



Avoiding the “Resource Curse” in Mongolia

Theodore H. Moran

Theodore H. Moran, *nonresident senior fellow*, has been associated with the Peterson Institute for International Economics since 1998. He holds the Marcus Wallenberg Chair at the School of Foreign Service in Georgetown University. Since 2007 he has served as associate to the US National Intelligence Council on international business issues. His books include *Foreign Direct Investment and Development: Launching a Second Generation of Policy Research: Avoiding the Mistakes of the First, Reevaluating Policies for Developed and Developing Countries (2011)*, *China’s Strategy to Secure Natural Resources: Risks, Dangers, and Opportunities (2010)*, and *Three Threats: An Analytical Framework for the CFIUS Process (2009)*. *The analysis in this Policy Brief draws on Moran (2011) and Hendrix and Noland (2013, forthcoming).*

© Peterson Institute for International Economics. All rights reserved.

OVERVIEW

Mongolia is a parched, landlocked, and sparsely populated nation of nomads and few roads and railways. Located in north central Asia, the country is on the verge of an economic boom as foreign investors extract and exploit its rich deposits of natural resources, among them copper, gold, and coal. But the onset of a mining boom in Mongolia has also generated widespread concerns about the potential damage to traditional agriculture and the environment, the lack of infrastructure and water resources, and the dangers of increased economic inequality, inflation, fiscal instability, corruption, and lack of transparency.

The reelection of President Tsakhiagiin Elbegdorj on June 26, 2013 provides an opportunity to reassess how the country has fared in dealing with the mining boom and identify the best policy options to avoid the “resource curse,” which has caused

more harm than good in other countries seeking to use mineral revenues to provide economic and social benefits to their citizens.

To the outside observer, evidence suggests that Mongolia has been making progress on many fronts in managing the complex process of foreign investment–led mineral development. But challenges remain—from health and environmental issues to reducing inequality, ensuring transparency, and battling corruption. Of key importance is managing contractual relations with current and future international resource companies.

This Policy Brief surveys how Mongolia’s recent accomplishments appear to those abroad and investigates the most important considerations for President Elbegdorj as he begins his second term in Ulan Bator.

THE “RESOURCE CURSE” SETTING

Viewed from abroad, Mongolia is a promising test case on how massive investments in the extractive sector might enhance a country’s economic growth. But history shows that many resource-rich countries succumbed to the curse and failed in this effort.

In the annals of development literature, an abundant natural resource base was originally considered a valuable asset, and the arrival of foreign firms with capital and technology to invest in extractive industries offered the opportunity for rapid growth. In the contemporary period, the presence of oil, natural gas, gold, copper, coal, and other minerals is more likely to be characterized as a “curse,” with the interaction between foreign investors and local elites creating the potential for corruption, authoritarian rule, and environmental damage, plus lopsided growth due to “Dutch disease.”¹

1. Dutch disease is the negative impact on an economy of a natural resource boom (e.g., the discovery of large oil reserves), which gives rise to a sharp inflow of foreign currency. These inflows lead to currency appreciation, making the country’s other products less price competitive on the export market. It also leads to higher levels of cheap imports and can lead to deindustrialization as industries other than natural resource extraction are moved to cheaper locations. The origin of the phrase is the Dutch economic crisis of the 1960s following the discovery of North Sea natural gas. (Source: <http://lexicon.ft.com/Term?term=dutch-disease> [accessed on June 21, 2013]).

The history of foreign direct investment (FDI)—led exploitation of mineral resources in the Democratic Republic of the Congo and of oil in Nigeria, Angola, and Equatorial Guinea, among other countries, paints a vivid picture of misappropriation of extractive industry revenues (Shaxson 2007, Le Billon 2005, Bannon 2003). Corruption and lack of transparency have often been the norm, whether in family-run domination of revenues as in Equatorial Guinea or cascading levels of revenue diversion as in Nigeria, where more than \$1 billion has been lost each year until recently.

