

# The study of perceptions of Mongolian Mining companies- a comparison analysis

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*Abstract*— This study is compared Mongolian public perceptions of two mining companies, Erdenet Mining Corporation (EMC) and Oyu Tolgoi (OT) which are the main players in the Mongolian mining industry. Two interrelated areas key drivers of Mongolian public opinion regarding natural resource development: First, public opinion that strongly supports government ownership; a firm belief that the lands and resources of Mongolia belong to the Mongolian people. The history of government ownership and control of the economy in Mongolia's socialist past is the ideological manifestation of this belief. Secondly, a fear of foreign domination (Damdinnyam, 2015), particularly by developed countries; The priorities of OT's foreign investors are practically and ideologically opposed to those of the Mongolian public and represent a break from Mongolia's socialist past. The public fears that the investing companies do not concern about the long-term impact of mining on Mongolia, especially the long-term sustainability and development of infrastructure and the environment. These are ideas that Mongolian people hold and assume that others share.

Key Words — Mining industry, public opinion, Company Town model.

#### I. INTRODUCTION

Mongolia is rich country by natural resources and undiscovered mineral stores. Mongolia has huge copper reserves in the world which ranked as second place. However, there are many companies operated in mining industry, Erdenet Mining Corporation (EMC) and Oyu Tolgoi (OT) are two main players which contributed to the mining industry because of their amount of reserves. Today, EMC and OT are relied upon to give a huge lift to the Mongolian economy (Evan, 2012). Most copper products in Mongolia are copper concentrates produced by EMC and OT.

Mongolian open view of EMC and OT would present a significant defense examine. The two companies are operating in three ways. To begin with, proprietorship compose may affect open discernment. Though EMC is a state-possessed endeavor (SOE), OT is basically (66%) exclusive. Second, there is the matter of the Mongolian proprietorship stake. The legislature of Mongolia claims 51% of EMC, however just 34% of OT. Third, there is the nationality of the venture accomplice. While Russia, the outside accomplice in EMC, is generally seen as a companion to Mongolia, there is to a lesser extent a chronicled association with Canada and Australia, the nation's putting resources into OT.

Mongolians usually contrast OT ominously with its antecedent, EMC (Ganbat, 2015). This view is given from various perspectives unforeseen. Mongolians seem to support the more experienced company rather than its lower level of speculation, more innovated company. Generally, it has negative feeling towards OT, but respects EMC by public. Thus, we examine public opinion about these two mining companies. Examination of the Likert yield uncovered that open impression of the two mining companies on administration and the idea of the Company Town. It found that people emphatically support EMC to OT.

#### 1.1. Research objectives

1.To analyze current public opinion on EMC and OT.

2.To study the potential for implementing a "Company Town" model for OT and EMC.

3.To compare the contributions of the two mining companies, especially with respect to infrastructure, environmental record, and employee quality of life.

4.To examine how the cultures of the two mining companies` foreign investors differ.

#### 1.2. Research motivation

The public perception about these two companies are basically under three reasons. First, the Mongolian government, which has been responsible for many aspects of the development of EMC and OT, is responsible to the public. Gauging public opinion will give the government feedback on its performance.

Second, the long-term profitability of OT may depend in part on public opinion. The survey results indicate that ordinary Mongolians feel that OT's profits do not benefit the country. Though the financial and political implications of recent mining FDI are widely reported in the press, there are also



less tangible impacts that deserve attention. The failure of public institutions to respond to the concerns of ordinary citizens has bred cynicism among Mongolians. This leads to questions of further interest to researchers and policymakers. Why do Mongolians seemingly hold a more negative view of OT than of EMC? What can be done in the future to boost the Mongolian sense of ownership in national mining projects? By revealing public dissatisfaction, this study opens the door to future debate on FDI strategies.

Third, if we accept EMC as representative of the socialist era and OT as emblematic of capitalism, a comparison of public perceptions may be a proxy for the extent to which Mongolians have embraced capitalism. This issue is explored further in the conclusion of the study.

#### 1.3. Background of Mongolian mining

As of 2013, there are approximately 1,617 mining companies in Mongolia (David Osborne, 2015). Mongolia has the world's largest reserves of copper, coal and rare earth metals. Furthermore, Mongolia is regarded as the world's third biggest fluorspar producer after Mexico and China, and it is among 46 countries with immense uranium reserves (Chultem, 2014). When those new deposits were discovered, Mongolians hoped that the country would develop rapidly (Chultem, 2014).

