Based Governance assesses the extent to which private economic activity is facilitated by an effective legal system and a rules-based governance structure in which property and contract rights are reliably respected and enforced.

Quality of Budgetary and Financial Management assesses the extent to which there is a comprehensive and credible budget linked to policy priorities, effective financial-management systems, and timely and accurate accounting and fiscal reporting, including timely and audited public accounts.

Efficiency of Revenue Mobilization assesses the overall pattern of revenue mobilization—not only the de facto tax structure, but also revenue from all sources as actually collected.

Quality of Public Administration assesses the extent to which civilian central-government staff is structured to design and implement government policy and deliver services effectively.

Transparency, Accountability, and Corruption in the public sector assesses the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within

the executive are required to account for administrative decisions, use of resources, and results obtained. The three main dimensions assessed here are the accountability of the executive to oversight institutions and of public employees for their performance, access of civil society to information on public affairs, and state capture by narrow vested interests.

All the indicators range from 1(low) to 6 (high).

Most countries performed in the mid-range from 2.5 to 3.5. Burkina Faso reflects a relatively good performance in each indicator, especially in Quality of Budgetary and Financial Management. PNG scored relatively better on these measures than we might expect from a general assessment of its performance. Afghanistan, DRC, and Timor-Leste performed poorly relative to the other countries in these five indicators. This illustrates poor management in the public sector of these three countries. Notably, property and contract rights were implemented much more poorly than the other aspects. Seen another way, Afghanistan performs relatively well on budgetary and fiscal measures, suggesting that it has the requisite financial skills and institutions (perhaps due to a large number of Afghan civil servants with education outside of Afghanistan, or experience in working with ISAF authorities and foreign development agencies), which should be of value in developing a well-governed mining sector.

And, finally, the Resource Governance Index (RGI) captures many of the factors considered thus far in one measure. It consists of four components: 20% Institutional and Legal Setting, 40% Reporting Practices, 20% Safeguards and Quality Controls, and 20% Enabling Environment. Specifically, Institutional and Legal Setting assesses the degree to which the laws, regulations and institutional arrangements facilitate transparency, accountability and open/fair competition. Reporting Practices assesses the actual disclosure of information by government agencies. Because de facto disclosures are the best indicator of transparency, this component receives a greater weight. Safeguards and Quality Controls assesses the presence and quality of checks and oversight mechanisms that encourage integrity and guard against conflicts of interest. Enabling Environment assesses the broader governance environment, based on more than thirty external measures of accountability, government effectiveness, rule of law, corruption, and democracy. The index assigns a numerical score to each country and divides them into four performance ranges: satisfactory (71–100), partial (51–70), weak (41–50), and failing (0–40).

90 80 70 60 50 40 30 20 10 0 Safeguards and Resource Institutional and Reporting **Enabling Governance Index Legal Setting Practices Quality Controls** Environment Afghanistan Azerbaijan ■ Democratic Republic of the Congo ■ Mongolia

Figure 18. Resource Governance Index and Components, 2013

Data Source: 2013 Resource Governance Index Report, Revenue Watch Institute, 2013

Overall, RGI indicates that none of the countries listed in Figure 18achieved a "satisfactory" in resource governance in 2013 (note that the Index is not available for Burkina Faso and Kyrgyzstan). Mongolia and Timor-Leste showed a "partial" performance, while Azerbaijan, DRC, and PNG performed "weakly" in this measure. Afghanistan received a ranking of "failing" as its resource governance according to RGI. All countries performed relatively well in Institutional and Legal Setting, as they received "satisfactory" or "partial" scores in this indicator. Timor-Leste's relatively stronger showing on three of the four components is somewhat anomalous given its generally weak scores on other measures considered in this report, which illustrates the difficulty of reconciling independent qualitative judgments of governance and the limits on inferring lessons there from.

Besides Timor-Leste and Azerbaijan receiving scores above "partial" in Reporting Practices, the other countries performed poorly in government transparency accordingly. Notably, Timor-Leste performed substantially better, while Afghanistan and PNG failed in this measure. Similarly, Timor-Leste, Azerbaijan, plus PNG, performed well in Safeguards and Quality Controls, whereas the other countries fell into a "weak" range. No countries received a "satisfactory" score in Enabling Environment showing that none of their governments were experiencing a stable political environment. Particularly, Afghanistan and DRC performed very poorly on this measure, as is not surprising given the ongoing civil conflict in both states. Generally through all six countries, their performance in Institutional and Legal Setting and Safeguards and Quality Controls were better than the other two indicators.