The issue is how the country can best manage its vast mineral deposits to promote broad social and economic development, while avoiding the pitfalls of the resource curse.

Looking at the historical record, Jeffrey Sachs and Andrew Warner (2001)—following in the tradition of Richard Auty (1994)—present gloomy findings of an aggregate nature, arguing that resource-rich countries tend to suffer from lower growth rates than other less well-endowed nations.

But such dismal outcomes are not inevitable.

Subsequent investigations point out that the Sachs-Warner-Auty low growth correlation is very sensitive to the time period chosen, and the database includes multiple examples of individual countries that have fared well.² The experiences of Chile, Botswana, Argentina, Colombia, Brazil, Indonesia, and Malaysia, for example—alongside Australia, Canada, Norway, Sweden, and the United States—document a positive contribution to the domestic economy and society from extraction of abundant natural resources, without the inevitable result of large-scale corruption and institutional failure.

In short, the evidence shows that there is no single outcome “associated with” FDI in extractive industries. Instead, the impact of FDI in natural resources can be quite positive, or extremely negative, depending up the policy framework of the host government and the broader institutional setting within which extractive FDI takes place.

Within this context, it is clear that Mongolia has already made remarkable progress on many fronts. The issue is how the country can best manage its vast mineral deposits to promote broad social and economic development, while avoiding the pitfalls of the resource curse.

2. See Hendrix and Noland (2013, forthcoming), Lederman and Maloney (2003), Wright and Czelusta (2004), and Stevens (2003).

THE MINING BOOM COMES TO MONGOLIA

Mongolia has traditionally been viewed as one of the most remote, impoverished, and backward countries in the world. It became a democracy only after the fall of communism nearly 25 years ago. Its population density is second only to Greenland’s. The country has a rich and romantic history of conquest going back to the days of Genghis Khan in the 13th century, but in recent years it has been mostly dependent on nomadic agriculture. The road network is relatively rudimentary; most roads are not paved. Only a single railway line crosses the country from Russia to China. Water is in short supply in the grasslands that surround the Gobi desert. Power supplies are often undependable.

FDI in the extractive sector began to climb steeply after 2000, reaching \$437 million in 2006 and passing \$1 billion in 2010³ (compared with a total GNP of some \$6 billion).

Two projects dominate the country’s middle-term horizon, with doubtless more to come—under the right conditions.

The first is the Oyu Tolgoi copper/gold deposit in south Gobi desert. In 2009, after six years of negotiations, the Mongolian government signed an investment agreement with Ivanhoe Mines (now called Turquoise Hill) of Canada, 51 percent of which is owned by Rio Tinto. Turquoise Hill owns 66 percent of Oyu Tolgoi and the Mongolian government owns the remaining 34 percent. Mining operations began in the first quarter of 2013, and exports are expected to ship in the second half. By the time this mine reaches full capacity of 450,000 tons of copper in 2017–18, its output may have equaled 3 percent of total world output. Investment required to ramp up to full capacity may climb to \$19 billion. Production at the mine is projected to represent as much as 34 percent of the entire Mongolian GDP.

The second massive project is Tavan Tolgoi, a coal formation also in south Gobi desert. Small amounts of coal have been mined there for some 45 years, with private Mongolian company Energy Resources LLC developing a small portion of the deposit. But in 2011 the Mongolian government began to consider foreign investors to join Erdenes Tavan Tolgoi, the state-owned coal company, in developing the east and west Tsankhi blocks. These blocks contain high-grade coking coal, used in making steel. Peabody Coal, Anglo American, Arcelor-Mittal, Vale, Shenhua Coal of China, and a group of Russian companies have expressed interest. Graeme Hancock, president of Anglo American in Mongolia, has said that the size of Tavan Tolgoi dwarfs other deposits and that they are looking at 20

3. Most of the data cited in this Policy Brief are from Isakova, Plekhanov, and Zettelmeyer (2012).

million tons a year from east Tsankhi and 20 million from west Tsankhi simultaneously.⁴

The mining boom in Mongolia has created enormous opportunities but has predictably brought large problems as well.

