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STRATEGIES FOR STRENGTHENING SOUTH KOREA'S POSITION IN MONGOLIAN MINING SECTOR

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ABSTRACT

Despite its challenges and volatilities due to number of internal and external factors, Mongolian mining industry remains to be the most important driver for its economic development. Mineral products consistently comprise over 80% of Mongolia's total exports and efforts are being made to switch the raw commodity based exports to more value-added products and the role of foreign investments in the forms of capital, technology and expertise are crucial for this process. Several countries have been successfully cooperating with Mongolia in its mining sector and among these counties, this paper will investigate South Korea's position, identify the challenges it is facing and attempt to provide recommendations on a commercial basis.

INTRODUCATION

Defining the challenge

Mongolian mining industry remains to be the most important driver for its economic development as can be seen in Figure 1 and Table 1. Year 2014 marks the 23rd anniversary of Mongolia and South Korea's diplomatic relation since 1991. Especially in the past decade, bilateral ties between the two countries expanded substantially after the formal diplomatic relation in terms of foreign direct investment, foreign aid and social interactions. As of 2013, total trade turnover between Mongolia and South Korea increased almost five fold during the preceding 10 years. However in the field of mining and natural resources, except increased exports in technology and mid-range investments mostly in the mineral exploration, no significant contribution has been made yet. We may observe from Figure 2, that Mongolia's overall trade activity increased dramatically in the past 5 years with China and Russia the two neighbors with much larger economies than Mongolia. The real competition is happening outside of China and Russia with interesting results. For instance imports from South Korea increased substantially in the past five years and yet still lags behind the much more distant partner, United States. Another observation would be the consistent low level of export from South Korea. The increased foreign trade activity mostly relates to the country's rapid expansion in its mining sector. Mongolia is considered to hold significant volume of untapped mineral riches, and Mongolia's close proximity to China (the world's largest importer of minerals product) paired with its consistent double digit economic growth in the past decade resulted in increased demand and price for Mongolian mineral products.

However, given Mongolia's relatively low developed mineral processing sector, the most feasible approach in this situation was to directly export its raw mineral products. Yet, the economic impact was significant for Mongolia's small economy and the country experienced a natural resources boom in the past decade. However, starting from mid-2012 global commodity market especially coal, copper and iron ore (three out of four top performing export commodities of Mongolia) showed decreased price and volatility. Poor market sentiments were further worsened by political and legal instabilities within Mongolia and as of 2nd quarter 2014, foreign direct investments are down 60%. Yet, despite these challenges, exports increased by 22.6% to 2,480.8 million USD in the first half of 2014 compared to 2,023.7 million USD in 2013. The increase is mainly attributable to increase in copper and coal exports.

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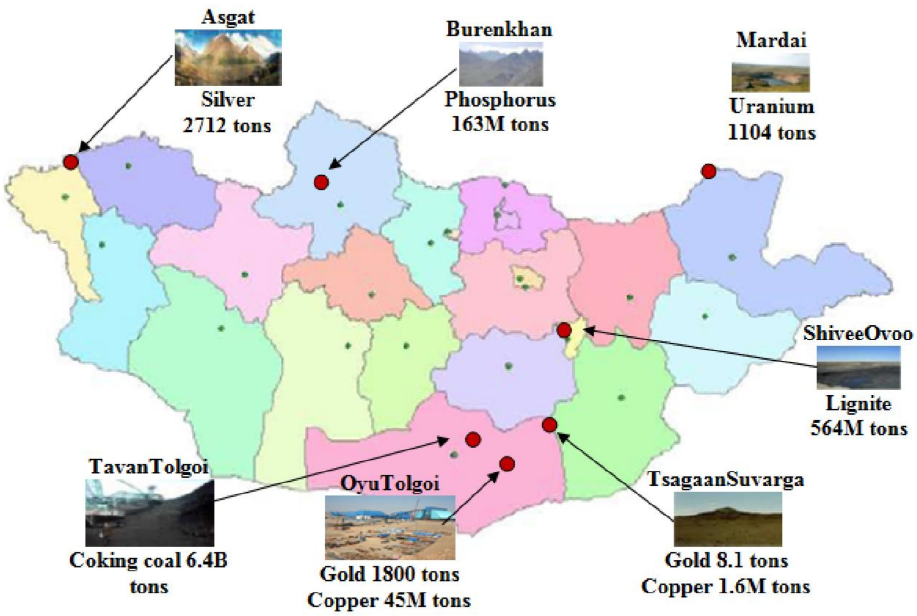


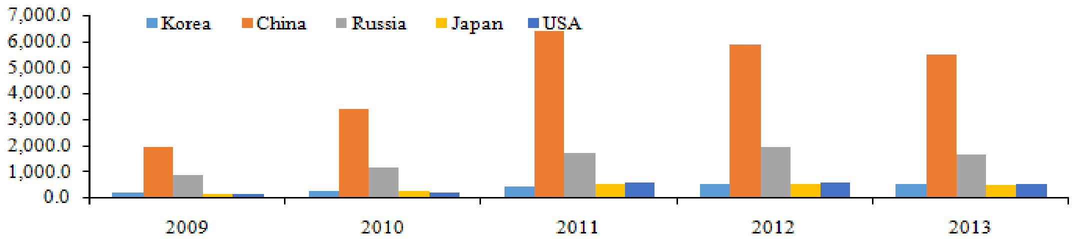
Some of Mongolia's largest mineral deposits (all categorized as deposits of strategic importance)

Figure 1. Deposits of Strategic Importance in Mongolia

Table 1. Key economic indicators of Mongolia

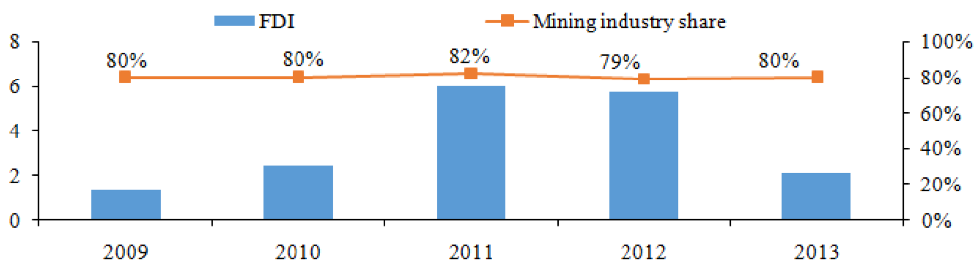
	2010	2011	2012	2013f
Real GDP growth (%)	6.4	17.5	12.3	13.0
Nominal GDP (MNT billion)	8,414.5	11,087.7	13,944.2	17,172.7
GDP per capita (US$)	2,285.6	3,181.1	3,672.97	-
Industrial production (% YoY)	10	9.7	7.2	26.3
Government expenditures (% of GDP)	36.6	45.1	43.9	41.2
Government revenues (% of GDP)	37.1	40.3	35.5	35.1
Government balance (% of GDP)	0	-4.8	-8.4	-6.1
Export (US$ million)	2,899	4,817.5	4,384.6	4,272.6
Mineral resources export (% of export)	80.8	89.2	89.2	81.8
Import (US$ million)	3,278	6,598.4	6,738.9	6,354.6
Foreign Direct Investment (US$ million)	1,629.7	4,620.1	3,835.1	-
External debt (% of GDP)	28.2	26.1	29.4	-
Foreign Reserves (US$ million)	2,288	2,457.1	4,090.7	-
Basic policy rate	11.00	12.3	13.25	-
Exchange rate (MNT/USD)	1,257	1,395.4	1,392.1	-

