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Financing Mongolia's Mineral Growth

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Abstract

Mongolia's high economic growth based on abundant mineral resource in recent years is a welcome story in today's world economic situation. This has been fuelled by massive commodity demand from Chinese, Korean, Japanese and Russian heavy industries. However, the growth and progress of the financial sector has not been able to catch up with this high-speed mineral growth and therefore a pivotal policy reform is needed in the financial sector and this should be implemented by the Government together with the financial community. This paper considers a number of key questions: What can the Central Bank, Financial Regulatory Commission and other financial institutions do to meaningfully increase domestic financial services for the mining sector? Are current programmes and policies making a difference? Is there any model country for Mongolia in this matter for improving its laws and institutions? Is there any option other than FDI for financing the extraction of Mongolia's vast mineral resources?

Keywords

mining – finance – international investment – Mongolia

Introduction

Mongolia is a frontier economy, with a population of 2.8 million with average GDP per capita of about US$3500, which makes it 111th in the world, according

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to the IMF (2013). Mongolia's development in the twentieth century and its struggle for transition to a market economy has been well documented (ADB 1992; Namjim 2002). It should be noted that for almost 20 years, starting from transition to a market economy in 1990 and up to 2011, most of the time the country had enormous difficulties in its development (UNDP Mongolia 2004). For example, its nomadic agriculture, a key sector of the economy and a vital source of income for 40 per cent of the population engaged in agriculture, has been subject to multiple droughts and severe winters ('*zud*' in Mongolian); a series of such '*zud*' winters in 2000–2003 wiped out almost a third of the national livestock (12.5 million of total livestock of 33 million animals) (Mercy Corps 2010), in the process negatively affecting the incomes of 80,000 households, of which many were left completely devastated economically and the country had to resort to international aid for its herders.

Yet despite such difficulties, the country's economy recently became one of the fastest growing in the world. In 2011, economic growth rate reached an astonishing 17.5 per cent; subsequently in 2012 the country recorded a very impressive 12.3 per cent and most recently, in 2013, the GDP grew by 11.7 per cent (NSO. 2011/2012/2013). In January 2014, the Economic Intelligence Unit forecast that Mongolia's economy will become the fastest growing in 2014 as well (*Economist* 2013), with a projected growth rate of a very high 15.3 per cent. These astonishing rates of economic growth were fuelled by one of the world's largest investment/GDP ratios, 55 per cent for 2011 and as high as 64 per cent for 2012. This is one of the highest ratios in the world and made Mongolia one of the top five countries in terms of 'best investment', according to CNN (2012). In 2012, total investment in the economy of the country, whose GDP was less than US$10 billion, reached almost US$6 billion (NSO 2013). This was mainly FDI. This is because Mongolia is similar to other emerging economies in terms of its low rate of domestic savings and, consequently, has insufficient domestic resources for such a high level of investment. Apart from the basic limitation of low income, which itself limits the capacity to save, the absence of a well-developed capital market and the inadequacy of banking facilities make access to this small supply of savings difficult for many potential big borrowers.

Therefore, the key question is, how was the country able to finance such high rates of economic growth? This period of rapid economic growth and fast-developed and related financial changes are much less studied and documented, perhaps because it occurred very recently and had been somewhat unexpected. One of the most informative studies is a recent report by the European Bank for Reconstruction and Development (Isakova *et al.* 2012) about managing revenue from mining. This article looks into a different question:

how was the country able to find sources for its growth in the first degree and is there some experience, which can be useful for similar frontier economies?

Economic Growth of Mongolia in Recent Years

The Mongolian winter is harsh and cold, with average temperatures for January reaching –25°C, yet in recent years its frontier economy is running hot at full steam and is full of dynamism and energy. With one of the highest literacy rates in Asia and a well-functioning democracy, which has been firmly established in the last 20 years in Mongolian steppes of Central Asia, Mongolia is quite a unique phenomenon for the region. The recent discovery of incredible reserves of world class natural resources and the mining industries developed around them are no doubt the major impetus for this growth, as Figure 1 shows.