The mining industry represents a significant force in Mongolia's economy. Mining accounts for approximately 81% of Mongolia's total exports, 32% of government revenue and 30% of GDP (Rescap Mongolia, 2014). Mining companies are a big source of public revenue and economic development. They must pay 68% tax on the profits of copper and gold (EBRD, 2006).

There are 15 Strategic Deposits in Mongolia. A Strategic Deposit (SD) is a mine that holds huge mineral reserves, and therefore is taken to influence Mongolian national security and/or socio-economic development (Mineral, 2006). The government of Mongolia established the notion of SD's in the 2006 Mongolian Minerals Law (Mongolian State Ikh Khural, 2006), as an amendment to the 1997 Law on Minerals. Since then, on average, the revenue from SD profits has supplied 5% of Mongolian GDP. The Mongolian Minerals Law stipulates that the government acquire at least 34% ownership of SD rights. The most coal and copper deposits in the Mongolian Southern Gobi Region are near the Chinese border. Chinese involvement in the mining sector is particularly strong in this region, and tensions with Chinese investors and managers have added to the sense of exploitation among Mongolians (Davaadorj, 2016).

EMC and OT are both Strategic Deposits. EMC is a joint venture between the governments of Mongolia and USSR, with the partners having rights and interest of 51:49, respectively. EMC has produced copper concentrate at EMC mine since 1978, with most exports going to Russia and China, though some are also sent to the U.S.A., Europe, and other destinations. In 2009, an IA was signed with Ivanhoe Mines and Rio Tinto, resulting in the government taking 34% ownership of the OT project.

#### 1.3.1. Erdenet Mining Corporation (EMC)

Ostensibly the most imperative, most seasoned and most persuasive mining venture in Mongolia, EMC (its' called Erdenet) is rich in metal and copper. EMC is one of the chief metal handling industrial facilities in Asia. It was started as a joint wander between the administrations of USSR and People's Republic of Mongolia. The main yield was delivered in 1978. EMC is situated in Erdenet City, 400 kilometers northwest of the capital, Ulaanbaatar, 180 kilometers from the third biggest city, Darkhan, and 140 kilometers from Russian outskirt. EMC is associated by railroad toward the East-Siberian and Chinese systems. By 2020, it is anticipated to build GDP by 30% (Suzuki, 2012). Also, it is anticipated to goad interest in lodging for organization workers (IMMI, 2009) and in addition utilities and administrations in Khanbogd (the territorial region and region), in the Southern Gobi Region and all through Mongolia (World Bank Mongolia, 2010).

The deposit was discovered and explored between 1960 and 1972 by Russian and Czech geologists. 1973 the governments of Mongolia and the USSR signed an agreement for the development of the deposit and set up the EMC as a Mongolian-Russian joint venture.

EMC was begun as a 50/50 percent two sides amid the Communist Era. After 1990, the Mongolian government kept up its 51% proprietorship offer of the mine, and the mine gave the administration its biggest wellspring of improvement. Presently, it is a decently of enormous creating and handling 25 million mineral, 530.0 thousand tons of copper think and 3.0 thousand molybdenum focus for every year (Tsetsen, 2005; Frontier, 2015). The EMC plant has been reliably taking measures for redesigning its advancements and enhancing the execution and productivity. From 1978 to 2015, EMC is yet an essential part supporter of the state spending plan and GDP, 17% of, and a business of 14,000 individuals in 2015 (Ganbold, Gerbish, and Frontasyeva, 2006). Its copper-molybdenum porphyry stores are among the best 10 by volume. The mine, and the close-by township of Erdenet that was worked with Soviet help, which has 100 thousand populaces and the second biggest modern



and mining city in Mongolia (Ganbold, Gerbish, and Frontasyeva, 2006).

#### **1.3.2.** *Oyu-Tolgoi* (*OT*)

Oyu Tolgoi (OT) is a flagship mining project located in the South Gobi Region of Mongolia 26 km long, considered to be one of the world's largest undeveloped copper-gold mines in the present. Russian geologist Ya.Petrovich arrived in Khanbogd soum in 1957. He collects geological samples from the area around OT and concludes that the area may have copper mineralization in the clay, shale and sand-based rock (Batsukh, 2015). An extraordinary find by a Canadian mining exploration company in the Gobi Desert in an area called OT was just beginning to impress itself on the consciousness of the public and bring Mongolia to the attention of serious global investors in 2001(Edwards, 2015; Evan, 2012; Batsukh, 2015).