Source: (National Statistics Office of Mongolia, 2014), (The World Bank Group in Mongolia, 2013)



Source: (Mongolia Customs, 2014)

Figure 2. Mongolia's top trading partners (million USD)



Source: (Mongolia Exporters Association, 2013)

Figure 3. Foreign Direct Investment to Mongolia

Table 2. Latest statistics in the mining sector

Number of licenses (2014.01.09)	3018
Mining licenses	1301
Exploration licenses	1717
Area of licensed areas (% of territory)	9.4%
Mining licenses	0.6%
Exploration licenses	8.8%
Mining sector share in GDP (2013)	[]
Mining sector share in industrial output (2013)	67.3%
Key mineral production output (2013)	
Copper concentrate (35% content basis)	533.3 thousand tons
Molybdenum concentrate (47% content basis)	3869.2 tons
Gold	894.4 kg
Fluorspar concentrate	76.4 thousand tons
Iron ore concentrate	6011.2 thousand tons
Zinc concentrate	104.1 thousand tons
Key export minerals (2013)	
Fluorspar ore, fluorspar concentrate	337.7 thousand tons
Iron ore, iron ore concentrate	6724.5 thousand tons
Copper concentrate	649.8 thousand tons
Gold	7.6 tons
Coal mined (2013)	33,340.5 thousand tons
Coal sold (2013)	25,821.3 thousand tons
Coal exported (2013)	18,188.3 thousand tons

Source: (National Statistics Office of Mongolia, 2014), (Mineral Resources Authority of Mongolia, 2014)

There are tons of opportunities for foreign businesses to invest in the growing mining sector in Mongolia, especially in the fields of value-added production, infrastructure and so on. South Korea is one of the leading economic powerhouses in Asia with vast array of technological advancements that could be implemented in Mongolia. However, its performance in Mongolia was relatively mediocre in the recent past.

Due to Mongolia's landlocked geographical location makes the overall feasibility of the idea of delivering natural resources to South Korea (or other East Asian countries for that matter) is quite remote. Thus our recommendations will focus more on feasible approaches in strengthening South Korea's position in Mongolian mining sector with ideas such as financial commitment, strong China focus (as Mongolia's main exporter), job creation and strong ties with government entities and so on.

The paper will look at South Korea's position on a comparative perspective by looking at successful foreign invested businesses that are non-Korean and as mentioned earlier we will keep our practical approach by coming up with recommendations that are as feasible and practical as possible for future South Korean businesses planning to invest in Mongolia. For identifying the challenges, we will not only look at Mongolia as a country, but also South Korean businesses with misconceptions on how to make it in Mongolia. In this instance challenges will be divided into two broad categories - Mongolian and South Korean sides - touching upon issues such as political and regulatory issues, protection of interests and investments, market size, infrastructural development, industrial development, human capital etc. on the Mongolian side, while looking at such issues as governance and transparency, level of sophistication of South Korean financial institutions, familiarity with mining industry in general etc. on the South Korean side. Given the commercial focus of this paper, we will employ an extended version of PEST analysis PESEL (Political, Economic, Social, Environmental and Legal) on Mongolia's mining sector.

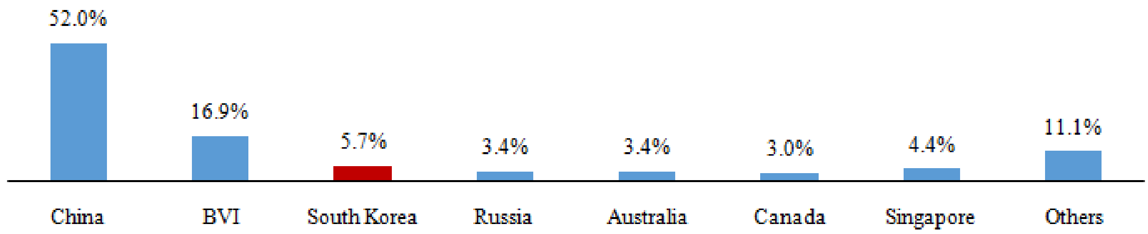


Figure 4. Joint ventures with Mongolian firms in mining industry (Jan 2014)

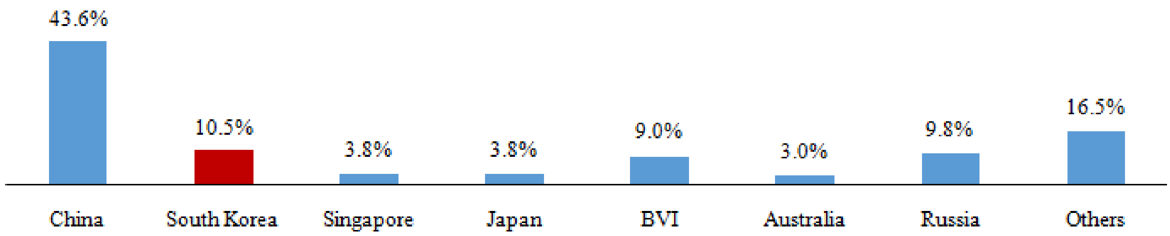


Figure 5. 100% foreign invested mining entities (Jan 2014)

As seen in above figures majority of FDI flow was directed at mining industry with South Korean invested or Mongolia-South Korea joint venture entities accounting for comparatively significant portion. It is worth mentioning that many of these investments were made with the long-term vision of supplying mineral resources back to South Korea (KIEP, 2011). There are number of studies (Choo & Kang, 2012; Kim, 2013; Lee & Lee, 2010; Park, 2012) emphasizing on this idea as well.

We will also conduct a brief SWOT analysis on South Korean investors to subsequently draw a combined model to improve the relationship between the two parties. The employment of PESEL and SWOT will give us an organized view on the matter. In terms of organization, Section 1 will provide a general overview on Mongolia and Korea relations in the past and its current status and with Section 2 we will narrow down to Mongolian mining sector with its recent developments that may be relevant to our research.