As is clear from the graph, the Mongolian economy, which struggled for a decade after transition to market economy as described above, began to improve from 2003, and momentum began to pick up from 2009. In 2011, the real economic growth rate of Mongolia surpassed 17.5 per cent per annum, making it one of the fastest growing economies in the world. In 2012, the growth rate was 12.3 per cent and in 2013 the year's real growth rate was 11.7 per cent, with the rising contribution of the new flagship of Mongolian economy—Rio Tinto and Mongolian Government's joint venture, a giant copper—gold enrichment plant at Oyu Tolgoi, in the South Gobi, which opened its operations in June 2013.

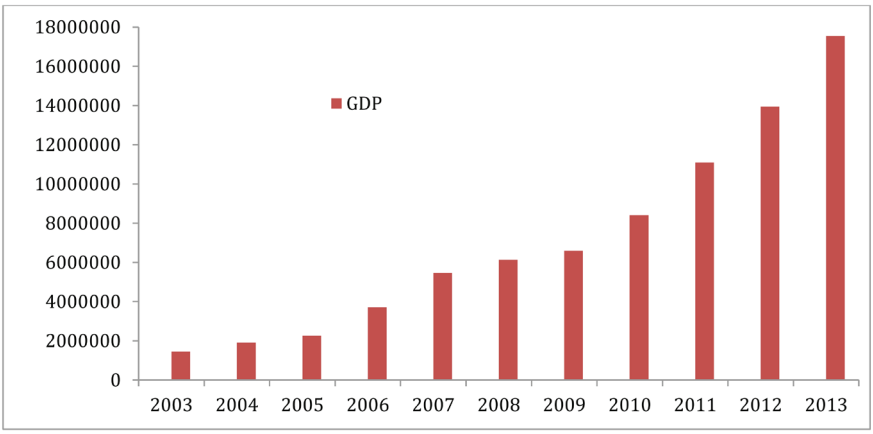

FIGURE 1 *Mongolia's nominal GDP (in MNT).*
SOURCE: NATIONAL STATISTICAL OFFICE 2003–2013 YEARBOOKS

As can be seen in Figure 2, the world economic downturn in 2008–2009 severely affected the economic growth of the country, but it rebounded with high growth immediately afterwards and from 2010 the growth rates have been record-breaking. Similarly, higher rates of growth were expected for 2014 and 2015, when (as forecast in Mongolia's Long-term National Development Strategy approved in 2008) finally the largest deposits of mineral resources in coking coal such as Tavan Tolgoi and others will be opened to the world market, presenting multiple business opportunities.

Since Mongolia is a relatively small US$10 billion economy (NSO 2013), large investment projects have a very strong economic impact through a multiplier effect. In this sense, Mongolia is a country with almost unlimited possibilities for economic growth because it has started from a very low level of economic development, while being endowed with large reserves of various minerals. Mongolia's mineral resources are large and vital to its economic growth:

- One of the geologic regions on the planet with the best prospects for mining.
- 1000 identified mineral deposits and 8000 occurrences that include copper, gold, iron, coal, molybdenum, silver, zinc, lead, asbestos, fluorspar, nickel, uranium and others.