A possible lesson here for Afghanistan is at least somewhat encouraging: on three of the four sub-indices it performs on par with Mongolia, a generally perceived-to-be better performing country; if its Enabling Environment score were to improve to the level of (post-conflict) Timor-Leste's, its composite RGI would be similar to Mongolia's. Granted, improving the Enabling Environment score is no small task, and not one within the control of mining-sector stakeholders, but it does provide a tangible incentive to improve governance, beyond the approbation of foreign observers and watchdog groups.

3. SURVEY OF MINING-SECTOR EXPERTS

We supplement the quantitative data with qualitative information regarding mining practices collected from experts in the field. Persons familiar with extractive-industry investments and operations in the comparison countries were identified and contacted. As a full survey based on a representative group of mining executives was outside of the scope of our research, we made no attempt to develop a complete sampling frame from which to select survey participants. Instead, we solicited referrals from in-country contacts. The result is a convenience sample of a half-dozen mining executives who were willing to describe their experiences in the focus countries. Respondents were given assurances of confidentiality. Respondents were asked for their input regarding a set of factors that relate to a country's success in securing investments for the extractive sector (see §4.1). The purpose of these interviews was to identify themes surrounding investing in the extractive sector that might be relevant to Afghanistan. We provide a summary of the common themes emerging from the interviews (with company names redacted) in §4.2.

3.1. Factors Contributing to Successful Investment Climate

Table 1 details the factors that respondents were asked to reflect on in terms of their importance in terms of their importance in contributing to a country's success in attracting investment in exploration and extraction and to responsibly managing its resources and revenues for its people.

Table 1. Factors Contributing to Investment in the Extraction Sector

1. Administration, interpretation, and enforcement of regulations 2. Environmental regulations 3. Regulatory duplication and inconsistencies (including federal/provincial and interdepartmental overlap) 4. Legal system (legal processes that are fair, transparent, non-corrupt, timely, efficiently ad-5. Taxation regime (including personal, corporate, payroll, capital taxes, and the complexity associated with tax compliance) 6. Disputed land claims 7. Areas protected as wilderness, parks, or archaeological sites Infrastructure 9. Socio-economic agreements/community-development conditions (includes local purchasing or processing requirements, or supplying social infrastructure such as schools or 10. Trade barriers (tariff and non-tariff barriers, restrictions on profit repatriation, currency restrictions, etc.) 11. Political stability 12. Labor regulation/employment agreements and labor militancy/work disruptions 13. Security 14. Educated workforce 15. Corruption 16. Mining/drilling policy and implementation

3.2. General Themes from Expert Interviews

3.2.1. Administration, Interpretation and Enforcement of Regulation

Respondents regarded the biggest challenge, and also the biggest concern to investors and developers in the extractive sector, to be the complexities of dealing with varying levels of government (national, provincial, district, and tribal). Inconsistencies in administration, interpretation, and enforcement of regulations across the various government agencies yields uncertainty, and difficulties in interpreting and acting on key decisions that are announced by government authorities. Many respondents noted the difficulties they encountered when agreements made at a national-government level were not respected at a district level where the company was planning their operations. This led to significant challenges on the ground, particularly when trying to negotiate and liaise with stakeholders at a provincial or tribal level, where the rules of engagement are very different from those at the national level.

For an international mining company considering investing in a country, the uncertainty and regulatory complexity introduced by inconsistent responses across government tiers is potentially a major barrier. When Ilocal governments function differently and independently of the national government, the reliability of local decisions and the authority of designated local decision makers is often compromised; this undermines an investor's ability to control the project environment as originally anticipated.

Regulatory duplication and inconsistencies also create opportunities for corruption. When national regulation is reinterpreted at a traditional council level, where the focus, in practice, might be less on regulation and more about supporting traditional practices, the inconsistencies that emerge can create environments where problems such as bribery and corruption can occur.

Without reliable systems of local government in place around selected sites for potential new mining projects, and without reliable local government officials being in place, potential extraction projects are often not considered a viable proposition. Investors feel more comfortable investing in a country where the mining sector has strong government support from all tiers. The absence of strong support raises concerns that there is perhaps no political will to enforce regulations. By contrast, a strong regulatory environment which is firmly enforced creates a stable investment environment in which to operate.