Section 3 will explicitly look at the current performance of South Korean businesses in Mongolian mining sector and identify the challenges they are facing and with Section 4 we will attempt to come up with practical recommendations for current and future South Korean businesses for tackling the challenges that were identified in Section 3.

South Korea and Mongolia relations: past and present

Looking back

Some studies show that Mongolians and Koreans share the same root. Although not exactly clear as to where the Korean people came about, and although not proven, it is commonly viewed that Koreans are descendents of tribesmen travelled down to the Korean peninsula from modern day Manchuria and Lake Baikal area. It is also commonly viewed that these tribes belonged to the Altaic and proto-Altaic speaking tribes that included Turks, Mongolians, Koreans among others (Rang, 2004).

Historical relations of Mongolia and South Korea could be divided into 3 stages. First official encounters of Mongolia and Korea as two nations were recorded during the Goryo dynasty era (918 - 1392), where the Mongols, during its formative years as the Mongol Empire, invaded the whole of present day mainland China and the Korean peninsula specifically from 1231 to 1259, with number of socio-economic transactions took place during this time and since the fall of Mongol Empire in 1368 direct relationship between Mongolia and Korea faded. However, an interesting episode of cooperation started to take place between the Mongolian and Korean people after the Second World War, when both Mongolia and North Korea started sharing similar political ideologies. Mongolia was the second nation after Soviet Union to recognize North Korea's sovereignty in 1948. The two countries signed a number of economic treaties such as the Agreement on Economic and Cultural Cooperation in 1957 and following Kim Il-Sung's visit to Mongolia in 1988 the Intergovernmental Commission for Economic, Scientific, and Technical Cooperation took place. Currently Mongolia still maintains its relationship with North Korea and the President of Mongolia Elbegdorj Tsakhia paid a visit to the country in October 2013.

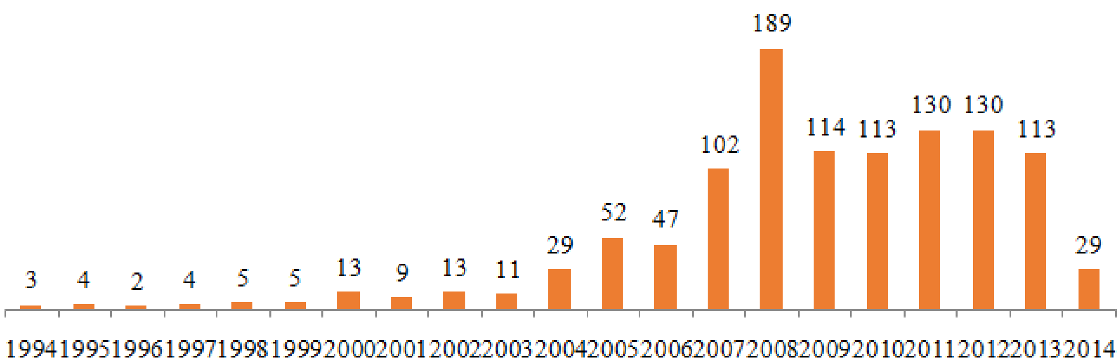
Mongolia - South Korea relations

Since early 1990s Mongolia and South Korea have had strong economic and social cooperation. As of 2013, total trade turnover between Mongolia and South Korea reached 520 million USD which is three times larger than that of 2009 and South Korea is the 4th largest trading partner of Mongolia with a market share of 0.31% in export and 7.98% in import. Trade balance was 494.4 million USD with imports at 507 million USD mainly in petroleum products (119 million USD), motor vehicles (39.6 million USD), transportation vehicles (52.3 million USD) and exports at 13 million USD mainly consisted of molybdenum concentrate at 69% (9 million USD). South Korean businesses started investing in Mongolia as early as in 1994 with 1,973 South Korean owned entities registered in Mongolia as of 2010. According to Korea Export and Import Bank, the total foreign direct investment made by South Korea to Mongolia is at US$1,117 million from 1994 to 2014. Retail and mining are the top performing sectors in terms of investments by South Korean entities. In terms of South Korea's position in Mongolian mining sector, there are total of 12 Mongolia - South Korean joint ventures possessing 22 licenses covering total of 30,910.31 ha area whereas as additional 17 South Korean entities owning another 22 licenses covering total area of 98,356.87 ha area according to the Mineral Resources Authority of Mongolia as of January 2014.

Table 3. Top trading partners of Mongolia

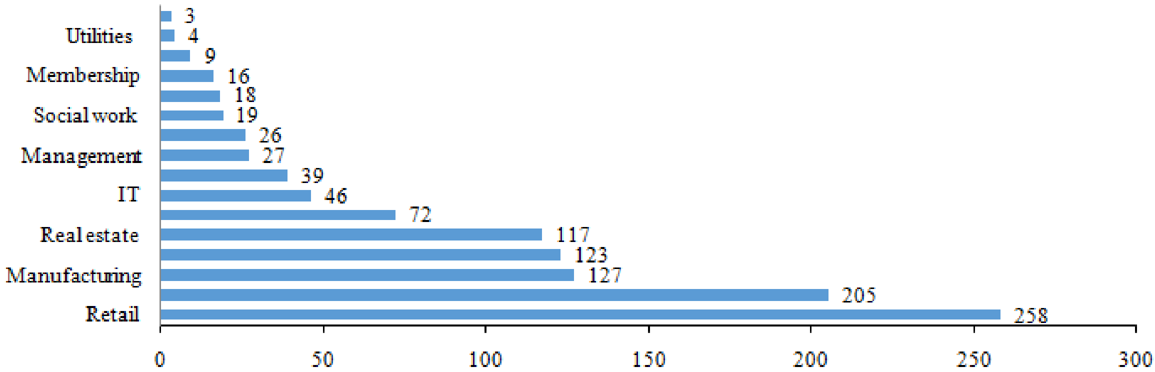
	2009		2010		2011		2012		2013	
	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import
China	1,392.3	531.7	2,454.4	956.5	4,404.56	1,978.17	4,028.46	1,825.75	3,700.3	1,785.8
Russia	68.2	772.8	82.7	1,046.7	96.3	1,624.7	79.57	1,847.39	61.8	1,561.9
USA	13.892	103.7436	6.0	158.9	5.0	536.0	3.6	535.9	3.9	512.7
Korea	15.5	155.1	30.5	181.8	37.87	356.73	12.30	467.75	13.0	507.4
Japan	4.6	97.1	2.7	196.5	10.96	490.23	10.96	501.62	10.5	444.2

Source: (Mongolia Customs, 2014)



Source: (Korea Exim Bank, 2014)

Figure 6. South Korean FDI to Mongolia (US$ million) 1994-2014



Source: (Korea Exim Bank, 2014)