In 2002 the president of Mongolia, N.Bagabandi said that "Mongolia's politics has stabilized and the economic situation has improved but warns not all foreign investors' requests will be met, with the country's own interests as the priority".

On October 2009, Turquoise Hill Resources and Rio Tinto signed a long-term, comprehensive Investment Agreement with the Government of Mongolia for the construction and operation of the OT copper-gold mining complex. The agreement creates a partnership between the Mongolian Government which acquired a 34% interest in the project and Turquoise Hill Resources, which retained a controlling 66% interest in OT. Global miner Rio Tinto, which joined Turquoise Hill Resources as a strategic partner in October 2006, is managing the development of OT. The government's 34% stake in the business would be paid for after the mine began to make profits, while amount of the business owned by the stake could also increase in the future. Ivanhoe's name was changed to Turquoise Hill Resources after mining giant RT increased its ownership stake to 51% and assumed control of the company in 2012 (Wallack, 2014).

#### 1.4. Responsible Mining

Responsible mining refers to the comprehensive set of practices needed for sustainable mine development and operation. Responsible mining ensures that mining activities are carried out in a manner that respects the culture, traditional customs, and especially the natural environment of the host country. For the Mongolian public, the most important criterion is that mining companies should minimize negative impacts on the lives of resident citizens and nomads. According to international experience, responsible mining involves both support for long-term development and implementation of government policies in the host country. Unfortunately, in Mongolia, mining practices near known deposits have devastated the environment and way of live among local peoples. Because of inadequate laws and regulations, responsible mining is no longer enforced. The mineral law was amended to fine mining companies MNT 50-MNT 250 thousand (Enkhbayar, 2011). But for many mining companies supported by FDI, this is just the cost of doing business.

Mining companies have to take responsibility the host countries future development. Responsible Mining contains using advanced technology, provide environmental and human security, investing in the host country's future, work efficiently, transparent and open in the public...so on.

#### II. COMPARISON CRITERIA AND HYPOTHESIS DEVELOPMENT

This part describes the phase 1 qualitative analysis, which was used for design of the second phase questionnaire. First, the phase 1 methodology is summarized. The output, criteria used for comparison of OT and EMC in the second-phase questionnaire, is then presented. The criteria are used to formulate hypotheses concerning public perceptions of OT and EMC. We present these at the end of this section, with a brief review of the relevant literature.

#### 2.1. Qualitative Analysis

The purpose of the qualitative analysis was to derive categories that could become dimensions in the second-stage Likert questionnaire. For this purpose, we took advantage of a publicly available source of mining opinion data, the publicly televised debate between two Members of Parliament (MPs) who have become the public face of the anti-OT and pro-OT crowds (Edwards, 2015). These are S.Bayartsogt, who was the Minister of Finance when the OT Investment Agreement was signed in October of 2009, and independent MP S.Ganbaatar, who challenged S.Bayartsogt to a televised debate on the Mongolian National Broadcaster channels (Mongolian National Broadcaster, 2012). The debate, which focused on the 2009 OT Investment Agreement and the operation of the OT project, took place in November of 2012.

Following the debate, viewers were invited to phone in questions for the debaters. The recorded debate and questions were posted on social networks, including Facebook and Twitter. There were all together 589 questions and comments from the public, all concerning mine-related issues.



The analysis procedure worked as follows. First, the recorded comments and questions were transcribed into Mongolian text. Within the text, a word or phrase was identified as an evaluation criterion if it met three conditions. First, it described an activity that a mining company could perform. Second, it had moral value: an increase in the activity could be "good" or "bad" in the eyes of the public. Third, the public could reasonably expect it to be influenced by managerial decisions.

All evaluation criteria were bracketed within the text. They were then compiled into a master list and grouped into preliminary categories. To reduce the number of categories, the preliminary categories were consolidated as much as possible and those with few entries were eliminated. The result was a system of question categories for use in designing the second-stage Likert questionnaire.

#### 2.2. Question Categories

The output of the qualitative analysis was a set of five constructs: Corruption, Environmental Record, Worker Living Conditions, Development and Infrastructure, and Overall Impression. An additional construct, Collaboration and Company Culture, was added. The categories and associated hypotheses are presented below.