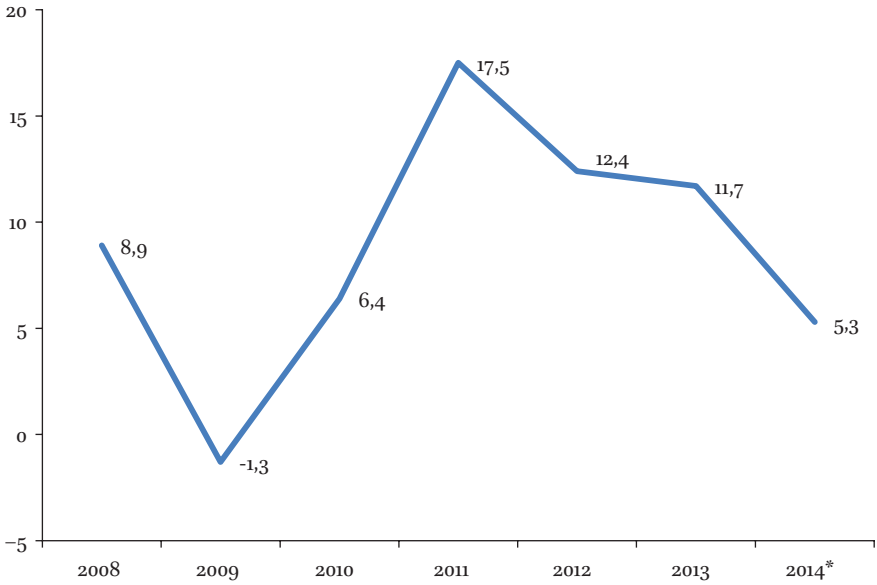

FIGURE 2 *Real GDP growth rates of Mongolia, 2008–2013 (percentages).*
* First half-year.
SOURCE: NATIONAL STATISTICAL OFFICE YEARBOOKS AND AUGUST 2014 REPORTS.

- The government has designated 15 deposits of various minerals as strategically important. They include Oyu Tolgoi (copper, gold), Tavan Tolgoi (coal), which are very large deposits. For example, Oyu Tolgoi's independently verified estimates indicate that the copper deposit contains approximately 37 million tonnes of copper and 1300 tonnes of gold in measured, indicated and inferred resources and Oyu Tolgoi is scheduled to produce 430,000 tonnes of copper per year, an amount equal to 3 per cent of global production, in the process accounting for 30 per cent of the country's GDP and with the potential to become one of the top five world copper producers.[1] Its enormous scale is such that it is estimated that 'Oyu Tolgoi is currently the world's largest copper-gold porphyry development project' (Yi Shu 2014).
- Tavan Tolgoi coal deposit is estimated to hold reserves of over 6 billion tonnes of coal and is one of the largest undeveloped world-class deposits of coking coal (Erdenepurev 2010).
- At least $1.0 trillion in potential future revenue from other various minerals deposits, according to the Oxford Business Group (2013).

These developments led to significant changes in the economy. Table 1 gives a comparison of changes in the country in the last decade

TABLE 1 *Changes in economy*

	2003	2013
Largest sectors of economy (share in GDP)	Trade 28.8% Agriculture 20% Hotels and restaurants 15.1%	Mining 20.0 %, Agriculture 13.6%
Exports (US$ billions)	0.615	4.273
GDP (US$ billions)	0.9	12.46
GDP per capita (US$)	385	3964

Source: National Statistical Office of Mongolia. (Yearbooks 2003–2013)

From a very small economy, based mostly on agriculture, Mongolia became a mining-based economy, with the size of GDP exceeding other transition economies such as Armenia, Macedonia, and Moldova and neighbouring Central Asian economies like Kyrgyzstan and Tajikistan.

1 Ranked using 2013 Brook Hunt mine production data and Oyu Tolgoi full capacity production.

However, it should be noted that mining-driven economic growth in the country is also related to a multitude of other factors, some unique to Mongolia and some in general benefiting all commodity-based economies. One is the boom in prices of commodities on world markets in recent years (Figure 3); another is the country's location. Mongolia lies closest to three BRICS countries, namely Russia, China and India, of which China and India have a large need for mineral resources to feed their industry. Both Russia and China are potentially very large markets for Mongolian exports. However Russia is less so as compared to socialist days when the Soviet Union was a market for 90 per cent of Mongolian exports and its sole supplier of equipment and technology. China is not so much promoting exports of Mongolian processed goods, rather preferring to import raw materials.

Nevertheless, China's market is a main source of obtaining value from Mongolian minerals and raw materials and in that sense, the close proximity to this large and growing market has its advantages. Russia is also a traditional market for Mongolian exports: it presents options for logistics and transportation and is also a potential investor.