Figure 7. South Korean FDI by Industry 1994 - 2014 (US$ million)

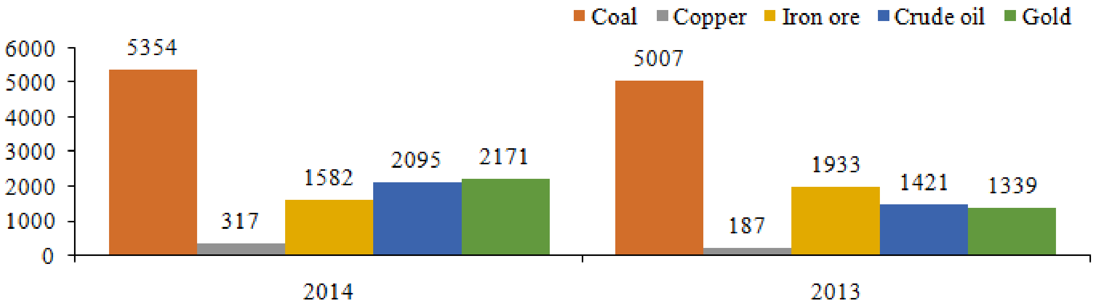
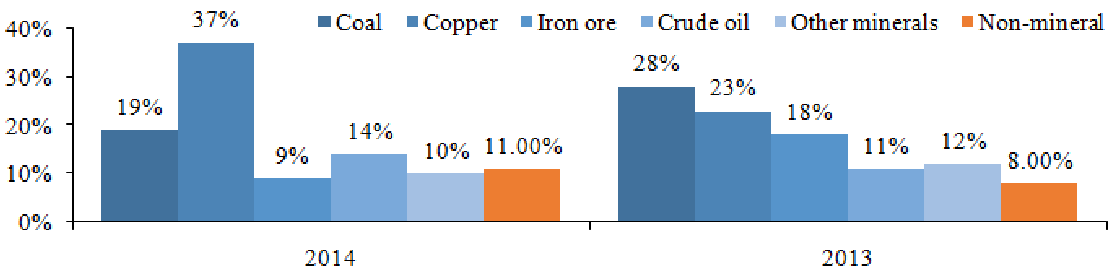


Figure 8. Mongolian exports dominated by mineral products (first 4 months)



Source: (National Statistics Office of Mongolia, 2014)

Figure 9. Mineral products export (first 4 months in thousand tons)

Table 4. Latest trade statistics of Mongolia

Field	First 4 months			Changes			
				2014/2013		2013/2012	
	2014	2013	2012	Amt.	%	Amt.	%
Turnover	2,958.6	2,953.3	3,373.1	5.3	0.2	- 419.8	-12.4%
Export	1,432.4	1,212.5	1,292.4	219.9	18.1%	- 80.0	-6.2%
Import	1,562.2	1,740.8	2,080.6	- 214.6	-12.3%	- 339.8	-16.3%
Balance	- 93.7	- 528.3	- 788.2	434.6	-82.3	259.9	-33%

Source: (Central Bank of Mongolia, Jan - Apr 2014)

The combined number of licenses owned by South Korean and Mongolia - South Korea joint ventures account for less than 1% in terms of ownership of licenses by countries. The top performing countries in Mongolian mining industry in terms of ownership of licenses are China and Mongolia - China joint ventures at 16.6%, Singapore and Mongolia - Singapore joint ventures at 9.1% followed by British Virgin Islands and Hong Kong at 5.8% and 4.1%. South Korea businesses are more active in non-mining fields as well.

Recent developments in the mongolian mining sector

Slow growth in mining industry

In the first 4 months of year 2014, Mongolia's total trade turnover was 2,958.6 million USD which is a 0.2% increase from that of the previous year. This slow increase in trade turnover was due to decreased imports by 214.6 million USD. Mineral products still dominate the majority of Mongolia's export with 89% which is a decrease of 1.8% from that that of the previous year. Top performing commodities include coal, copper, iron ore and crude oil which account for 79% of total export and 89% of mining products export. Total export increased by 18.1% compared to 2013 which was mainly due to 14.4% increase in mineral products export including copper concentrate, crude oil and gold. However, former top performing commodity of Mongolia coking coal and iron ore, zinc ore exports decreased by 20%, 44% and 43% respectively due to decreases in prices. Yet, total export value managed to increase by 219 million USD by the contributions of exports of copper, crude oil and gold but decreased by 280 million USD in terms of coal, iron ore and zinc.

New Investment Law

Recognizing the effects of deteriorating foreign direct investment and slow growth in the mining industry, the Parliament passed the Investment Law in October 2013 to boost foreign investment. The Investment Law replaces the controversial Law on Regulation on Foreign Investment in Business Entities Operating in Sectors of Strategic Importance (SEFIL 2012) and the outdated Foreign Investment Law (1993). The main purpose of the law is invigorating the GoM's policy on providing stable business environment for both foreign and local investors. The law is instrumental in promoting investments with the following main features:

- Removing the mandatory approval process by the parliament for foreign private entities to invest or operate sectors of strategic importance (mining, banking and finance, communications and media)
- Legal guarantees for protection of investments including ownership rights, transferring of excess capital to overseas.
- Promotion of investments by providing tax exemptions and discounts.
- Providing stabilization with the issuance of stabilization certificates to fix tax rates at certain point for a period of time depending on the amount of investment.
- Dedicated government agency to provide one-stop service for both foreign and local investors.

Although ambiguities and uncertainties exist, the law offers significant improvements toward bringing in foreign investment into the natural resources sector (Auditors & Partners, 2014). Based on interviews conducted with Korean businesses operating in Mongolia for the purposes of this paper, inadequate legal protection was considered one of the most challenging issues. However, the New Investment Law provides a number of protective measures and tax stabilization provisions for foreign and local investors alike. Tax stabilization is provided on a 5 - 18 year basis depending on the location of the business and amount of investment. Following are the requirements for obtaining stablization certificates. The Stabilization Certificate will be assessed subject to the provision of the following information from the investing company:

- A copy of the business plan and feasibility study
- Evidence that the total investment amount and investment completion period meet the minimum requirements under the Investment Law 2013
- Environmental impact assessment
- Details of how the investment will contribute to creating new jobs
- Details of how the investment will utilize advanced technology and techniques

The Stabilization Certificate will be issued to the following sectors for the durations stated below:

Table 5. Mining, Heavy industry, and Infrastructure

Investment Amount (billion MNT)	Duration of Stabilization Certificate (by years)					Investment Completion Period (by years)
	Ulaanbaatar Area	Central Area(GobisumberDornogobi, Dundgobi, Darkhan-Uul, Umnugobi, Selenge, Tuv provinces)	Khangai Area(Arkhangai, Bayankhongor, Bulgan, OrkhonUvurkhangai, Khuvsgul provinces)	Eastern area(Dornod, Sukhbaatar, Khentii Provinces)	Western Area (Bayan-Ulgii, Gobi-Altai, Zavkhan, Uvs, Khovd Provinces)	
30-100	5	6	6	7	8	2
100-300	8	9	9	10	11	3
300-500	10	11	11	12	13	4
500 <	15	16	16	17	18	5

