



WORLD GROWTH  
MONGOLIA



Дэлхийн Өсөлт  
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# An Analysis of Concerns about the Draft Agreement To Undertake the Oyu Tolgoi Mining Project

A Research and Analysis Report by Dr. Robert Shapiro  
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## About the Author

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# An Analysis of Concerns about the Draft Agreement To Undertake the Oyu Tolgoi Mining Project<sup>1</sup>

## I. Executive Summary

On February 18, 2009, the Mongolian Government Cabinet and two international mining companies, Ivanhoe Mines, Ltd. and Rio Tinto International Holdings, Limited, finalized a new draft agreement to develop the Oyu Tolgoi mine. We have reviewed the draft agreement and the concerns of Mongolian analysts, policymakers and civic society NGOs, and conclude that the concerns are largely misplaced or substantially outweighed by the very substantial benefits which this agreement offers Mongolia's economy and people.

We have carefully examined the terms of this agreement. While all parties may consider certain provisions less than ideal, as is normal for such a complex undertaking, the agreement in its totality with concessions from both sides effectively protects the essential interests of the Mongolian government, its citizens, and international investors in Mongolia. In our judgment, the final agreement should be ratified promptly. Its rapid implementation is particularly important as the global economy struggles with the current severe worldwide recession and depressed domestic economic conditions, which Mongolia could better weather by proceeding with construction and the eventual operation of the Oyu Tolgoi project. Continued uncertainty and further delays could impose large costs on Mongolia's economic prospects and development.

As demonstrated by the analysis which we prepared earlier this year,<sup>2</sup> the stakes in promptly reaching a final agreement are large. Mining development drives much of Mongolia's economic growth: From 1996 to 2007, mining's share of Mongolia's GDP expanded from 10 percent to 25 percent. Further, the mining sector's leading economic role will further expand once the State Great Hural approves the Oyu Tolgoi project as well as five other proposed new mining operations. Our research found that these projects would produce \$5.7 billion in new foreign direct investment in

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Mongolia. The analysis further found that over the next 22 years, these investments would generate a broad range of substantial benefits:

- Increases in GDP averaging \$1.5 billion per-year, or equivalent to a 38 percent increase in the country's 2007 GDP;
- Employment gains for Mongolians of more than 2,000 full-time jobs per-year;
- Increases in exports averaging \$2.5 billion per-year, equivalent to a 125 percent increase in the country's 2007 exports; and
- Increases in government revenues of at least \$385 million per-year, equivalent to a 24 percent expansion in the government's 2007 revenues.

Such momentous negotiations and agreements typically produce considerable criticism, and that is certainly the case here. We have reviewed these concerns and criticisms, including critical analysis presented by

<sup>1</sup> The research for this analysis received support from World Growth Mongolia.

<sup>2</sup> Robert J. Shapiro, "Economic Modernization in Mongolia: The Impact of Tax and Regulatory Policies on the Mining Sector," World Growth Mongolia, January 2009.

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certain NGOs as well as other concerns expressed within the State Great Hural. These concerns include the following provisions of the agreement: 1) Assurance of a stable tax environment; 2) an exemption from the windfall profits tax; 3) a 29.9 percent threshold level for the resource rent payment tax; 4) the 9.9 percent real interest rate paid to the Investors for the Government's deferred payment for its 34 percent equity share; 5) the interest rate for the Investors' pre-payments of taxes; 6) the level of the Investors'

management fees; 7) the duration of the Investors' mining license or "special permit" to operate Oyu Tolgoi; and 8) the necessity of a detailed feasibility study before the agreement is finalized.

We respect these concerns. Therefore, we are pleased to be able to assure members of the State Great Hural and the local NGO community that by industry and financial market standards, these provisions are fair and appropriate.

## II. Concerns About Taxes

One concern involves the Government's commitment to maintain a stable tax environment for the Investors over the project's expected operational lifespan. The analysis of a local NGO notes that "current [Mongolian] law permits stabilization of taxes." Nonetheless, it questions the scope of the stabilization and its 30-year span, writing that "neither existing law nor experience elsewhere supports such sweeping stabilization." The World Bank, however, reports that such arrangements are common in mining agreements:

As a matter of international best practice, the fundamentals of the tax package should be codified and set in the mining or tax legislation. This has been done in developed countries or those with large mining industries, such as Australia, Canada, Chile, and South Africa. In reality, when companies invest in developing countries, most will require, and governments are prepared to grant, tax stabilization or special mining development agreements. Tax stabilization agreements usually freeze, for a defined period of time, the types of taxes payable, the company's tax rates, and their method of calculation, as set out in the statutory law at a particular point in time.<sup>3</sup>