Contrary to the popular image of Mongolia as a country of nomads, Mongolia has for a long time been a mining economy—its first mines were opened at the beginning of the twentieth century, mainly in gold by the British (Storry & Ashikhimina 2010). During the socialist period between 1921 and 1990, multiple mining enterprises operated, some as joint ventures with Eastern European countries such as Mongolrostsvetmet (with the Soviet Union),

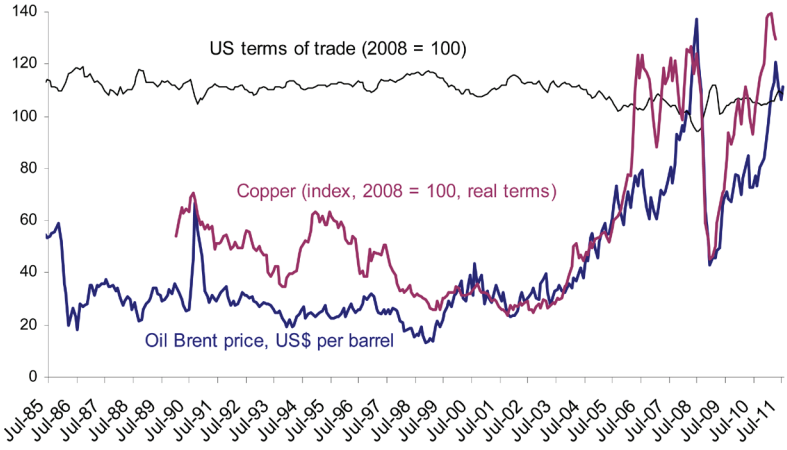

FIGURE 3 *Commodities boom on the world market* (*Isakova* et al. *2012*).
SOURCES: BLOOMBERG. IMF, EBRD CALCULATIONS. PRICES ADJUSTED USING US CPI

Mongolczechoslovakmetal (with Czechoslovakia). The largest of them is the Erdenet copper enrichment factory, which opened at the end of the 1970s with large investments from the Soviet Union. Mining products for a long time had a substantial share in Mongolian exports, reaching 48 per cent share of total exports by 1990 (ADB 1992). However, before transition to market economy, Mongolian exports largely consisted of light industry products and food rather than mining, partly because the main trading partner then—the USSR—was itself very rich in minerals and was not in need of Mongolian imports. Only since the 1980s has copper concentrate from the Erdenet plant become one of the main exports of the country. But depressed prices for copper throughout the 1990s meant that the country, despite much room for economic growth, remained subdued for the transition decade. However, rising prices of copper and oil (a main import item of the country), and later for food by 2008 created a set of policy challenges for the country.

The primary reasons for those challenges have been uncertainty and wild fluctuations in recent years of world prices for commodities which led to a mining-led boom in Mongolia in 2005–2007, the first one since the transition to market economy which started in 1990. The transition opened up Mongolian minerals for export to third countries beyond its immediate land neighbours, but with undeveloped infrastructure, only gold, copper and fluorite were competitive on world markets. With world prices for commodities remaining low following the Asian crisis of 1998, mining did not become a leading industry until the beginning of 2000. By 2008, its leading position was firmly established (Figure 4).