SIDE EFFECTS OF THE MINING BOOM

The onset of the mining boom has generated critical concerns about traditional agriculture, infrastructure, water, and the environment; increasing economic inequality; inflation and fiscal stability; and corruption and transparency.

Traditional Agriculture, Water, and Infrastructure

As the mining boom unfolds, approximately 40 percent of the population is still engaged in traditional agriculture, primarily animal husbandry, on the country's vast pasturelands. Herder families raise goats, sheep, cattle, horses, and camels for meat, milk, and wool. Cashmere from goats is the most profitable cash activity for herders. The scarcity of water and pasturelands in south Gobi desert limits herding near the Oyu Tolgoi copper/

The onset of the mining boom has generated critical concerns about traditional agriculture, infrastructure, water, and the environment; increasing economic inequality; inflation and fiscal stability; and corruption and transparency.

gold mine. Rio Tinto resettled 11 families with compensation that included costs of resettlement, a summer camp with a fence, a scholarship for one family member, and a job with the Oyu Tolgoi company for one family member (CEE Bankwatch Network 2011, 23). Ten of the resettled families have reported increased herd sizes. Two of the resettled families have complained, however, that the pumps they were given for new wells broke within a year.

There are some 600 to 700 herder families around the coal deposits in Tavan Tolgoi. Early investor Energy Resources claims to have resettled families according to best international practice (CEE Bankwatch Network 2011, 19). Two herders have expressed dissatisfaction with their resettlement, however. Many herder families remain around the coal town of Tsogtetsii, where

Energy Resources' mine is located. The town has also grown considerably with residents engaged in mining and infrastructure construction.

To cope with the disruption of traditional agriculture the Mongolian people have relied primarily on corporate social responsibility and public-private partnerships⁵ (and on government payments of mining revenues, as discussed later). Rio Tinto has built new schools and provided scholarships to members of herder families to study abroad as well as part-time employment that does not interfere with herding schedules. Wages (\$330 per month part time) compare favorably with national averages (\$400 per month full time). At Tavan Tolgoi, Energy Resources—in partnership with the European Bank for Reconstruction and Development (EBRD)—has constructed a school complex for 640 students, with a dormitory for 100, a water purification plant, a power plant, and a landfill for solid waste with a recycling plant (CEE Bankwatch Network 2011, 10).

In 2011 the Mongolian government created a state-owned development bank with a mandate to finance railroads, roads, power plants, and water supply. The inventory of possible projects is large by any standard. Mongolia scores 118 out of 142 countries in quality of infrastructure, as rated by the *Global Competitiveness Report 2011–2012* (in comparison, other countries with large mining sectors like Chile rank 41st, Peru 88th, and Botswana 92nd). The majority of roads are unpaved. The funding requirements for rail lines alone run in the multibillion dollar range, in comparison to Mongolian GDP of \$3 billion in 2010. The government guarantees the debt issued by the development bank, which is now a contingent liability that will have to be backed by future mining revenues.

Environment

Khanbogd is the town nearest to the Oyu Tolgoi mine site, with a population of some 35,000 people, 500 of whom are migrants. The head doctor in the Khanbogd hospital has reported a rise in respiratory illnesses caused by dust raised by traffic to and from the mine site, as well as construction (CEE Bankwatch Network 2011). The four doctors in the hospital indicate that they have very little capacity to make proper diagnoses or to monitor pollution and water and air quality. Health problems are complicated because the town does not yet have a sanitary service. Electric power is unreliable.