#### 2.2.1. Corruption

During the 2008 Parliamentary election, when it was clear that western investment in OT was imminent, presidential candidates from Mongolia's two rival political parties promised to give one million Mongolian Tugrugs (MNT) to every citizen. This pledge was to be financed by expected future profits at OT and the mining industry in general. (Mongolia's Investment Corporation, 2013). Every citizen was thus promised his or her share of the expanding economic pie. To ordinary Mongolians, a million MNT was a significant amount of money. Especially, for families that included more than one recipient (Mongolia's Investment Corporation, 2013). The promised handouts created an enormous sense of expectation. When the money failed to materialize, the promises appeared to have been broken. There was a common sentiment among Mongolians that corruption and political opportunism were to blame.

Though corruption impacts EMC and OT in a much broader sense, the failed one million MNT pledge, which is associated with OT, affected citizens in a direct and personal way. We therefore hypothesize that the Mongolian public rates OT as being more corrupt.

2.2.2. Environmental Record

Mining sector is Mongolia's most important industry in our development. However, and the long-term benefits of preserving Mongolia's natural heritage must be considered and weighed against the economic benefits and costs of mining activities. Mongolia is recognized as one of the world's most arid regions with desertification affecting 44% to 90% of the country's territory (Asian Journal of Political Science, 2011).

A few years ago, agriculture was main contributor of Mongolian GDP. After 2000 mining is replacing it. Mining is an extremely water-incentive industry, and both the quantity and quality of water remain paramount to its long-term viability as an economic activity (Kimito, 2011).

Public opinion of mining is that it can develop our nation. Local nomads have long time relationship with nature. Mining companies have a quite bad experience. As a result of mining deposit discoveries, the migration of herders who have lost their pasture results in further conflict with herders in other local areas when they try to share pasture. Even if there are few conflicts over pastoral land, local people are often unhappy with mining in their regions because of its poor contribution to local development. Most taxes from mining go to the central government budget and only a few minor fees and payments are allocated to local budgets (Vandangombo, 2012; Gankhuyag & Uyanga, 2014).

In Mongolia specifically, tailings dams are a significant environmental hazard. As of 2004, the tailings dam for the EMC, which has a production capacity of 24 million tons per year, a fraction of the production expected from OT, contained 400 million tons of tailings and 15 million cubic meters of supplement water (Oyu-Tolgoi).

In 2004 In Khanbogd soum approximately 630 herder families and more than 100,000 livestock live directly in the vicinity the mine (Gilbert, 2014). Dust from the unpaved mine roads also poses a huge health risk for herders and their livestock (Johnston, 2011; Schneider, 2013). OT mine use 2,000 off-road 100-tonne trucks (Watts, 2011). There is so much dust in the sky it looks like a war is taking place (Watts, 2011). Nomad families in the area blame the mines for dried up wells, shrinking watering holes and clouds of dust that blacken the lungs and stomachs of their animals. It makes nomads cough. Even the animals cough. Soon it will be impossible for us to stay here (Watts, 2011). Nomads have seen OT grow bigger and bigger. In the future there will be more dust and less water. It will be impossible for nomads to stay in the SGR.



A regular application of water on these roads is needed to manage the dust problem, further adding to the strain on water supplies. As there are concerns that there is not enough water available in the South Gobi to carry OT for the life of the project, the government has said that it may be pursuing two river diversion projects (Sarah McNeal, 2014). Most significantly, herders worry that OT is draining the region's water supply and making it difficult for their animals to find water. Environmental worries also loom large, particularly about water usage rights. OT plans to use 870-920 liters of water per second for the next 30 years (Watts, 2011). Rio Tinto reached different conclusions in its environmental studies. Rivers now run dry in some areas, making it more difficult to find water for thirsty animals, according to nomadic herders (Stefan, 2008).

"Existing mining operations in Mongolia have an extremely poor environmental record. Still, the EMC mine and others like it elsewhere in Mongolia are widely rumored to have an even worse environmental record than is publicly known. Truck and shovel open-pit mining are the most common mining methods at EMC. Production capacity is 24 million tons of ore per year. Each year, 10 to 12 million tons of subgrade ore are added to the existing stockpile. The waste from ore processing is pumped to a TMF (Tailings Management Facility), which is located approximately 4 km away from the plant. The TMF is basically a 5 km-long dyke of standard design, of which 3 km are covered with water and 2 km are exposed tailing beaches. It contains 400 million tons of mine tailings, as well as 15 million m<sup>3</sup> of supernatant water (World Bank, 2006).