Table 6. All other sectors (except Mining, Heavy industry, and Infrastructure)

Investment amount (billion tugriks)					Stabilization period (by years)	Investment Completion Period (by years)
Ulaanbaatar Area	Central Area(GobisumberDornogobi, Dundgobi, Darkhan-Uul, Umnugobi, Selenge, Tuv provinces)	Khangai Area(Arkhangai, Bayankhongor, Bulgan, OrkhonUvurkhangai, Khuvsgul provinces)	Eastern area(Dornod, Sukhbaatar, Khentii Provinces)	Western Area (Bayan-Ulgii, Gobi-Altai, Zavkhan, Uvs, Khovd Provinces)		
10-30	5-15	4-12	3-10	2-8	5	2
30-100	15 -50	12-40	10-30	8-25	8	3
100-200	50 -100	40-80	30-60	25-50	10	4
200 <	100 and above	80 and above	60 and above	50 and above	15	5

According to the law a new government entity, the Invest Mongolia agency will be established for the sole purposes of supporting foreign and local investors (http://investmongolia.com/en/). The New Investment Law is an important opportunity for existing and future South Korean businesses and investors to maintain stable legal protection.

Recent interactions between Mongolia and South Korea in the mining sector

When Mongolia opened up its mineral wealth to the world, two projects were significant in terms of size and economic impact. One was the Oyu Tolgoi (OT) copper-gold deposit that is currently being developed and operated by world mining giant Rio-Tinto under the 2009 Investment Agreement between the Government of Mongolia (GoM) and Rio-Tinto. The another one was Tavan Tolgoi (TT) coking coal deposit currently owned and operated solely by the state-owned enterprise Erdenes-Tavan Tolgoi (ETT) LLC. In 2011 the GoM announced a private-public partnership bid on TT project and as the deposit is divided into few large sections, the Western bloc which was already operating was put up for international corporations for further development. South Korea expressed its interest jointly with Japan as a consortium of large conglomerates from both countries. Members of the South Korean firms which participated in the Korean-Japanese consortium include state-run Korea Resources, POSCO, utility firm KEPCO, trading firm LG International and Daewoo International. Japanese firms in the group include Itochu Corp, Sumitomo Corp, Marubeni Corp and Sojitz Corp. However, the unclear and politics ridden selection process has not selected any bidder yet and given the decline in price of coking coal, the entire process is put on hold. This was a manifestation of Mongolian government's inefficient practices of managing and dealing with international investors on large scale projects.

However, the private sector has been showing tremendous successes in cooperating with South Korean entities on various industrial sectors including construction and mining. Mongolian conglomerate MCS Corporation's subsidiary, MCS Energy has entered into a joint venture agreement with South Korea's POSCO to develop a coal-to-liquid (CTL) coal gasification project in Baganuur district of Ulaanbaatar city (MCS, 2013). The project is planned to produce 450 thousand tons of diesel, 90 thousand tons of gasoline, 100 thousand tons of gas fuel using low quality coal which is not economical to export. The project is estimated to create 200 - 600 new jobs. The project takes a total of 2 billion USD investment and planned to commence operations in 2018. South Korea's Hyundai Glovis has permanent operations in Mongolia providing services to Mongolian mining companies including diesel fuel and other industrial material supplies. Number of other businesses are active in Mongolia including Samsung C&T developing the 250km railway construction in the South Gobi as well as the large Shangri-La construction project in Ulaanbaatar with MCS Property.

Box 1: Samsung C&T wins 483 million USD project to build railway in Mongolia

Samsung C&T said on May 8 it has signed an agreement to build a 217-kilometer railway in Mongolia commissioned by the Railway Authority of Mongolia. Samsung C&T is the sole contractor to implement the 483million USD project. The project calls for installing a railroad line connecting Tavan Tolgoi coal mine, 540 km south of the Mongolian capital Ulaanbaatar, and the China-Mongolian borders, as well as building a rolling stock depot. A Samsung C&T official said, “We were given high marks for our ample experience in railroad projects, excellence in technological prowess, and best construction time schedule. With the latest project, we are in an advantageous position to win additional projects in Mongolia related to resource development.” Samsung C&T entered the Mongolian construction market in May last year with a 273million USD project to build Shangri-La Hotel in Ulaanbaatar. This is a third project for the company following a 56million USD project to build the MCS Tower last June.

Challenges facing south korean businesses and investors in the mongolian mining sector

Mining industry

Although beneficial on a short term, raw commodity export has distinct downsides that might hurt economic growth in the long run. Numbers of *external* factors fundamentally affect Mongolia's natural resources sector including the commodity price volatility and the dependence on China as its main customer. Mongolia's strong dependence on not only commodity export in general but also the fact that these exports comprise of handful of mineral products including coking coal and copper puts it in a more challenging position. Initial requirement of intense capital and labor are another common traits of natural resources industry that could later pose serious risk factors given its price volatility. Mongolian natural resources sector has been facing the extreme challenges in the past decade, including the 2010 - 2011 coking coal and iron ore price hike that enabled a number of Mongolian mining companies to become listed on various stock exchanges around world. However, the recent price decline in the aforementioned commodities rendered the country's mining industry weak and volatile. Just as in any developing and frontier economy, a number of underlying *internal* issues negatively affect the mining industry including poor infrastructure, nationalistic public policies, lack of skilled labor to name few. Yet, such high-risk & high-return scenario is a commonplace among all mining oriented countries around the world and the mining industry could be bountifully profitable if managed properly. Certain countries put tremendous efforts to mitigate its risks to successfully develop its natural resources sector as a national economic driver including Australia, Canada, and Chile among others. The following PESEL analysis on Mongolian mining industry will analyze these issues in a more constructive manner.

PESEL analysis for Mongolia's mining sector

Political assessment

Mongolia is a land-locked country. Thus, it is crucially important to have low-cost access to the Korean market, and further, to the foreign markets for its natural resources by connecting South Korea, North Korea, China and Mongolia. In order to have that solution, it needs to try to establish friendly relations between North Korea and South Korea, between

China and North Korea, and between China and Mongolia. From the viewpoint of Mongolia, Chinese market (Liaoning, Jilin and Heilongjiang provinces), Siberian market, and North and South Korean markets need be considered in order to develop wide perspective economic cooperation (Choo & Kang, 2012). But the key is détente between North Korea and South Korea. Since Mongolia has maintained favorable diplomatic relations with both North and South Koreas, it may be able to wield a mediating power in pursuing cooperation.