4. Michael Kohn, "Anglo Interested in Developing Mongolia's Tavan Tolgoi Coal Mine," Bloomberg, May 1, 2013.

5. Nina Wegner, "The Dark Side of Mongolia's Mineral Boom," *The Atlantic*, February 12, 2013. Available at www.theatlantic.com/international/archive/2013/02/the-dark-side-of-mongolias-mineral-boom/273079 (accessed on June 20, 2013).

In Tsogtsetsii, at the coal mining site of Energy Resources, the town administration also reports that it has no equipment or expertise for monitoring air quality or other impacts from the mine. Town leaders must rely on the company for monitoring data and instruction.

A coalition of civil society groups warns that much more study needs to be done about health impacts, water availability, species migration, and other issues to determine whether the proposed mitigation measures will be effective or sufficient (CEE Bankwatch Network 2011). An important issue is the insufficient discussion or consultation with the affected communities, which has resulted in insecurity and fears about the future. Moreover, these civil society groups warn that government institutions have limited capacity to ensure environmental protection. They report that local administrators and citizens feel marginalized in decision making on projects.

Income Inequality and the Human Development Fund

Historically inequality has been relatively moderate in Mongolia, as indicated by its Gini coefficient⁶ (Isakova, Plekhanov, and Zettelmeyer 2012). To keep the Gini coefficient from deteriorating as the mining boom takes hold, the Mongolian government established the Human Development Fund in 2009. The goal of the fund is to transfer a portion of natural resource revenues on an ongoing basis to the entire population. The fund gives out cash, pays tuition fees, and possibly engages in other social expenditures. In 2010 every citizen received two cash handouts equivalent to approximately \$90 per year. In 2011 cash handouts equaled about \$180 per year, with one-quarter in the form of tuition fee support.

Some concerns have been expressed about the impact of direct cash transfer programs (Isakova, Plekhanov, and Zettelmeyer 2012). But comparative studies from Latin America, Africa, and the United States (Alaska) suggest that direct resource transfer programs do not necessarily reduce the incentive to work if they are not means-tested (so taking a job, or taking a better job, does not reduce the benefit) and if they are separated from other social safety net programs. In Alaska, for example, only 1 percent of those surveyed after the launch of the Permanent Fund Dividend program reported that they worked less because of the dividend. In Mexico, Progresca cash transfers, which were conditional on enrollment of children in school and family participation in health care, produced no adverse effects on employment. In a country like Mongolia,

linking cash transfers to mining industry profits, which are then taxed by the government, would increase extractive industry productivity and transparency and reduce corruption.

The Human Development Fund has been funded by prepayment of future royalties by Rio Tinto, which will be combined with actual royalty payments when/if actual copper and gold production starts.

Inflation and Fiscal Stability

This Policy Brief does not aim to offer a comprehensive review of macroeconomic policy in Mongolia. But here, as elsewhere, the country seems to be taking solid steps in the appropriate direction (IMF 2012). The Fiscal Stability Law sets a cap on public debt of 40 percent of GDP and ceiling on annual expenditure growth, along with provisions for transparency on budgeting. Most importantly, it provides for the establishment of a fiscal stabilization fund to accumulate “excess” mineral-related revenues for later use when/if commodity prices fall. The aim is to reduce macroeconomic volatility. When deployed along with countercyclical fiscal policy, the stabilization fund can reduce pressures on the exchange rate to appreciate and help maintain the competitiveness of the economy.

The Dutch disease may be of relatively less concern to Mongolia in comparison to some other states given the modest size of its manufacturing sector going into the mining boom (Isakova, Plekhanov, and Zettelmeyer 2012). In 2009, Mongolian manufacturing accounted for approximately 4 percent of GDP and 6 percent of employment, with food processing accounting for roughly half. Nonetheless, the growth of natural resource exports may make it difficult to develop nonresource sectors or to diversify the economy. Here the Development Bank of Mongolia, a for-profit independent development institution with a capital base contributed by the state, may be helpful. An early initiative is the creation of an industrial park in Sainshand, a town in the south along the Ulan Bator–Beijing rail line, with projects focusing on natural resource processing and production of construction materials.