At EMC, water and dust are major problems, and the company has been accused of taking no action to rectify and problems. "The EMC is reportedly fined \$ 500,000 per year for its abhorrent environmental practices, but simply considers the fine to be a cost of doing business rather than the costlier (in the short-term) option of cleaning up its process" (Studniberg, 2010, p. 19).

However, in the Southern Gobi region, the environmental impact of mining activities at OT and other companies are arguably worse. Mining companies have been blamed for the plight of nomadic peoples, including water shortages, dustinduced illness, loss of animals, and conflicts between herders resulting from loss of gazing lands (Watts, 2011; Janshin, 2012).

Though there are serious environmental concerns at both OT and EMC, we hypothesize that the Mongolian public holds a lower opinion of OT because of the negative reporting on impacts to nomadic herders. The public should therefore rate EMC higher on its environmental record.

#### 2.2.3. Living Conditions among Employees

Mongolia is becoming more urbanized with more rural population migrating to the capital city in search of better living conditions. Currently about 40% of the population live in Ulaanbaatar, around 20% live in Darkhan, Erdenet, provincial centers and soum settlements and the remaining 40% live in rural areas. Semi-nomadic and nomadic herders make up around 30% of the entire population (Rescap Mongolia, 2014).

The mining sector is Mongolia's largest employer, accounting for 42% of its 1.5-million-person workforce (Dierkes, 2012; MMSD, 2002). Mines attract foreign and domestic migrants, often male workers who arrive without their families (The World Bank, 2006). Among these migrants, "living conditions" include more than just housing. Social services and resources, including education, health, and water supplies, must be expanded in pace with the growing number of users. Special services may be needed to handle social problems such as alcoholism, crime and prostitution, which are common among unaccompanied male workers. To develop such infrastructure, management must be willing to make long-term investments in its personnel.

In this respect, EMC has been a model employer. Erdenet City was established in 1974 as a bedroom community for EMC. With investment and cooperation of the company, Erdenet has grown to become the second largest city in Mongolia. Much of the infrastructure at EMC and Erdenet dates to the Socialist Era cooperation between the Mongolian and Russian governments. Today, EMC maintains close ties with the city administration, and seven percent of its budget is devoted to "public service units, social discounts, and support funds (Enkhtsetseg, 2016). The company finances schools, hospitals, and athletic/cultural centers that are open to local residents as well as EMC employees.

At OT 4% of workers are foreigners. The rest of the workers are Mongolian. 22% of workers are Umnugovi resident area citizen. 74% is migrants from capital city or other provinces. At EMC 5% is foreign workers. The rest of the 95% is Erdenet city workers.

OT construction workers will typically be housed in temporary construction camps without their families. According to OT manpower study, the construction worker population will reach a peak of around 13,700 temporary workers (Osborne, Cane, & Enkhtuya, 2015). At EMC, all



workers live in Erdenet city from 1978-2016. Erdenet city is getting bigger and bigger.

By comparison, OT's management has focused on the shortterm needs of employees, with much less progress on longterm development. Employees receive perks like free airfare to and from UlaanBaatar (UB) and complementary meals, accommodations, and laundry services (Dondov, 2011). They work in intensive 2-week "shifts," which alternate with periods of rest and recuperation in UB. However, the communities surrounding OT remain underdeveloped, and local residents account for only a small proportion of employees. Social problems in Khanbogd soum include a gender imbalance, alcoholism, drug abuse, prostitution (including issues related to HIV/AIDS), gaming and gambling issues. Infrastructure problems include increased traffic; reduction of the quality and quantity of drinking water; noise; emissions; and dust pollution.In summary, the Mongolian public should rate EMC higher on commitment to employee quality of live.

# 2.2.4. Infrastructure development comparison of EMC and OT

Mongolia's infrastructure, or lack of it, is the most serious inhibitor to developing its resource wealth. However, there are many ambitious projects and foreign investment commitments to improve the situation. Mongolia's main rail line is the Trans-Mongolian railway (2,215 km in length). 96.7% of roads in Mongolia are unpaved. Most large-scale deposits in Mongolia are located in isolated areas, with very limited infrastructure. The 2010 Global Competitiveness Report ranked Mongolia last for the quality of overall infrastructure out of 134 countries (Khushrushashi, Julian, & Noushin, 2006).

Mining companies in other countries have also played a role in planning and controlling infrastructure. However, may be not interested or lack the capacity to plan and operate infrastructure for towns that include employees as well as a general population. Because of their business interests, mining companies may plan infrastructure for their workers and attached families but will be less interested in making that infrastructure available to existing non-mining populations or newcomers.