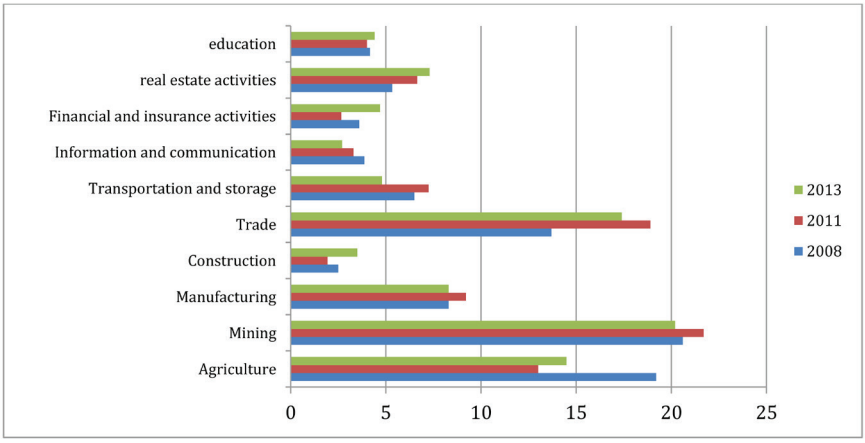

FIGURE 4 *Mongolia's GDP structure by main industries, 2008–2013 (as percentage of total GDP).*
SOURCE: NATIONAL STATISTICAL OFFICE 2008–2011 YEARBOOKS

By 2008, minerals' share in Mongolia's exports was 80 per cent; most of the exports were destined for China. In the following years, both the share of minerals in exports and China's share in Mongolian exports increased rapidly, reaching as high as 95 per cent of exports in 2012. By 2010, due to the high prices of main export items on the global market, Mongolia enjoyed a large increase in its GDP, reaching US$2221 in per capita terms. In 2011 mining created 21 per cent of the country's GDP and exports of minerals expanded rapidly, including 3 tonnes of gold, 573,000 tonnes of copper concentrate, 21 million tonnes of coal, 5.7 million tonnes of iron ore and 2.5 million barrels of oil. A sharp plunge in copper prices during the world financial crisis of 2008–2009 made the country impose on itself a World Bank and IMF-supported structural adjustment program and undergo a large and painful fiscal adjustment after the expansion of the boom years. It experienced a GDP contraction of –1.6% in 2009, the first in almost a decade, and made it temporarily halt much of development financing during the period. However the economy rebounded with 6.4 per cent growth in 2010.

Beginning from 2011, coal became a new export champion, bringing in more revenue than copper for the first time in history. Coal is mostly exported by Mongolian private companies such as Energy Resources, MAK and others. In order to further sustain this growth and development, new efforts to develop were initiated such as negotiations for joint development of new strategic deposits of coal in the Gobi, such as the Tavan Tolgoi mine. From 2013, a new source of exports of copper concentrate came from Oyu Tolgoi. These developments mean that copper and coal should be the main export items for the next decade for Mongolia.

Mining has driven economic growth (Figure 5), which has also brought benefits to other industries as well as creating many new jobs, reducing the poverty rate to 29 per cent in 2011, down from 38 per cent in 2008, and to 26.9 per cent in 2012. The Gini coefficient, which measures distribution of income, was also at 0.327 in 2011, slightly better than in neighbouring countries, such as 0.42 in Russia. In addition, supported by strong taxation revenue from the mining sector, public investment increased rapidly, in sectors such as infrastructure, social infrastructure, education and healthcare. The Mongolian Government declared 2011 as the Year of Employment Opportunities, and intensified its efforts aimed at supporting job placement services, improving the system of training and re-training and further encouraging on-the-job training and apprenticeship. High economic growth and the policy of supporting employment and job creation have indeed resulted in a drop in the unemployment rate from 13 per cent in December 2010 to 8.7 per cent as of June 2011. Average wages reached 557,000 MNT per month in 2012 (approximately US$400);