3.2.2. Environmental Regulations

Respondents noted that, when evaluating a new investment destination, they always take into consideration the environmental regulations in the country, what regulations are in place, and how they are enforced on the ground. Respondents noted that there are strong external factors that can ensure that reputable mining operations comply with environmental regulations that are in place. Interestingly, respondents suggested that the external pressure to comply with environmental regulations is typically greater than the internal pressure from within the countries.

Respondents regarded environmental regulations as key to sustainable business in the mining sector and noted that there is an increasing focus on the environment when it comes to decision making on new projects and countries in which to invest. Having a "social license" (public acceptability) to operate in any country and community is regarded as fundamental "go or no-go" decision making. Consistency is the issue on this matter that seems to matter most to would-be investors. There needs to be clear definition around protected environmental areas.

3.2.3. Legal Systems

All respondents noted the importance of a fair and efficient legal system. When their companies consider the investment potential of a particular country, they pay close attention to the

legal framework and support systems in that country, from the perspective of protecting their interests. Access to due process, and to remedial action, is paramount. Investing companies are ultimately responsible for protecting the investments of shareholders. A reliable judiciary is essential, and in particular, at a provincial or community level, where due process needs to be followed and the law clearly defined and implemented. Our respondents noted the added challenge of doing business in an environment where local laws are misinterpreted or ignored. As a result mining companies are paying increasing attention to the legal frameworks that exist within the communities that would be impacted by their investment in the mining sector. This can be a particular challenge in countries with poor reputations. One respondent gave as an example the challenges of operating in a country where the global perception is that legal processes are weak. Even if their company can show that all of the legal processes had been adhered to, due process had been followed, and the legal process had been approved by a judge, they struggle to manage the public perception that corruption must have been involved, and that bribes must have been paid (when they were not). Unfortunately, such a negative perception has the potential to influence decision making because the company is concerned with protecting its reputation.

Ultimately, reliability and predictability are considered to be two key factors that are essential to the success of any mining venture. Without a legal process that is transparent, fair, and efficiently administered, the global mining appetite for doing business in the country will be diminished.

3.2.4. Taxation Regime

Respondents were of the opinion that tax considerations were especially important for smaller companies (that might not be cash-rich) when making key decisions on investment destinations. They also noted the importance of tax guarantees as a means for reducing the uncertainties involved in an investment; without the necessary guarantees, a company might find itself in dispute with the government over taxation. As a result, mining companies are paying much more attention to taxation-management. Government administrations can change during the course of any project, and the taxation rules might change as a result; this makes it critical that any agreements signed at a national-government level can be upheld regardless of any political change that occurs at a later date. Mining companies encountering these sorts of transition-related tax issues can be exposed to reputational risk. Our respondents noted that the perception tends to fall negatively on the positioning of the international mining investor coming into the country, as opposed to the government message in the public domain. The public often regards foreign mining investors with suspicion. The perception is often that a business agreement will inevitably serve the company but not society as a whole in the country. This represents another challenge and potential deterrent to investors looking at a potential new market.

3.2.5. Disputed Land Claims

Previously the issue of disputed land claims and mining rights might not have been too much of a deterrent to potential investors. However, many mining companies today have committed to follow global best practices in such issues as disputed land claims, making issues of disputed land claims and mining rights important decision criteria in evaluating investments. Disputed land claims also have the potential to impact significantly on reputation. As a result, mining companies that pay careful attention to reputation management have become more risk averse today than in previous years, as disputed land claims have made headline news in many countries over the last few years.

The issue of land rights poses a real challenge to potential investors because of the uncertainties they introduce. When negotiating around a possible project, investors are uncertain whether they are discussing the matter with the actual landowner who has legally binding title deeds to land, or whether the land is under dispute (with disputes often going back decades). Such issues can ultimately affect the decision to invest or not. One respondent noted that sustainability

has become less of a "soft" issue in the company's decision-making process, and more of a strategic issue. Land disputes were regarded as especially important in post-conflict areas. The outstanding land-rights issues and a lack of clarity and paperwork associated with such claims, post-conflict, were considered a particular challenge.