Once again the ongoing generation of mineral revenues offers solutions to the problems emerging from mining-based development.

Corruption and Transparency

According to the World Bank’s Worldwide Governance Indicators, Mongolia enjoyed relatively strong institutions as it entered the resource boom, scoring well above resource-intensive counterparts in the former Soviet Union. The country has a

6. The Gini coefficient is a measure of a country’s income distribution. It ranges from 0 (complete equality) to 1 (complete inequality).

multiparty democracy, a free press, and a growing array of non-governmental institutions. The parliamentary elections of 2012 scored high marks among external observers and monitors.

To ensure transparency and accountability, in 2007 Mongolia joined the Extractive Industry Transparency Initiative (EITI), an Oslo-based voluntary nongovernmental organization.⁷ The country achieved certification of full compliance in 2010. Shar Tsolmon is the independent indigenous auditor and reconciler of accounts.

Supported by most Organization for Economic Cooperation and Development (OECD) states, EITI comprises more than 70 of the largest international resource investors, 37 states seeking EITI certification, and a multitude of civil society organizations, most notably the Publish What You Pay Coalition and Resource Watch. Its operating principle is that investors in the oil, gas, and mining industry publish all payments they make in any given country and host governments publish all payments they receive, in a form that can be understood, examined, and reconciled by independent authors, citizens, and parliamentarians. A World Bank Trust Fund helps fund capacity building among host officials, legislators, and local civil society entities so as to acquire the financial and accounting skills needed to reconcile revenues paid and received. Discrepancies would guide investigations into corruption.

Apart from EITI compliance, Transparency International's Corruption Perceptions Index shows that Mongolia has improved substantially in fighting corruption, especially corruption involving state officials. The index ranked Mongolia 98 out of 174 in 2012, a significant improvement from 2011, when it ranked 120 out of 182. Mongolia is not fighting corruption by simply writing tough laws; enforcement is taking place as well. In August 2012 former president Nambaryn Enkhbayar was sentenced to four years in prison after being found guilty of graft changes. Earlier in the same year, former chairman of the Mineral Resources Authority D. Batkhuyag was sentenced to six and a half years in jail for illegally issuing mining licenses.

Looking Forward

The challenge for Mongolia is to channel revenues from the mining boom into offsetting the undesirable side effects of the boom. The massive revenues that the state will receive once Oyu Tolgoi moves into production of copper and gold—and as Tavan Tolgoi begins to export coal from east and west Tsankhi blocks—provide the resources for dealing with infrastructure and power needs, education expansion, Human Development

Fund payments and tuition support, herder relocation, and environmental protection. At the same time, the political leadership, congressional representative, civil society, and citizenry at large will want to perfect the EITI-backed monitoring of revenue payments and receipts so as to guard against corruption.

RESOURCE NATIONALISM AND CONTRACT STABILITY IN MONGOLIA

Questions, criticisms, and uncertainties have begun to plague both Tavan Tolgoi and Oyu Tolgoi megaprojects. Public debate about possible revisions to the nation's basic Minerals Law have included the desire for Mongolian state ownership (including, perhaps, free equity), higher tax rates (including, perhaps, an escalating royalty structure), and limitations on participation by state-owned resource investors.

With regard to foreign investments in the coal sector, the Aluminum Corporation of China (Chalco) launched a bid of \$938 million in April 2012 to buy a majority stake in a Mongolian coal mine, Ovoot Tolgoi, from SouthGobi Resources. One month later, the Mongolian government passed a law entitled the Strategic Entities Foreign Investment Law that required the parliament to review bids for more than 49 percent ownership by private companies and state-owned enterprises in Mongolian natural resource projects (as well as projects in two other sectors). Citing the new law, Chalco withdrew its offer for SouthGobi Resources.