The extent of the tax stabilization agreed to by the Government and the Investors extends to the taxes which affect the project's returns, in line with other mining agreements approved by governments in such diverse places as South Africa, Peru, and Indonesia. Further, the 30-year term for this stabilization for the Oyu Tolgoi project reflects only a portion of its purported operational lifespan. A stable and certain tax burden is a necessary element for international investors such as Ivanhoe and Rio Tinto, who seek to ensure that their \$5 billion investment will produce competitive, post-tax returns. For a project such as Oyu Tolgoi, tax stabilization provisions have value only if they cover the project's lifetime and the taxes covering its' products or other activities. Since the Mongolian Ministry of Minerals and Energy has estimated a 40-year lifespan for the Oyu Tolgoi project, the 30-year span for tax stabilization actually represents a concession by the Investors. Moreover, the agreement

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includes a 20-year extension of the 30-year license, which would extend operations beyond the tax stabilization period. The concerns about the duration of the stabilization provision appear to be essentially an objection to an effective tax stabilization program for the project. The absence of such provisions, however, would be contrary to the settled international practice recognized by the World Bank and could preclude the development of Oyu Tolgoi.

The NGO criticism also notes an issue with the exemption from Mongolia's windfalls profits tax on copper and gold. Analysis provided by the NGO community notes that in exchange for the Government's granting this exemption, the Investors have agreed to provide the Government a 34 percent ownership share in the project at the same price the Investors have paid for their interest. They also agreed to study the possibility of constructing a major new copper smelting operation in Mongolia that could refine 40 percent of the copper mined in Mongolia. Apart from the large benefits for Mongolia conferred by the Investors' concessions on the terms of the Government's equity stake and perhaps the copper smelting operation, the exemption merely aligns Mongolia with general international practice, including the practice in other countries competing for investment by Ivanhoe and Rio Tinto.

The restoration of this tax could make the project economically unviable for the Investors or other international mining companies. Mongolia's 68 percent windfall profits tax on copper and gold is already the world's highest windfall profits levy. In addition, the International Monetary Fund reports that with this tax, the marginal effective tax rate on the production and sales of copper and gold in Mongolia would reach

<sup>3</sup> Otto, James, Cawood; Fred, Doggett, Michael; Andrews, Craig; Tilton, John; Guj, Pietro; and Stermole, Frank. *Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society*, World Bank Publications, 2006.

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**Many of these taxes already are much higher than those applied to mining operations in other countries. For example, Mongolian commentators have suggested raising the royalty rate on mining from its' current 5 percent level to 7 percent or 7.15 percent, arguing that many other countries apply high rates. This is incorrect.**

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80.8 percent, the world's highest level.<sup>4</sup> This level far exceeds the effective marginal tax rates on gold and copper production and sales in other countries with windfall-profits taxes, such as Peru at 34.3 percent (and a 8 percent windfall profits tax) or Zambia at 72.0 percent (with a 50 percent windfall profits tax).

In lieu of a windfall profits tax, the Investors agreed to the implementation of a resource rent payment system covering the Oyu Tolgoi project. Under the agreement,

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the payments would apply to returns that exceed a threshold rate of 29.9 percent, adjusted for annual U.S. inflation, in each tax year. Under the agreement, the Investors' total tax payments, including resource rent payments, cannot exceed 68 percent of the Investors' taxable income from the project. Concerns have been expressed, however, that under the 29.9 percent threshold, the resource rent payment system will not generate any significant revenues.

As noted in our previous analysis prepared for World

Growth Mongolia, most economic analyses of this issue have found that resource rent payment systems and other windfall profits taxes typically produce little revenue and often have adverse economic effects.<sup>5</sup> For example, the U.S. Congress found that a 1980 windfall profits tax on oil sales raised little revenue and discouraged domestic oil exploration and production.<sup>6</sup> A recent resource rent payment system applied in Australia also has produced disappointing results.<sup>7</sup>

As it is, the Investors are liable for seven other separate taxes: Corporate income tax, customs duties, the value-added tax, excise taxes, mining royalties (which at a 5 percent gross royalty rate is the highest in the world), property taxes, and the special permit fee for mineral exploration. Many of these taxes already are much higher than those applied to mining operations in other countries. For example, Mongolian commentators have suggested raising the royalty rate on mining from its' current 5 percent level to 7 percent or 7.15 percent, arguing that many other countries apply high rates. This is incorrect. While Mongolia recently raised its royalty rate from 2.5 percent to 5.0 percent,<sup>8</sup> other countries seeking to attract foreign direct investment in mining have reduced their rates to 3 percent or less, or eliminated them entirely.<sup>9</sup> Further, Mongolia already has the world's highest overall effective tax rate on mining investments. Under current law, Mongolia's overall rate on these investments is 67.9 percent, much higher than the effective rates applied in other mining-

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4 International Monetary Fund, "Mongolia: Selected Issues and Statistical Appendix, Country Report No. 08/201, 2008, <http://www.imf.org/external/pubs/ft/scr/2008/cr08201.pdf>.