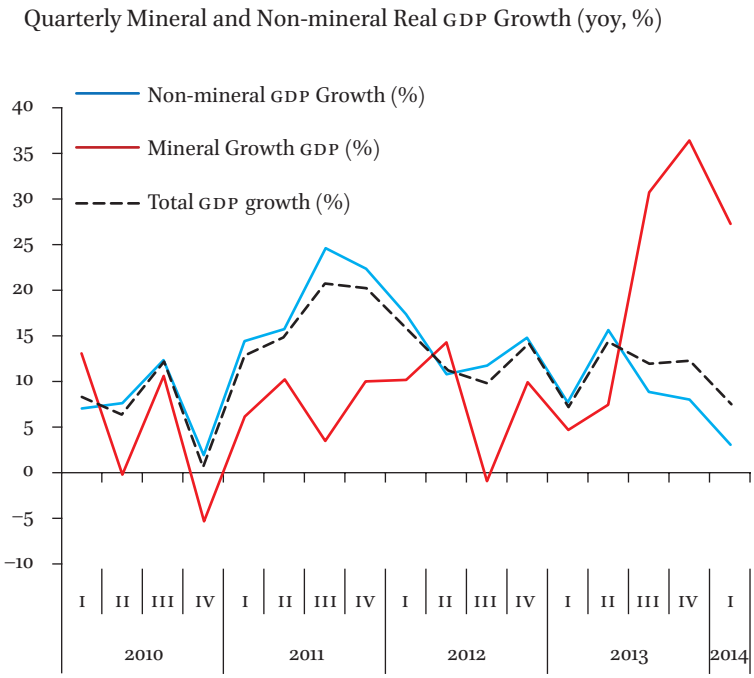

FIGURE 5 *Share of mining sector growth in overall GDP growth.* (*World Bank, Mongolia Recent Economic Development and Challenges, June 2014.*)

household income has been increasing steadily, standing at 263,700 MNT in 2007, 363,600 MNT in 2008, 402,500 MNT in 2009 and reaching 819,996 MNT per month in 2012, or US$585 per month (NSO Yearbook 2012).

As a result of this sustained growth, in a decade, GDP per capita in Mongolia rose tenfold from USD 385 per annum in 2003 to USD 3,964 in 2013. As its income per capita rose, its Human Development Index also rapidly improved (Table 2). Further expectations are that economy will continue its rapid development increasing in nominal terms to US$8000 per capita by the end of 2016.

Development and Financing Policies

These very high rates of economic growth were fuelled by one of the world's largest investment/GDP ratios, 55% for 2011 and as high as 64% for 2012. This is one of the highest ratios in the world and made Mongolia one of the top 5 countries in terms of 'best investment' according to CNN (2012). In 2012,

TABLE 2 *Human Development Index of Mongolia* (UNDP 2013)

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP$)	HDI value
1980	56.9	10.3	5.7	2788	0.515
1985	58.4	10.3	6.6	2401	0.523
1990	60.3	10.2	7.6	2848	0.552
1995	61.2	7.7	7.7	3051	0.536
2000	62.9	9.4	8.1	4014	0.580
2005	65.2	12.7	8.2	5042	0.637
2010	66.8	14.6	8.3	5880	0.671
2011	67.1	14.8	8.3	6774	0.682
2012	67.3	15	8.3	7736	0.692
2013	67.5	15	8.3	8466	0.698

GNI – gross national income
PPP – purchasing power parity
HDI – human development index

total investment in the economy of the country was equal to almost 6 billion US dollars (NSO 2013), of which foreign investors' share was about 66 per cent or US$4 billion.

Financial integration of Mongolia into world markets has also deepened: in 2011–2012 Mongolia issued US$2.1 billion of sovereign bonds and Development Bank bonds; Mongolian companies raised almost US$2 billion of private financing, such as by Energy Resources, TDB, Xasbank etc. Trade integration of the country has also increased dramatically with foreign trade turnover exceeding GDP and totalling US$11 billion with exports of US$4.3 billion. For comparison, Mongolia's exports greatly exceed the exports of Kyrgyzstan, a country with a much larger population (Kyrgyzstan exports in 2012 were US$1.3 billion).

As commodity prices continued to rise, soon it became clear that a need for better developed finance management strategy and investment planning was becoming more acute. By 2008, a National Long Term Development Vision, a strategy for Mongolia to grow in the period 2008–2021, was approved by Parliament resolution No. 13 of 2008. The first stage (2008–2015) of the National Development Strategy (NDS) to 2021 is based on the Millennium Development Goals (MDG) championed by the UN. The National Development Vision called

for the creation of a development planning, coordination and monitoring unit within Government and it became a basis for subsequent Government Action programs of 2008–2012. A NDS implementation monitoring report was submitted to the Parliament of Mongolia for a progress review before the 2012 elections.