Mongolia is a multi-party, semi-presidential, democratic country. The President and the Parliament (State Great Khural) are elected every four years. The Parliament consists of 76 members and appoints the Prime minister and the Minister. The Government of Mongolia (GoM) currently consists of 16 ministries.

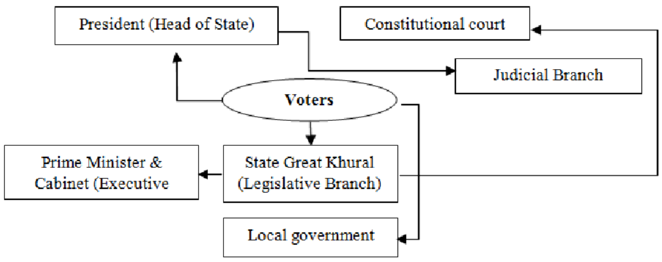


Figure 10. Government structure of Mongolia (2012 – 2016) (Ministry of Justice, *2007*)

Given its importance to the nation's economy, Mongolian mining industry is subject to heavy politics and state interventions

Under the Minerals Law of Mongolia (2006), the government selected 15 large mineral deposits that are considered strategically important and put them under state control. The state owned Erdenes-MGL company owns the concessions for these deposits operating through its wholly owned subsidiaries for each project. Among these projects Rio-Tinto and GoM jointly owned Oyu Tolgoi copper & gold mine and Tavan Tolgoi coking coal mines (wholly owned by GoM) are actively operating with arrays of political and operational issues. The relationship between GoM and Rio-Tinto puts heavy weight on the mining industry and the country's economy in general. In June 2013, Rio Tinto considered to temporarily halt the Oyu Tolgoi construction work of its 6.2 billion USD Phase 2 development as the GoM demanded a greater share of profit, disclosure of financial documents among others. On the other hand, the Tavan Tolgoi coking coal project that is solely owned by the state had numerous issues with inefficient operation, embezzlement cases and tensions with its main buyer in China.

Bureaucracy and poor public services result in operational difficulties

The government of Mongolia employed total of 162,769 individuals or 5% of the country's total population as of 1st January 2013. Just as in any developing country, Mongolian civil services face number of challenges including poor governance, ineffectiveness and corruption. The apparent lack of high quality skilled personnel is eminent due to low wage, unclear hiring system and the poor public perception of civil servants. Abuse of administrative power leads to inappropriate appointments of civil servants on important decision-making positions. There is an apparent lack of high quality bureaucrats and technocrats especially at all public administration levels but more severe in lower levels. Mining companies in most cases end up dealing with local administrative bodies.

Due to close correlation between government agencies and entities operating in the mining industry, widespread corruption poses significant threat

Weak corporate governance and loose public polices promote embezzlement and unfair treatment towards both local and foreign mining entities, the latter being more severe. Mongolia has been actively trying to fight corruption with the passing of the initial Anti-Corruption Law (1996), National Program for Anti-Corruption (2002) and joined the UN's Anti-Corruption Convention (2005). Recent initiatives such as the renewing of the Anti-Corruption law (2006) and the subsequent establishment of the Independent Authority against Corruption (IAAC) were important milestones against corruption. Transparency International ranked Mongolia 120th out of 180 countries in 2011, which went down to 84th in 2013 (Transparency International, 2014). Yet, corruption still is a widespread national threat, from the very low levels of civil servants to provincial government agencies to some of the highest government officials. Especially foreign invested or owned mining companies are subject to administrative pressure and frequent requests for bribery.

Economic assessment

Commodity-driven boom-bust cycle puts the economy in volatile state

Energy and mining sectors are considered one of the most volatile industries with an average daily change from 3.5% - 3.3% (Investopedia, 2012). Mongolian economy's dependence on coal, copper and few other specific mineral products expose the country's performance to their prices. Moreover, the majority of these products being sold to one customer, China, doubles the pressure.

Poor infrastructural development is a significant threat to Mongolia's economy as high transportation cost hinders trade activities

Mongolia is the 19th largest country in the world with less than 3 million people. It is also the third most scarcely populated country after Greenland and Falkland Islands with 1.7 square kilometer land per person. The scarce population combined with extreme climate, limited workforce implies that the unit cost of developing road, rail, water and electricity supplies is very high. Mongolia's infrastructure is in urgent need for development. Mining companies usually rely on road transportation with high transportation costs due to inefficient road transportation network. Road transportation also created significant environmental damages to the south and southeastern provinces. Only 6,000 km of its 49,000 km road network is engineered (i.e. paved, gravel) with the rest being naturally formed through repeated use (The World Bank, 2013).

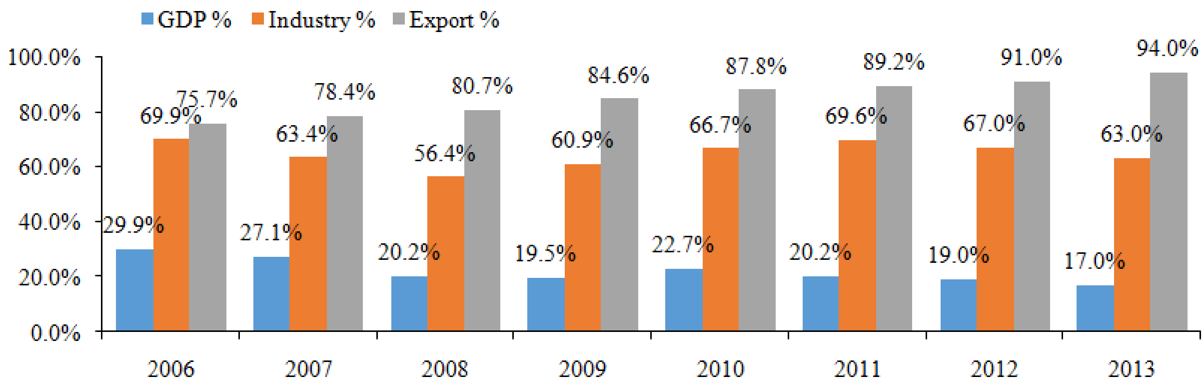


Figure 11. Mining industry's weight in the economy

Limited financial sector capabilities and high interest rates negatively affect mining businesses

Mining is a capital intensive industry that requires significant amount of up-front capital. Mongolia's financial industry is concentrated on four large commercial banks that dominate the industry Trade and Development Bank, Golomt Bank, Khan Bank and XacBank with approximately 77% share of the banking sector in both loans and deposits. Interest rates remain in double digits with current rate (2Q 2014) at 10.5%. However, this is an advantage for foreign investors offering cheaper financings for mining entities in Mongolia.