Basic public service costs to government include community or project related infrastructure expenditures. For example, more schools, kindergartens, hospitals, police and fire stations will be required. Additional costs incurred by public administration include the salaries of national and local civil servants, public infrastructure, and maintenance (Cane, 2015; Allen & James, 1966). According to international standards, a mining company and government should jointly determine how many people will be employed in the construction and operation of a project. They should also determine how much housing will be needed for the construction and permanent workforces. Will employees bring their family to the soum or not? If yes, how large a population influx might be expected? What type of housing will be needed for this population? Should the government and a private company share construction and maintenance expenses for additional housing capacity required? How should workforce-related transportation needs (roads, travel, and railway), health and education requirements, utilities provision (power, water, heating, sewerage) be met? How much infrastructure capacity in these various areas is needed, and when will capacity be expanded? Who will design, build, operate, and maintain the infrastructure? What quality of infrastructure services will be provided, and what prices will consumers pay for those services? If the mining company has the kind of plan it would be better to public.

But EMC has always played a different role. During the socialist era, Russia had a great deal of economic and political clout in Mongolia. Mongolia had little industry, and relied on Russia for capital, technology, and management skills. The EMC model fit nicely into the Russian-Mongolian partnership. The company with its Russian leadership developed the local community with little input from the government (Johnston, 2011). The cost of basic public services, such as community or project related infrastructure, was passed on to the government. This could include new schools, kindergartens, hospitals, police, and fire stations. Additional costs incurred by public administration included the salaries of national and local civil servants, public infrastructure, and maintenance (Cane, 2015; Allen & James, 1966).

Since 1978, exactly 15 years later second big city was built based on the EMC deposit. This is the big differences of these 2 companies. Since started to using the OT, politicians promised that politicians there would built "fairy tale town". Time passed, they are still talking about fairy tale. "Rio Tinto" built few sandwich buildings and "kiosks". Rio Tinto's influence is growing. The company's headquarters in Ulan Bator is one of the biggest buildings in the capital. Its advertisements run constantly on local television channels and it will be a leading sponsor of the country's Olympic team in London next year (Watts, 2011).

There is no doubt that OT needs to build its own infrastructure. In the past, the company has tried



unsuccessfully to construct liveable housing in Khanbogd soum. The original OT company town, built a few decades ago, was a failure because of substandard housing. More recently, OT has announced plans to build colleges and clinics, improve water infrastructure, fund health programs and preserve the unique cultural heritage of the South Gobi (McRae & Cameron, 2013). Though this announcement raised Mongolian expectations, it came to naught. After many years of talking, OT has built very little, only a few shops and kiosks.

We expect the Mongolian public to rate EMC higher on commitment to infrastructure development.

#### 2.2.5. Overall Impression

If the Mongolian public has a more positive perception of EMC's honesty, environmental track record, and commitment to worker living conditions and infrastructure development, then it should also have a global feeling for EMC, as stated in Hypothesis 5 below.

#### 2.2.6. Collaboration and Company Culture

This dimension describes the cultural influence foreign investors. It captures the differences between EMC's Russian investors and OT's western investors.

#### 2.3. Resource Nationalism and Mongol Exclusivity

Ownership of natural resources in Mongolia is what might be called "Mongol exclusivity" Mongol exclusivity refers to the belief that the land and natural resources of Mongolia belong exclusively to the people of Mongolia. This belief is reflected in the Land Law, which prohibits the ownership of land in Mongolia by foreigners (Tumenbayar). As a small country dominated by one ethnic group, Mongols are fiercely protective of their land and resources (Charles, 2014).

Many Mongolians have trouble understanding how foreigners might directly own natural resources that are located on Mongolian land no matter who is involved in discovering and producing the resources. The ultimate ownership of these resources is understood to belong exclusively to the people of Mongolia. Foreigners may be invited to help develop the resources, but it is not understood how or why foreigners might be allowed to own the resources as these are clearly a part of Mongol territory.

Public protests against foreign miners began to grow after a speech in early 2005 by Ivanhoe Mines chairman Robert Friedland at an investor conference in Florida where he implied (Suzuki, 2012) that foreign miners such as Ivanhoe would be able to make huge profits from their holdings in

Mongolia while paying only minimal taxes, it says foreign investment means debt.