However, as institutional development continued, and in line with adoption of the MDG-based National Development Strategy, the Government of Mongolia strongly emphasis putting in place legal and institutional frameworks for strategic planning, economic policy coordination and development policy implementation, which were non-existent before MDG adoption by the country. In 2008–2012, the Government of Mongolia actively created development planning and financing institutions and amended fiscal system planning to make the development goals a top priority.

Based on the 2008 Parliament resolution No. 13, which approved MDG-based National Development Strategy, after the 2008 Parliament elections, within Government of Mongolia, a strategic planning agency, the National Development and Innovation Committee, was established in 2009 and further reorganised into a Ministry of Economic Development after the 2012 elections; a Development Bank of Mongolia was founded in 2011 to finance mid- and long-term development projects; the Government of Mongolia adopted Private Public Partnerships (PPP) as an important mechanism for financing development (a Concession Law approved in 2010) and put emphasis on mid-term investment planning in its policy documents, amended budget legislation to allow for strategic priority development policies and included a Regional Development index for budget allocation mechanism in the new organic Budget Law.

Further, in the field of development planning, in May 2012 the Government of Mongolia approved its first ever mid-term development plan for 2012–2016 and a first mid-term investment program for 2012–2017. The new Government, formed after the 2012 elections, updated the mid-term investment program. In line with NDS, a first contract to develop a strategic deposit of copper and gold in the Gobi, the Oyu Tolgoi deposit, was signed with Rio Tinto and Ivanhoe Mines. Arguably, the increased investment into mining was a key factor in fast stabilisation and further growth of the country in years after the 2008 crisis. At the same time, policies to further develop financing mechanisms for the country, including the mining sector, were adopted.

Until recently, the annual budget cycle was deficient in many circumstances to allow for strong policy-based interventions to create new industries or start large investment projects. A large problem was that there was no strong government financial unit specialising in raising finances from overseas, using

the potential mining revenue as a fundamental attraction and channelling it into new large projects. The usual approach of allocating the task to ministry bureaucrats was inefficient because the officials lacked proper skills and training. These projects were large infrastructure projects, some heavy industry projects and other policy-based steps based on the NDS.

Under such circumstances, the Government planned to establish the Development Bank Mongolia (DBM) specifically designated for the financing of large projects without relying too much on the usual annual budget cycle. The first Government decree to establish the Development Bank was issued in 2009 and in cooperation with the JICA team and with assistance from GTZ (Japanese and German development aid agencies), the Bank was established in 2010. In 2010, its law was passed and its capital was allocated from the budget. The new law gave the DBM wider financing possibilities compared to a usual commercial bank; a management agreement was signed with the Korean Development Bank and the Bank officially opened in May 2011. In March 2012, the new Bank raised its first US$600 million on international markets and then proceeded to raise another US$1.5 billion in DBM and Government bonds in the autumn of 2012.

The DBM is financing road infrastructure projects in the capital and a large construction materials plant, and is in charge of financing a new railway project in the Gobi, a key project for expanding exports of Mongolian coal to the Asia–Pacific market, and other key projects. By government decree and later by law, it reported first to the National Development and Innovation Committee (NDIC) and, after the 2012 elections, to the newly organised Ministry of Economic Development, a successor to NDIC. Currently, the money raised by DBM is the largest development-oriented package of financing undertaken by the Government of Mongolia. Some of the government bonds' capital is allocated towards developing more downstream industries such as agro-processing and urban infrastructure.

Another important step was the development of the Mongolian Stock Exchange (MSE). Founded at the beginning of the 1990s, for most of the time it had been used to allocate shares of state-owned enterprises. However, its goal gradually changed as more portfolio investment came from abroad and of 249 companies listed on MSE; 43 of them (or 17 per cent) are mining companies.[2] To gear the MSE towards more development financing needs, in 2011 its management team was renewed, new specialised software installed and an advisory team from the London Stock Exchange helped its modernisation.