Mongolia is still one of the largest untapped mineral resources holder in the world

Mongolia currently holds 1,170 mineral deposits and approximately 8,000 mineral discoveries of 80 different elements. In terms of volume, Mongolia has copper (36.6M tons), iron ore (660M tons), zinc (5.6M tons), crude oil (220M ton) and 175 billion tons of coal resources.

According to Ernst & Young, the total value of Mongolia's mineral wealth is estimated at 1.3 trillion USD (2013). Yet, major portion of the country's large territory is not explored in detail. Extensive exploration efforts are being conducted by both Mongolian and foreign companies in Mongolia. In 2013 alone total of 180 million USD worth of mineral exploration activities were conducted by private entities.

Favorable geographical location close to the largest commodity importer is a major economic growth factor for Mongolia

Following are 2013 customs data extracted from the Chinese customs on imports of some key mineral products from Mongolia.

As seen in the above Figures 18 and 19, Mongolia has tremendous potentials by taking advantage of its favorable geographical location. Chinese commodity import increased strongly in 2013 at more than 10 percent.

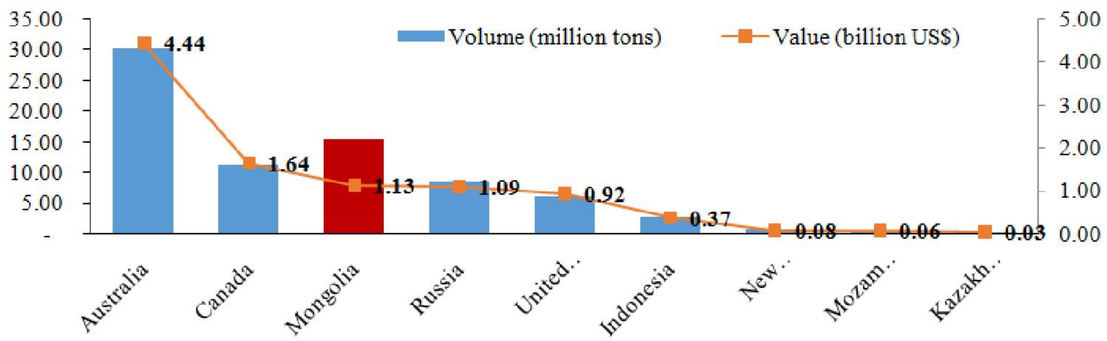


Figure 12. Coking coal export to China (2013)

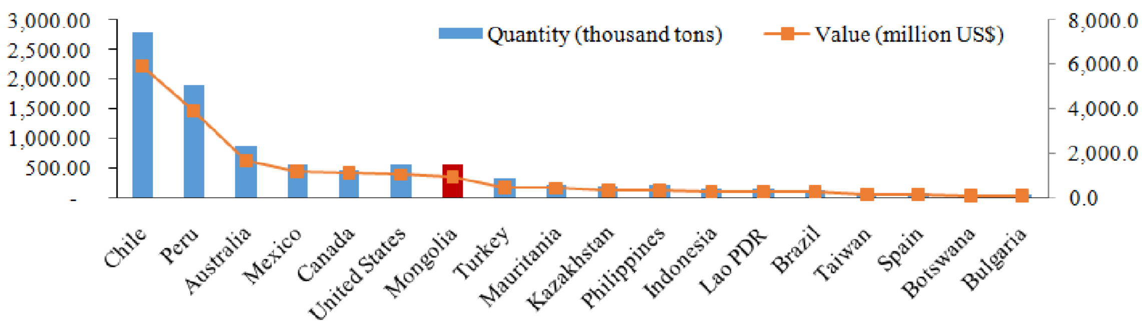


Figure 13. Copper export to China (2013)

Social assessment

Mongolia is one of the most scarcely populated countries in the world. According to National Statistics Office of Mongolia, the population of Mongolia as of April 2014 is 2.95 million with population density of 1.84 sqm per person (239th). The small number of population poses significant challenge in terms of overall market capacity. According to UNDP's 2012 Human Development Index Mongolia was ranked 110 out of 187 countries, and Mongolia has been continuously increasing its HDI position since 1995.

Table 7. Mongolia social development indicators

	Life Expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2005 PPP$)	HDI Value
1980	57.3	10.3	5.7		
1985	58.8	10.2	6.6	2,257	0.536
1990	60.5	10.2	7.6	2,395	0.559
1995	61.2	7.7	7.7	1,979	0.527
2000	63.1	9.3	8.1	2,198	0.564
2005	66.0	12.5	8.2	2,800	0.622
2010	68.2	14.3	8.3	3,298	0.657
2012	68.8	14.3	8.3	4,245	0.675

Social stability, no ethnical conflicts provides relatively safe environment for foreign businesses in Mongolia. Mongolia had one of the most peaceful political transition during the collapse of the Soviet Union despite sharp economic downturns. The country rarely has public unrests and has almost no ethnical conflict given that the majority of national pool is consisted of one ethnical group. Mongolia was ranked 67 by the Global Peace Index while South Korea was ranked at 47. Mining companies face increasing threats and oppositions from activists and non-governmental agencies. Mining around the world has always been a heavy subject for social and environmental issues. This problem does not go around Mongolia. According to the Ministry of Environment and Green Development some 1,279 civil society entities are active in the fields of environmental protection employing total of 13,429 people which is 4 times more than the government employees working in the field. Despite the clear advantages of having an active civil society for common purposes, there are numerous accounts of non-governmental organizations manipulating their positions by blackmailing mining entities for financial gains. Especially, foreign owned companies are targeted due to their limited positions compared to their Mongolian peers.

Environmental assessment

Rapid urbanization and development in its mining sector in the past decade has been negatively affecting the country's environmental conditions, but the relevant protection activities were not kept in track. As an industry that directly interferes with the environment and extract limited natural resources, a number of environmental issues need to be resolved for any mining entity around the world. Environmental requirements for mining companies operating in Mongolia are as follows. The Ministry of Environment and Green Development is the governing authority for all matters in this field. Mining companies that hold either exploration or mining licenses must submit an environmental impact assessment in order to renew the licenses. Due to harsh winters or as Mongolians call it "dzud" between 1997 and 2002 left many Mongolian herders without any sources of income. Thus many Mongolians found an alternative way of funding by directly extracting the easily reachable on-surface gold deposit tailings that were left out during the Soviet-era gold mines. These individuals so called the "ninja miners" due to the green buckets on their back that they use for washing out the dirt, are posing significant environmental issues in Mongolia.