Shortly after Chalco's withdrawal from the coal sector, 23 members of the newly elected parliament in Mongolia petitioned the government to renegotiate the investment agreement with Rio Tinto for Oyu Tolgoi in the copper/gold sector. President Elbegdorj, stated that the government would maintain the agreement it made with Rio Tinto in 2009 and not open the project up for renegotiation. The government then resolved to defer any further debate on possible revisions to the nation's basic Minerals Law until after presidential elections in June 2013.

Early in 2013, however, Rio Tinto pointed out that the royalty expectations that underpinned the government's fiscal budget did not conform to the investment agreement signed in 2009.⁸ The company issued a statement stating "in its proposed 2013 budget, the Government of Mongolia has included revenue from the application of a progressive royalty scheme to Oyu Tolgoi. However, the Investment Agreement provides a stabilized royalty rate of 5 per cent over the life of the agree-

7. Extractive Industry Transparency Initiative (EITI), <http://eiti.org> (accessed on May 17, 2013).

8. Christopher Donville, Todd Baer, and Yuriy Humber, "Rio Said to Consider Halt at Biggest Mongolia Copper Mine," Bloomberg, January 31, 2013; Peter Ker, "Rio's Mongolia mine hits another hurdle," *Sydney Morning Herald*, March 26, 2013.

ment and specifies that new laws made after its signing will not apply to Oyu Tolgoi. Any change to Oyu Tolgoi's royalty rate would require the agreement of all parties to the Investment Agreement." Rio Tinto let it be known that it was considering temporarily halting construction work at Oyu Tolgoi. Measures of investor confidence in Mongolia dropped as did FDI flows themselves.

Reputational Risk for Host Governments that Engage in Arbitrary Revision of Mining Agreements

Many of the reconsiderations on the part of Mongolian legislators and citizens about how future mining agreements might be structured are well worthy of discussion.

For example, national governments around the world—including Australia, Canada, and the United States—frequently review acquisitions or investments by foreign state-owned natural resource companies. Best practice, however, is to have such reviews done by public-sector agencies carefully insulated from impulsive congressional or parliamentary pressures. It is commonly accepted that there is nothing inappropriate about the principle of such review.

Also, many countries have investigated the pros and cons of negotiating royalty escalation taxes or excess-profits taxes with foreign investors. Mongolia may want to ask an independent institution such as the World Bank to provide a review of host-country experiences with such progressive tax structures. The new government may want to be wary about the impact on investment promotion, however, if the medium-term outlook for commodity prices is not as strong as has been the case in the recent past.

The situation is different with regard to arbitrary ex post revision of investment agreements and mining contracts that have already been signed in good faith by all parties.

Investors of all kinds hope and expect that legal contracts signed without trickery or duress will be observed and enforced. But national resource investors are particularly sensitive to what Harvard Business School Professor Raymond Vernon labeled the "obsolescing bargain" in which host governments change the terms under which the companies operate once the projects start production.⁹ International companies in the extractive sector invariably have to sink large amounts of fixed capital—hundreds of millions or billions of dollars—into mines or oil wells that require long periods to recover costs. Once committed, they cannot credibly threaten to withdraw. They do not have the bargaining device of delaying or withholding rapidly changing technology as many manufacturing companies do if

they do not like how they are treated. They are easily subjected to what business school literature refers to as "the hostage effect" or what economics literature refers to as "hold up."

As a result, international natural resource companies are more than usually alert to the possibility that host governments might arbitrarily change the mining agreements after they have been signed, even if such changes are ostensibly rather small. This leads to large "reputational risk" for countries that engage in such ex post contractual changes. Mining and energy companies will refuse to consider committing large amounts of capital even if the projects under consideration are quite appealing on a commercial basis.

Indeed, even the possibility of contractual changes has a disproportionately large impact on the investment decision making process. Advances in the analysis of investment strategies under conditions of irreversibility have formalized how to understand why this is so.