Protected wildlife areas, national parks and archaeological sites

Protected areas were another important factor taken into consideration in an investment decision, especially as part of a pre-feasibility study. If such sites or areas are negotiable, for example, if an investor is permitted to move archaeological tombs or other such sites to another area, then the mining company would need to work with the local and national government departments to do this as sensitively as possible. Usually, there are government regulations in place to govern the moving of heritage or archaeological sites, etc. but it often comes down to local negotiations with tribal councils. Local laws often have provision for such negotiation and consultation processes. The clearer the policies and practices in this regard, the smoother the negotiations. Respondents noted it is essential to engage all affected stakeholders proactively on the protection of wildlife areas, archaeological sites and religious sites as part of project negotiations. An important concern was company reputation and how failure to follow appropriate processes might reflect poorly on the company and undermine relationships with the local community.

3.2.6. Infrastructure

Responses regarding the quality of local infrastructure varied markedly across respondents (in ways that seem to correlate with the size of the company and the perceived expected returns on investment). For large companies, the important issue was whether local conditions allowed them to easily address infrastructure challenges (i.e., they would address their own infrastructural needs, for example, building roads), or whether infrastructure problems would continue to present barriers getting a new mining project off the ground. For large companies, lack of infrastructure would be a consideration, but was not necessarily a major obstacle to mining project development or delivery if local conditions were friendly to addressing the infrastructural gaps. One respondent observed that the question of infrastructure very much depends on what you are hoping to mine. For high-value commodities, such as diamonds and gold, infrastructure is less relevant. They specifically noted that for countries like the DRC or Afghanistan, concerns over infrastructure will likely not deter investors. The expected return on the resource would drive the investment decision, rather than the infrastructure or lack thereof. Mining companies have a long history of developing infrastructure in resource-rich countries.

For other would-be investors (notably smaller companies), infrastructure presents a major challenge. Respondents stressed it was important for governments to formally develop and present their plans for the country's future development needs regarding infrastructure and to provide investors with the essential guarantees that infrastructure will be in place to support their projects.

3.2.7. Socioeconomic Agreements/Community Development Conditions

Respondents noted that, while the physical environment is often highly regulated, host countries typically have comparatively little to say with regards to socioeconomic issues and there is often no compliance mechanism even if community development is noted in negotiations. The noted exception was that compliance was an issue if socioeconomic issues were addressed through the mining codes. Some mining codes suggest a percentage of net profit be used for reinvestment in local communities impacted by mining developments. However, respondents noted that this tends to be discretionary implementation on the part of mining companies, although companies now tend to do more than is prescribed within their local communities as it is good social practice.

Respondents noted that it is critical that communities that are going to be impacted by a mining development project be part of the discussion process. They need to be engaged at the earliest stage of the discussion process; otherwise the negotiations that take place at a national-government level will simply not be acted upon or honored at a provincial or tribal level if they have not been engaged and if the project has not been supported by the community. Local residents and tribal structures need to understand how they stand to benefit from the project and how the relationship with the investing company will work going forward.

3.2.8. Political Stability

Political stability is a dominant factor in mining-investment decision making. The more unstable a country is, then the less of an appetite mining companies will have to enter that country for a project opportunity. Political instability interrupts and undermines project activity and makes it difficult to operate the business and project. Political instability is especially likely to deter the larger and more-reputable companies in the global mining sector.

3.2.9. Labor and an Educated Workforce

Respondents noted the importance of a clearly elaborated labour-regulation framework. An educated labour force was a common concern across respondents. However, some respondents noted that mining companies view part of their social licence to help local government with skills development and basic education to ensure future workforces are better educated and ready to work. In today's mining sector, it is important to have access to a workforce of qualified personnel who can contribute to the business, but it is not necessarily a showstopper in terms of the decision making process of investing in a new mining operation. Ultimately, educating and training the local workforce can be part of the social compact between the mine and the local community when investing in a new mining project.

3.2.10. Security

Security was a common concern. Respondents noted that their companies had poured a vast amount of money into ensuring security at their mining projects. Often the security issue is focused on the question of whether the company may use its own security as opposed to using existing security resources within the country in the location of the mining project. Respondents observed that security issues were more complex when the government is in a position to dictate that its security has to be brought in to protect the investment, as opposed to relying on the company's own security. The end result is that a country's soldiers often are used as security forces on mining projects. This adds another layer of complexity to ensuring the security of the investment on the part of the company.

Respondents reported that issues surrounding security are often central to the negotiation process, and that it requires a combination of goodwill at a national level, local partnerships, and support mechanisms, and they expressed a strong preference for private security combined with national security support. Any mining project has to be fundamentally safe (for moving people in and out, as well as equipment and material) to be workable and viable.