Legal assessment

Unstable and changing regulatory environment negatively affects economic development and substantially reducing the confidence of foreign investors. Number of regulatory swings negatively affected the country’s natural resources sector and its economy. In 2006, the controversial 68% windfall profit tax was passed in order to curb the outflow of unprocessed copper and gold ores. Although the intentions were to promote diversification and value added production, the fact that no existing facility to process such minerals made the policy to turn against the industry. Almost all copper and gold mining businesses were left with no FDI and unprofitability. Due to apparent slowdown and increased black market activities, the windfall profit tax was lifted in 2009 (EBRD, 2008). In 2009, the government passed the equally controversial Law on the Prohibition of Minerals Exploration in Water Basins and Forested Areas that led to cancellation of over 200 pre-owned mining and exploration licenses. Another example of correctly intended GoM’s intervention to the natural resources sector (i.e. environmental protection) but with insufficient research basis. The GoM was not prepared to reimburse the investors of those revoked licenses, who eventually ended up losing millions of dollars’ worth of investment.

Recently in May 2012, mainly propelled by populist agendas and in anticipation of the 2012 Parliament elections, the State Entities’ Foreign Investment Law (SEFIL) was passed after Chinese state owned company Chalco (China Aluminum Corporation)’s attempt to acquire over 60% of the ownership of a coal mine in South Gobi. According to SEFIL foreign investment firms are restricted to own no more than 49% of Mongolian entities operating in mining, banking, telecommunication and media industry dubbed the strategic sectors. SEFIL was heavily criticized by investors who were worried about the rise of Mongolian “resource nationalism” (Reuters, 2013). Although positively received by the general public to a certain extent, SEFIL triggered significant doubt in the country’s ability to maintain stable business environment for foreign investors. It also created tensions between Mongolia and China. Many investors left the country due to volatile and whimsical legal protection by the Mongolian government. In addition to regulatory changes, the GoM’s unstable stance on the OT Investment Agreement against Rio

Tinto for profit sharing arrangements and request to increase its ownership in the project delayed further investments into the project.

SWOT analysis for South Korean investors and businesses in the Mongolian mining sector

Based on the challenges that were identified and given South Korea's current position in the Mongolian mining sector the following observations were made in a SWOT format. Korean firms have several strengths including financial capabilities and experiences, technical expertise, strong social and cultural ties with Mongolia, experiences of global marketing and others. But they have lack of experiences in the Mongolian mining industry, limited access to quality information and, on top of those weaknesses, do not have low-cost transportation means of natural resources to Korean market. Even though there are opportunities with GoM's new policy efforts and new investment laws, Korean firms have limited and poor performances in the mining industry, and have some suspicions about the policies and management of Mongolian government.

Easily accessible information platform dedicated for Korean businesses may significantly boost the confidence of new investors interested in Mongolian mining industry

Currently there is not much public information on Mongolian mining industry that is available for South Korean businesses except few reports by South Korean policy research institutes. Information regarding the economic relationship between South Korea and Mongolia in English is almost non-existent. Ministry of Mining and other relevant government entities should improve their online information system with more robust and quality data.

Joint researches may be conducted specifically on South Korean businesses and their performances in Mongolia on a more frequent basis

Detailed research analysis may be conducted to identify the challenges facing South Korean businesses in Mongolian mining industry on a more frequent basis. Lack of high quality information prevents South Korean businesses to conduct proper marketing research in Mongolia.

Table 8. SWOT analysis on South Korea's position in Mongolian mining sector

Strengths	Opportunities
- Financial capability - Technical expertise in mineral processing - Strong position in non-mining business fields - Strong social and cultural ties with Mongolia - Geographical proximity - History of successfully developing export oriented economy	- GoM supports foreign investment with number of policies - China sustains strong economic development as late as 1H 2014 - GoM to re-issue additional exploration licenses - Investment protection and stability significantly improved with the Investment Law - Passing of revised Minerals Law
Weaknesses	**Threats**
- Lack of experience in the mining industry, thus skeptical in future performances. - South Korean financial institutions are not as sophisticated as its competitors - Inability to access quality information on Mongolian mining industry	- Poor performances in the mining industry - Decreased investor confidence in Mongolia - Regulatory environment still considered unstable - Competitive with strong foothold by other countries

Reccomondations and Conclusion

In order to strengthen the foundations for sustainable growth between the two countries, active and higher level bilateral arrangements are needed

State level legislations for supporting bilateral trade and even Free Trade Agreements need to be implemented. The current economic relationship between South Korea and Mongolia are limited to private enterprises only. Dedicated trade and investment organization may be established jointly by KOTRA/KOREX or similar state owned policy think tanks of South Korea in collaboration with the Ministry of Mining / Ministry of Economic Development of Mongolia.

Political and regulatory stability for foreign investors is crucial for Mongolia to attract South Korean investors into Mongolia

According to one of South Korea's largest trading companies operating in Mongolia, the most challenging issue they face in the country is lack of legal protection and political uncertainty (Glovis, 2014). Yet, this has been a major challenge for all foreign investors and businesses operating in Mongolia for a long period of time. In order to boost investor confidence in Mongolia the government approved the New Investment Law in later part of 2013. Given mining sector's mediocre performance in the past few years, the government is trying to revive its economic foothold with such plans as the "100 Days to Revive the Economy" by the current government. The government is also working on the new draft of petroleum law to be discussed and approved this year. Yet, stability and further feedback on supporting the entities who are planning to benefit from the new legislations is an important matter.

Infrastructure development is a major barrier for Mongolian mining industry to gain confidence in the Chinese market

High transportation cost in mining industry due to poorly developed infrastructure poses major challenge for practically all mining entities in Mongolia. Infrastructure development is an area where Mongolia and South Korean governments may actively cooperate. Economically feasible solutions such as Trans-Mongolian highway connecting Russia to China.

Maintaining close and professional relationships with Mongolian government entities and local businesses

There are number of cases of South Korean firms pressured by local authorities and activists. The most effective approach to establish a successful running business in Mongolia is joint ventures with Mongolian firms and in certain cases local governments. As bureaucracy and corruption is a commonplace in Mongolia, it is important to maintain professional but frequent interactions with Mongolian administrative entities.

Feasibility and financial commitment are essential to actually benefit from tremendous business opportunities in Mongolia

Currently Mongolia's entire export portfolio consists of mostly raw mineral products. The country's mineral wealth can be transformed into more value added products that are in high demand in foreign markets like China, Japan, Korea and others. The CTL project initiated by POSCO-MCS is an indication of proper feasibility study and financial commitment. The project has the mindset of serving the local market with detailed technical and environmental assessment reports.

Korean firms can be saluted in the area of power plant, electricity and green energy

Korean firms can cooperate in the production of electricity. Several Korean firms have expertise in the construction, operation and maintenance of power plant (Park, 2012). Construction and operation of power plant will mitigate the problem of electricity shortage and environmental pollution in Mongolia, and can be also extended to export surplus electricity to neighboring Russia or China instead of exporting coals directly. Korean firms can also join in the green energy area.

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