5 For a summary of this literature as it pertains to the United States, see Shapiro, Robert J., and Pham, Nam D. "The Economic Impact of a Windfall Profits Tax for Savers and Shareholders," 2005, [http://www.sonecon.com/docs/studies/windfall\\_1105.pdf](http://www.sonecon.com/docs/studies/windfall_1105.pdf).

6 Lazzari, Salvatori, "The Windfall profits Tax on Crude Oil: An Overview of the Issues, Congressional Research Service Report to Congress, September 12, 1990.

7 Rodgers, Trudi, "Resource Rent Mechanisms in Australian Primary Industries: Some Observations and Issues," paper presented at the 51st Annual Conference of the Australian Agricultural and Resource Economics Society, 2007.

8 World Bank, "Country Economic Memorandum - Mongolia Sources of Growth," <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/MONGOLIAEXTN/0,,contentMDK:21487082-pagePK:141137-piPK:141127-theSitePK:327708,00.html>.

9 Otto, James, "Competitive Position of Mongolia's Mineral Sector System: The Case of a Model Copper Mine, <http://www.bcmongolia.org/images/Articles-Reports-Mongolia/mongoliareport2008final.pdf>.

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intensive countries, such as 36.4 percent in Australia and 41.7 percent in China.<sup>10</sup> As noted above, Mongolia also already applies the world's highest marginal tax rate on sales of gold and copper, at 80.8 percent.

Even higher taxes would produce modest, if any, additional revenues. For one, the Government itself is a strategic investor in the Oyu Tolgoi project with a 34 percent equity share, so additional taxes would also

reduce the Government's equity-related payments. Applying additional tax burdens to mining in Mongolia also might preclude future foreign direct investment, ultimately reducing Mongolian tax revenues in the future. We conclude that it would be highly inadvisable for the Mongolian Government or the State Great Hural to attempt to apply higher resource rent payments, royalty rates or other new higher taxes to the project.

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<sup>10</sup> Otto, James, *op. cit.*



### III. Concerns About the Terms of Mongolia's Equity Share

Under the agreement, the Mongolian Government will purchase a 34 percent equity share in the Oyu Tolgoi project, and the Investors will lend the Government the funds to purchase this equity at 9.9 percent interest rate adjusted for inflation, measured by the U.S. Consumer Price Index. Some commentators have expressed concerns that this interest rate is too high. Our analysis finds, however, that this rate represents a normal and appropriate level for both borrowing by the Mongolian Government and lending for such a project.

For example, the Mongolian government currently pays about 15.6 percent interest on its long-term bonds,<sup>11</sup> and the IMF expects prices in Mongolia to increase at an annual rate of 5.0 percent to 5.5 percent in coming years.<sup>12</sup> Therefore, the Mongolian government expects to pay its other lenders real annual interest of 10.1 percent to 10.6 percent, higher than the Investors' 9.9 percent real interest rate under the agreement.

The Investors' 9.9 percent real interest rate is also consistent with the returns they could earn in alternative investments. Financial analysts make these comparisons for U.S. and global companies using the returns for the S&P 500, a value-weighted index of 500 large cap companies.<sup>13</sup> Since the Oyu Tolgoi project is expected to produce returns for 30 years or more, we use the average 30-year nominal and real returns for the S&P 500 over the period 1980-2008, which are 10.8 percent and 7.0 percent, respectively. Therefore, the Investors will receive a real risk premium of 2.9 percent (9.9 percent – 7 percent) for its loans to the Government for the Oyu Tolgoi project, a fair measure of the additional risk involved in lending for mining in Mongolia, compared to investing in U.S. blue chips stocks.

The 9.9 percent real rate is also appropriate based on historical risk premiums for investments in the United States. The real return on U.S. Treasury bonds, the international standard for risk-free investment, is 4.0 percent over the last 30 years. The historical risk pre-

mium for large and small U.S. stocks is estimated, respectively, at 4.85 percent and 10.04 percent in nominal terms, or 2.35 percent and 7.54 percent in real terms. The long-term real return from U.S. stocks, therefore, ranges from 6.35 percent (4.0 + 2.35) to 11.54 percent (4.0 + 7.54), or an average of 8.945 percent. Therefore, the 9.9 percent real rate of interest earned by the Investors for their loan to the Government is only marginally greater than the real returns for investing in U.S. equities, despite the substantially greater risks of investing in Mongolia's mining sector.

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11 Enkhbold, Ganbat and Bolormaa, Jalbaa, "Bond Market in Mongolia: Current Status and Legal Issues," United Nations Economic and Social Commission for Asia and the Pacific, 2008, [http://www.unescap.org/pdd/projects/bondmkt/10\\_Mongolia\\_current\\_status\\_legal.pdf](http://www.unescap.org/pdd/projects/bondmkt/10_Mongolia_current_status_legal.pdf).