3.2.11. Corruption

Corruption is a key factor that impacts decision making regarding mining investments. An otherwise promising project might be rendered nonviable simply because the corrupt environment would put the project at the mercy of corrupt officials and local practices. Respondents noted that in countries that have experienced major conflict, many actors have no long-term vision and are constantly motivated by short-term, factional, or individual gain, hence the propensity for corrupt practice.

Respondents noted that corruption was a major concern for a company's reputation management. Companies listed on global exchanges cannot afford to have their and their executives' reputations tarnished by corruption. If a listed company steps out of line on this issue, it is isolated in terms of where it can operate in the world. Listed companies with a global reputation to protect tend not to operate in highly corrupt environments. Corruption is a barrier to positive mining-sector decision making as it impacts not only initial decision making as to whether projects are viable, but also the long-term sustainability of a project.

4. IMPLICATIONS FOR AFGHANISTAN

Our review of national indicators and survey of mining-industry experts yields several implications for Afghanistan:

4.1. Good Governance

Good governance is essential to supporting a mining sector that contributes to sustainable development and benefits the public. It is essential for providing clear lines of responsibility, oversight, and accountability. Good governance consists largely in reducing opportunities for corruption within the sector, and ensuring legal rights. This requires a system of contract law, and clear processes for arbitration. It also requires solid public-management practices as they pertain to the mining sector.

Transparent and clear rules reduce uncertainty. High-quality investors engage in long-term planning for large investments, and they place a high value on predictable rules in conducting their risk analysis.

High-quality investors place a high value on their reputation. Not out of personal ego, but because a reputation for honesty and fairness is a valuable brand identity. Our respondents all said that they wanted to protect the reputations of their companies and senior executives, from even the appearance of misbehavior (embarrassing associations, scandals, corrupt deals, etc.)

Corruption was a near-constant concern. Afghanistan has made good progress towards developing anti-corruption policies in recent years. It needs a clearly articulated plan for the mining sector that includes (1) a system wide approach to weed out corrupt figures (by, for example, protection for whistleblowers and even rewards for exposing corruption) and (2) reducing opportunities for corruption (by rationalizing the transactions required for doing business in the sector. Every interaction with a public creates an opportunity for corruption; for example, reducing the number of signatures and fees required to obtain a license by setting up "one-stop shopping" (efficiency gains are a bonus feature of this arrangement). Georgia effectively eliminated its once-pervasive petty corruption within a few years, largely by slashing the number of official transactions required to conduct business.

Clear articulation of governing responsibilities and jurisdiction over every matter that might affect a mining operation is especially important when a country has multiple tiers of government with fuzzy lines of jurisdiction and authority. Afghanistan is a particularly dire example of overlapping and redundant administrative districts.

4.2. Multi-Stakeholder Consultation

Multi-stakeholder dialogue and consultation is required to ensure that all stakeholders are given a fair voice. All stakeholders should also have access to the information necessary to fully participate in the consultation. Consultation with stakeholders who are affected by proposed mining operations should be a requirement of the permitting process. Engagement with affected communities (especially those in close proximity to the mines) allows the views of these communities to be expressed and taken into consideration in decision making. It also helps to improve the relationship with those communities.

All negotiations involving mining agreements and licenses should be held in light of national priorities and policy objectives, to identify how mining policy can best support these goals.

Our respondents all acknowledged the importance of a "social license." Everybody gains if there is a good working relationship between the mining companies, the local community, and all levels of government (and the public, because public perceptions filter into all of the above, ultimately public, entities). There is often a natural suspicion towards outside companies in the extractive-industry sector (in ways that manifest unproductively). Bringing in CSOs and other players can mitigate this antagonism. Managing these complex relationships is impossible without cross-stakeholder collaboration. All players need to be brought in early in the process if there is to be a true sense of ownership.

Our interviews suggested that introducing socioeconomic factors (for example, a profit handover) into the mining codes is a promising approach for ensuring that local communities benefit from mining operations (compliance with promises made during the initial stages of negotiations is otherwise difficult to monitor or enforce—there is usually no watchdog).

4.3. Transparency/Access to Information

This includes ongoing generation of information and access to information by members of the public and civil-society actors. Transparent and easy access to information gives wider access to participation in the mining sector and provides individuals with the knowledge they need to fully participate in dialogue related to mining policy and practices.