Mongolia's moves against foreign investment coincided with sharp declines in the prices of key natural resource exports, such as coal, a tightening of global credit markets, and the ending of the foreign fund inflows associated with the first phase of the OT mine. Problems were compounded due to long delays in the negotiation of the agreement with Rio Tinto on the development of the second phase of the OT project, and moves by the government to penalize foreign firms for alleged tax fraud (Charles, 2014).

### CONCLUSION

Mining companies are a big contributor to Mongolian GDP. EMC and OT are the largest mining operations in the country. Beginning in 2000, Mongolians had a sense of expectation when they saw news that new deposits had been discovered. They felt that the establishment of OT could build a new era in Mongolia, with increased employment and GDP and the elimination of poverty. Unfortunately, there has been unexpected negative publicity, and numerous accusations against OT. This paper compared public perceptions of the two mining companies on management and the concept of the Company Town. The public was found to strongly favor EMC to OT. The responses supported all hypotheses.

The people of Mongolia have a fear of investor domination. To implement the giant OT project, Mongolia took large loans from its foreign investors. The public fears that Mongolia will be forced to give up its land to pay back the debts. Collaboration with westerners has caused a lot of trouble.

The company town is a new concept in Mongolia. The company town provides infrastructure, housing, transportation, stores, churches, schools, and recreation facility to workers. Even though OT is the biggest mining project in Mongolia, it has no company town. OT workers are like "migratory birds" who show up at OT during periods of work and move elsewhere when the work is done. The public of Mongolia is disappointed that OT does not take care of infrastructure and long-term development. Meanwhile, EMC was established by Russian investors who built a big company town that included schools, kindergartens and infrastructure. Workers at EMC live together with their family members. A major problem is that



OT does not focus on Mongolian long-term development. The only company town in Mongolia is EMC. If OT had started to build a company town, the Mongolian public would be satisfied with OT.

#### REFERENCES

[1] AllenB, & James. (1966). Company Town in the American West.University of Oklahoma Press, 1966.

[2] Batsukh G. (2015). Oyu Tolgoi 1957-2015. Ulaanbaatar: OT press.

[3] Cane Isabel. (2015). Social and Gendered Impacts related to Mining, Mongolia.

[4] Chultem Nyamsuren. (2014). The Resource Curse in Mongolia: Mineral Wealth, Institutional Quality, and Economic Performance. Monterey, California.

[5] Davaadorj Ts. (2016). Current situation of Mongolian economics, future dynamic and the requirement of changes of mind parapigmy

[6] David OsborneIsabel Cane, Dr Mel Cousins, Dr EnkhzayaDr. (2015). Integrated Report: an integrated analysis of economic, political and social issues that support or hinder growth and poverty reduction in Mongolia.

[7] Dierkes Julian. (2012). Change in the Democratic Mongolia- Social Relations Health, Mobile Pastrolism and Mining. Lieden Boston.

[8] Dondov D. (2011June8)."Build mining townships, and stop all new exploration". (JournalAriuntuya-Mining, 採 訪者)

[9] EBRD. (2006). Finance in transition, Transition report. EBRD.

[10] Edwards Oyu Tolgoi deal is a win for Mongolia but no game-changer for 2015Terrence, (2015May19). Oyu Tolgoi deal is a win for Mongolia but no game-changer for 2015. http://www.intellinews.com/ bne IntelliNews.

[11] Enkhbayar D. (2011November18). Social Responsibility in mining in Mongolia.

[12] Enkhtsetseg B. (2016April29). Father of the city, eldest son of the state. 2016May28 Mongolian Economy: Mongolia's Economy and Business Magazine: www.mongolianeconomy.mn [13] Evan Matei-Dragos. (2012). Real Option Valuation Method Case of Oyu-TolgoiCopper and Gold mine.Business and Social Science.

[14] Frontier. (2015). Erdenet Ore-Processing Capacity Enhanced with New Expansion. Frontier's newswire.

[15] Funatsu Kimito.(2011). New Fundamental Technologies in Data Mining. InTech, Chapters published January 21, 2011 under CC BY-NC-SA 3.0 license.

[16] Ganbat, 2015Farrington D.John. (2005). The Impact of Mining Activities on Mongolia's Protected Areas: A Status Report with Policy Recommendations. Integrated Environmental Assessment and Management — Volume 1, Number 3, 283–289.

[17] Ganbold G, GerbishSh, & FrontasyevaM.V.(2006). Assessment of Hazardous Impacts on the Pastured Animals of Non-Ferrous Industry in the Town of Erdenet, Mongolia.