12 International Monetary Funds, "Mongolia: 2008 Article IV Consultation—Staff Report," Public Information Notice on the Executive Board Discussion, and Statement by the Executive Director for Mongolia," 2008, <http://www.imf.org/external/pubs/ft/scr/2008/cr08200.pdf>.

13 Since Oyu Tolgoi is expected to be one of the world largest mining projects, we use the S&P 500 index for large, blue chip stocks for the comparison. Using the long-term returns of other broad, equity indices, however, does not change the results of the analysis.



#### IV. Other Financial Concerns About the Agreement

The interest rate set under the agreement also affects another provision of the agreement, under which the Investors agree to prepay the Mongolian government \$125 million for future tax liabilities in three tranches: \$25 million at no interest, and two payments of \$50 million each at the 9.9 percent real interest rate. The average interest rate on all of these payments, therefore, is 7.92 percent. This interest rate is actually less than would be considered appropriate from a financial perspective. The prepayments represent a loan to the

ling, cooperating and scheduling all aspects of the project, including exploration, engineering design, construction, operations, and more. For comparison, we surveyed the general administrative costs for large and small U.S. mining companies reported to the U.S. Securities and Exchange Commission.<sup>14</sup> The general administrative expenses of large U.S. mining companies (sales of \$1 billion or more) equal about 6.4 percent of total expenses, while those of smaller mining companies equal about 9.1 percent of expenses. The 3 percent and 6 percent management fees which the investors receive under the agreement, therefore, are less than the industry standard.

**The interest rate which the Investors will receive under the prepayment provisions, therefore, is considerably less than the rate which the Government pays other lenders. Moreover, these prepayments represent an additional risk for the Investors not reflected in the interest rate, should the project encounter serious problems and the future tax liabilities which they prepay not occur.**

Government, similar to its issuing bonds. As noted above, the Mongolian government currently pays 15.6 percent annual interest (nominal) on its long-term bonds, and its expected real interest rate on future bonds is expected to range from 10.1 percent to 10.6 percent. The interest rate which the Investors will receive under the prepayment provisions, therefore, is considerably less than the rate which the Government pays other lenders. Moreover, these prepayments represent an additional risk for the Investors not reflected in the interest rate, should the project encounter serious problems and the future tax liabilities which they prepay not occur.

Concerns have also been expressed within the State Great Hural about the management fees paid to the Investors under the agreement. These fees are equal to 3 percent of the project's capital and operating costs from the effective date of the agreement to the beginning of production, and 6 percent of capital and operating costs after production commences. These fees cover the expenses entailed in managing, control-

<sup>14</sup> WorldScope database.



## V. Additional Concerns about the Agreement

Concerns have also been expressed from within the State Great Hural and from the Ulaanbaatar NGO community that the duration of the Investors' license to operate the Oyu Tolgoi project is too long: The agreement grants the Investors an initial 30-year license with provision for an additional 20-year extension. This time period appears to be appropriate and fair. The Government's previous evaluation found that Oyu Tolgoi contains 40 years of deposits of copper, silver and gold, requiring seven years "payback period" of production to cover the investments to develop the mines. The initial license and extension, therefore, roughly cover the projected production and payback period. Moreover, since the Mongolian government is a strategic investor in Oyu Tolgoi, with a 34 percent equity interest in the project, a long lifespan for the project sustained by committed Investors serves the Government's interest of ensuring the stability and continued investment and attention, without disruptions, required to generate returns for the Government.

Finally, the State Great Hural has pressed the Investors to submit an additional feasibility study, in addition to the preliminary feasibility studies already developed and submitted during the negotiations over the agreement. A detailed feasibility study involves considerable expense, as large as the equivalent of 5 percent of a project's total costs.<sup>15</sup> While the Investors can be expected to evaluate the issues covered in such studies once the project commences, as is the normal industry practice, it would be risky and inappropriate to conduct such a detailed and expensive undertaking without an agreement to proceed, particularly as such agreements are usually considered necessary before proceeding to a detailed feasibility study.

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## VI. Conclusion

The Oyu Tolgoi project represents a singular opportunity for the Mongolian government to increase the country's economic growth, expand exports and Government revenues, and create thousands of jobs for Mongolian workers. We have reviewed and analyzed eight serious concerns expressed by the State Great Hural and NGOs regarding certain provisions in the draft agreement with the Investors to proceed with the project. We clearly and conclusively find that by financial market and industry standards, these provisions represent appropriate, balanced and fair terms. It is also important to appreciate that all sides made concessions in the negotiations to produce the draft agreement, and a significant revision by one party could trigger demands for additional revisions by other parties, unraveling the agreement. The Oyu Tolgoi project and its benefits for Mongolia should not be derailed or delayed by these provisions.



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