Transparent information should include data on taxes and royalties derived from mining, and how these funds have been distributed. Transparency in the distribution of funds is essential to ensuring that the financial benefits from mining are apportioned appropriately. It is in the interest of all stakeholders that revenue derived from mining be seen as supporting local and national priorities.

We heard repeated concerns about reputation management. Good companies often will not take on an otherwise appealing investment if they are concerned about knocks to their reputation. Perceptions (even if not true) can undermine reputations. Transparent processes help reassure companies that they will not fall prey to the appearance of impropriety. Again, Afghanistan's history of corruption underscores the importance of paying attention to transparent regulations, because assuming the worst has so often been the correct posture.

4.4. Environmental Stewardship

Good governance is essential to ensuring that consideration is given to environmental implications of mining and for supporting environmental stewardship. This requires clear policies regarding water management (clear standards for the use of surface and groundwater and mineeffluent streams that are routinely monitored, with clearly articulated penalties for noncompliance) and managing mine wastes.

Afghanistan has a dismal track record of environmental stewardship, with extensive deforestation and groundwater depletion, and habitat destruction from decades of armed conflict. This could be an opportunity to start moving in the right direction, with incentives for all stakeholders not to despoil the environment as mining and hydrocarbon extraction grow.

4.5. Closely Monitored Mining Codes and Standards

There should be periodic updating of mining codes and standards and, as more is learned regarding best practices in mining, mining codes and standards should be updated to reflect improvements in the state of knowledge.

Once again, concerns about corruption are at the fore. Afghanistan needs an efficient process for monitoring codes and standards that doesn't breed new opportunities for corruption. Mining codes should not be renegotiated with each transaction. Doing so creates uncertainties and opportunities for corruption that will undermine the sector's reputation, and it repels the stable, reputable companies that the country wants to attract.

4.6. Transparent Licensing/Permitting Process

License and permit applications should be reviewed in a timely manner. The process should be transparent, and applicants should be treated in a consistent fashion to ensure fairness and predictability.

Again, this is imperative for a country with a poor corruption history such as Afghanistan. Announcing a new, transparent licensing process that lays out a clear path to the license minimizes the opportunities for corruption.

4.7. Economic Policy

Taxes and royalties earned from mining should reflect a benefit to society and support sustainable development. To this end, a taxation and royalty scheme should be designed that optimizes the returns from mining operations. Financial codes and tax schemes need to be clearly articulated and transparent. Mining policy should clearly articulate a revenue-collection scheme and should be sensitive to achieving a balance between optimizing tax revenues and allowing mining operators to earn an adequate rate of return on investment. Tax policy should therefore take a long-term view on returns.

Our interviews suggest that larger, reputable companies are less concerned with tax rates than smaller companies (which are more concerned with cash flow). For larger companies, the mechanism is more important than the rate if the venture is lucrative. Again, predictability and clarity are highly valued, and promises of low taxes in shady business environment are not attractive lures.

4.8. A Final Thought

A century ago Norway was one of the poorest countries in Europe. Today it ranks among the top few countries (in many cases, number one) on every measure of prosperity—per capita income, human development, health, education, happiness, and governance. What is all the more remarkable is that this ascent to the top has been driven largely by exploitation of hydrocarbon resources, which account for more than half of Norway's exports. Remarkable because the resource curse is a well observed phenomenon in nearly all poor, extraction-dependent countries. In the worst instances, it breeds massive corruption, inequality, and social unrest, as in Nigeria or Uzbekistan. Even the milder cases of Dutch disease (as in Norway) are cause for concern (although Afghanistan should be so lucky as to suffer from Dutch disease).

The explanations for Norway's success are varied, and not likely to be easily adopted or implemented in Afghanistan (if Afghanistan's neighbors were to become Sweden and Finland, that could help). But central to the Norwegian story is a widely and deeply held intolerance for corruption, and a commitment to long-term planning. Even before the oil and gas industries were established, hydrocarbon reserves were defined as common-property resources. As such, the greater part of resource rents has been accrued to the government, which has put most of them into a sovereign-wealth fund, rather than current expenditures. The fund is managed by an independent central bank and is out of reach of politicians. And the government has firmly established ethical standards for the exploitation of natural resources for the benefits of the citizenry, current and future. While recognizing the vast differences between the two countries, the lessons of Norway's success are worth considering.

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