To understand these new analytical advances, it is helpful to review how today's sophisticated models of the investment decision making process differ from traditional approaches (Pindyck 2009, Dixit and Pindyck 1994). Conventional investment decision models focus exclusively on assessing the net present value of revenue streams from the investment adjusted for the risk of the project. Contemporary perspectives on investment decision making under uncertainty show that the conventional approach is inadequate when large fixed costs are involved and the regulatory regime surrounding a given project is subject to possible change. The conventional investment decision model implicitly assumes total reversibility of making the investment and ignores the value of waiting to gain more information (and thus reduce uncertainty). The more sophisticated contemporary models introduce the concept of irreversibility and the positive value to the investor of waiting to gain more information.

The existence of sunk costs, which cannot be recouped if the firm regrets having made the investment, weighs upon the investment decision, as does the value of waiting, since such delay may allow the firm to gain a clearer idea of the likelihood of contractual changes. The opportunity to invest can be evaluated as a call option. To invest is to exercise the option and should rationally be done only when the payoff is larger than the value of waiting for more information. As a result, the calculus of whether to move ahead on an investment has to surmount more stringent barriers than the naïve net present value would indicate. Robert Pindyck and Avinash Dixit (1994) show that in such circumstances, international natural resource companies will use hurdle rates that are an order of magnitude or more greater than the opportunity cost of capital.

Thus Mongolia may suffer a rather large negative impact on mining investment if it were to go ahead with arbitrary

9. For a review of literature on the "obsolescing bargain," see Moran (2011).

changes to signed contracts. The resulting disincentive to make further natural resource investments would apply to new greenfield projects, development of the massive coal deposits at Tavan Tolgoi, and also the incremental expansions of Phases II and III at Oyu Tolgoi—“incremental” in name only since these expansions are of such large magnitude. The new administration should recognize that—given resource company experience with the “obsolescing bargain” around the world—even one instance of arbitrarily changing the terms of a valid mining agreement will cast a long shadow over further investment in Mongolia for years to come.

**Mongolia may suffer a rather large
negative impact on mining investment
if it were to go ahead with arbitrary
changes to signed contracts.**

Moreover—even in the short run—it is not at all clear that such a maneuver would be successful in any case, since Rio Tinto would almost surely appeal to the dispute settlement procedures of the Bilateral Investment Treaty (BIT) between Mongolia and the United Kingdom. The Mongolia-UK BIT stipulates that investment disputes be adjudicated under the procedures of the International Centre for Settlement of Investment Disputes (ICSID). Unless Rio Tinto could be shown to have behaved improperly in acquiring its right to invest in Mongolia, it is almost certain that ICSID arbitrators would rule in favor of the company. Mongolia’s investment reputation would thus diminish.

Finally, in the court of public opinion in international business circles, there would be not much sympathy for the country’s tightening of the contract, since Rio Tinto has already taken the extraordinary step of giving up \$150 million in pre-production royalty payments to finance Human Development Fund payouts to citizens. It is highly unusual for international companies to make payments to a host government before production has begun, costs have been recovered, or profits have been generated.

CONCLUSION

After the bustle of the presidential elections on June 26, 2013, the reelected President Elbegdorj will doubtless want to take some time to quietly review the country’s past efforts to deal with the mining boom and to assess what the best path is going forward. As he begins his second term, the president can

congratulate himself and his colleagues on the many steps the country has already taken along lines of best practices around the world.

His new administration should maintain the constraints on expenditure growth as laid out—with help from the IMF—in the Fiscal Stability Law. Within these constraints, however, a priority should be to build regional and municipal capacity to monitor environmental standards and take appropriate and timely action when needed. International donors like the EBRD and the World Bank can also help with this capacity building to protect the environment. In his second term, President Elbegdorj should institutionalize the program of modest direct cash transfers—and tuition fee support—from the Human Development Fund.