[18] Gankhuyag Mr, & Uyanga Ms. (2014). Extractive Industry and the Financing of Child-Inclusive Social Development in Mongolia. United Nations Development Programme (uyanga.gankhuyag@undp.org).

[19] Gilbert Gereme.(2014). Nomadic People and Human Rights. London and New York.

[20] Gongor Damdinnyam. (2015). Stakeholders' Perception on the Applicability of Shared Value Creation in Mongolian Mining Development. © Damdinnyam Gongor, 2015.

[21] IMMI. (2009). Awakened Gobi. Ulaanbaatar Mongolia: Responsible Mining Magazine.

[22] Janshin Bayanmunh. (2012). "Joint Venture and State-owned Enterprise in The Copper Industry": The case of Oyu-Tolgoi LLC (Mongolia) and Codelco (Chile).

[23] Johnston Leslie. (2011). Mongolia - Oyu TolgoiCopper/Gold/SilverMineProjectTripReport.USAID/Washington, EGAT/ESP.

[24] Johnston Leslie. (2011). Mongolia - Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report. USAID/ Washington, EGAT/ESP.

[25] Khushrushashi, Julian Diekers, & Noushin. (2006). Mining in Mongolia Some Recommendations for Long-Term Investment Agreements in the Mongolian Mining Sector.



[26] Krusekopf Charles. (2014). State Ownership and the Development of Natural Resources in Mongolia.

[27] M.Studniberg Brain. Private Municipal Governance and the Company Town.

[28] McRae, & Cameron. (2013). Defening The Mongolian Mining Sector: The effect of Oyu Tolgoi and Its Production. London.

[29] Mineral Law. (2006). Law of Mongolia on Minerals. Ulaanbaatar, Mongolia.

[30] Mongolian National Broadcaster. (2012). Parliamental Members Debate-OT.

[31] Mongolian State Ikh Khural. (2006July8). Law of Mongolia on Minerals. Ulaanbaatar.

[32] Osborne David, CaneIsabel, & EnkhtuyaM. (2015). Integrated Report: an integrated analysis of economic, political and social issues that support or hinder growth and poverty reduction in Mongolia.

[33] Oyu Tolgoi. (2012). Environmental Risk Sharing in the Oyu Tolgoi Mining Project.

[34] Oyu-Tolgoi.Environmental Risk Sharing in the Oyu Tolgoi Mining Project.

[35] Rescap Mongolia. (2014). Initiating Country Coverage on One of The Last Remaining Mining frontiers.Resource Investment Capital.

[36] Rescap Mongolia. (2014). Initiating Country Coverage on One of The Last Remaining Mining frontiers.Resource Investment Capital.

[37] Sarah McNeal BankWorld. (2014). A Golden Opportunity?Unpacking the relationship between Mongolia and the World Bank.Bloomberg.

[38] Schneider. (20131105). Mongolia Copper Mine at Oyu Tolgoi Tests Water Supply and Young Democracy.

[39] Stefan Lovgren. (2008, October,17). Along the Onggi River, Mongolia.

[40] Studniberg M.Brian. (2010). Private municipal governance and the company town: Applications past, present and future. International Journal of Business Governance and Ethics, 5(3), 214 - 240.

[41] Suzuki Yukio. (2012). Conflict Between Mining Development and Nomadism in Mongolia. SuzukiYukio, The Mongolian Ecosystem Network-Part of the series Ecological Research Monographs (269-294). Springer press.

[42] The World Bank. (2006). Mongolia - A review of environmental and social impacts in the mining sector. Washington, DC.

[43] The World Bank Group in Mongolia. (2014). Mongolia Economic Update.

[44] The World Bank Group in Mongolia. (2015). Mongolia Economic Update.

[45] Tsetsen D. (2005). Non-Ferrous and Ferrous Metals Value-Added Product Development in Mongolia.30-38.

[46] Vandangombo Danaasuren. (2012). Account(ing)/(Ability): Democratising the Environmental Impact Assessment in Mongolian Mining. Victoria University of Wellington-the degree of Doctor of Philosophy.

[47] WallackL.Robert. (2014). Mining in Mongolia-Getting Mongolia back on track. Ulaanbaatar, Mongolia: Resource World Magazine.

[48] Watts Jonathan. (2011November 7). Gobi megamine puts Mongolia on brink of world's greatest resource boom. http://www.theguardian.com/.

[49] World Bank Mongolia. (2010). Southern Gobi Regional Environmental Assessment.