As for the treatment of the mining sector, the newly elected administration should encourage current and future investors in copper/gold and coal to more proactively engage the local communities in discussions of upcoming operational plans.

Finally, President Elbegdorj should ensure that mining investment continues to be the engine for broader economic and social development across the country. In his previous term, the president stated on multiple occasions that Mongolia’s best course lies in *not* arbitrarily rewriting the investment contract at Oyu Tolgoi. The analysis presented here indicates that Mongolian interests will be best served if he now reaffirms this stance as his second administration gets under way.

REFERENCES

- Auty, Richard M. 1994. *Patterns of Development: Resources, Policy and Economic Growth*. London: Edward Arnold.
- Bannon, Ian. 2003. *Natural Resources and Violent Conflict: Options and Actions*. Washington: World Bank.
- CEE Bankwatch Network. 2011. *Spirited Away: Mongolia’s Mining Boom and the People that Development Left Behind*. Report of Fact-Finding Mission to Mongolia Organized by CEE Bankwatch Network, urgewald (Germany), Bank Information Center (USA), and Oyu Tolgoi Watch (Mongolia). Available at <http://bankwatch.org/sites/default/files/spirited-away-mongolia-mining.pdf> (accessed on June 20, 2013).
- Dixit, Avinash K., and Robert S. Pindyck. 1994. *Investment under Uncertainty*. Princeton, NJ: Princeton University Press.
- Hendrix, Cullen, and Marcus Noland. 2013 (forthcoming). *Resource Curse Challenges for US Foreign Policy*. Washington: Peterson Institute for International Economics.
- IMF (International Monetary Fund). 2012. *Mongolia: Second Post-Program Monitoring Discussions*. Washington.
- Isakova, Asel, Alexander Plekhanov, and Jeromin Zettelmeyer. 2012. *Managing Mongolia’s Resource Boom*. Working Paper 138. London: European Bank for Reconstruction and Development.

- Le Billon, Philippe. 2005. *Fuelling War: Natural Resources and Armed Conflicts*. New York: Routledge for the International Institute for Strategic Studies.
- Lederman, Daniel, and William Maloney. 2003. *Trade Structure and Growth*. World Bank Working Paper 3025 (November). Washington: World Bank.
- Moran, Theodore H. 2011. *Foreign Direct Investment and Development: Launching a Second Generation of Policy Research, Avoiding the Mistakes of the First, Reevaluating Policies for Developed and Developing Countries*. Washington: Peterson Institute for International Economics.
- Pindyck, Robert. 2009. *Sunk Costs and Risk-Based Barriers to Entry*. NBER Working Paper 14755 (February 13). Cambridge, MA: National Bureau of Economic Research.
- Sachs, Jeffrey D., and Andrew M. Warner. 2001. Natural Resources and Economic Development: The Curse of Natural Resources. *European Economic Review* 45: 827–38.
- Shaxson, Nicholas. 2007. *Poisoned Wells: the Dirty Politics of African Oil*. New York: Palgrave MacMillan.
- Stevens, Paul. 2003. Resource Impact: Curse or Blessing? A Literature Survey. *Journal of Energy Literature* 9, no. 1: 3–42.
- Wright, Gavin, and Jesse Czelusta. 2004. The Myth of the Resource Curse. *Challenge* 47, no. 2: 6–38.

This publication has been subjected to a prepublication peer review intended to ensure analytical quality. The views expressed are those of the author. This publication is part of the overall program of the Peterson Institute for International Economics, as endorsed by its Board of Directors, but it does not necessarily reflect the views of individual members of the Board or of the Institute's staff or management. The Institute is an independent, private, nonprofit institution for rigorous, intellectually honest study and open discussion of international economic policy. Its work is made possible by financial support from a highly diverse group of philanthropic foundations, private corporations, and interested individuals, as well as by income on its capital fund. For a list of Institute supporters, please see www.piie.com/supporters.cfm.