2 Speech of Angar Davaasuren, CEO of the MSE at Roundtable with the Mongolian Finance Minister, LSEG, 9 September 2014.

MSE has become an important financing tool for Mongolian companies hoping to raise financing for its projects and the related laws were updated in 2013. Currently most Mongolian mining companies issue stocks abroad. However, with gradual improvement of the regulatory environment, legal infrastructure and trading opportunities, it is planned that more stocks of Mongolian mining companies will be sold through MSE. On 9 September 2014, the Government of Mongolia signed with the London Stock Exchange Group (LSEG) an extension to the strategic partnership agreement between LSEG and the MSE by a further three years, based on the progress achieved to date, and several new areas including post-trade infrastructure, FTSE index development and an investigation of opportunities for trading new products and asset classes including commodity derivatives and foreign exchange (LSEG 2014). To further enhance the capital market, there is an urgent need to develop an attractive environment for domestic institutional investors by reforming government funded social securities and pension funds, and encouraging and supporting private pension initiatives. It is also important to create a financial ombudsman service as an independent public agency on a non-commercial and not-for-profit basis for settling disputes between businesses providing financial services and their customers in order to speed up the development of the financial sector and to enhance credibility and public trust in the system.

The Central Bank of Mongolia has signed a three-year currency swap, worth almost 1 trillion Mongolian *togrog* (MNT)/equivalent of RMB 5 billion, with the People's Bank of China in 2011; it was enlarged twice, to RMB 10 billion in May 2014 and then RMB 15 billion (MNT 3 trillion) in August 2014 for a term of another three years (Bank of Mongolia 2014) during the recent visit by China's President Xi Jinping. This deal aims to promote bilateral trade and cross-border trade settlements and offers short-term liquidity to the two countries' financial institutions to reduce reliance on the dollar in the wake of the global financial crisis. China is the biggest trading partner and investor for the past 10 years, with bilateral trade volume reaching US$5.4 billion in 2013, and *renminbi* (RMB) is the second most traded currency for cross-border payments between China and Mongolia. China and Mongolia will double two-way trade to US$10 billion by 2020. China Exim concluded a loan agreement with DBM to finance US$162 million projects including the first highway, installing pipes spanning China–Russia–Mongolia in a project called Steppe Road, and enhancing railway and energy sectors to support Mongolia's mineral exports, not only to China but also to Japan and South Korea (Lui 2014).

Most of the 13 domestic banks account for 96 per cent of the financial sector and total financial assets account for 70 per cent of GDP. Bank loans are important sources of finance for mining operations. Loans to the mining sector have

been substantially increased in the last decade contributing to a mining boom. They reached 14 percent of the total loan portfolio in 2014 (Figure 6) from only 2 per cent in 2008. Figures 6, 7 and 8 show that banking intermediation has been improving over time, showing increased loan disbursement and a slowly narrowing interest rate gap, despite lending constraints by a single-borrower limit, as well as an enlarged but still small capital base of local banks in comparison with the large scale of mining operations and their high demand of financing.

Big international investment banks have begun advising on macroeconomic risk management, international bond issues and IPOs of the major mining projects. For example, around 30 firms operating in Mongolia have shares listed on overseas exchanges. The four largest stocks listed offshore in 2011 were Ivanhoe Mines (listed in on the NYSE and TSX), Mongolian Mining Corporation (MMC, an MCS group subsidiary listed on SEHK) and South Gobi Resources (TSX and SEKH), holding a combined market value of US$23.1 billion, roughly three times Mongolia's 2011 GDP (Oxford Business Group 2013).

Global multinational institutions such as ADB, EBRD, and IFC play a crucial active role in financing the private sector projects including mining and infrastructure via equity and debt instruments. Mongolyn Alt Corporation (MAK) received two loan facilities of US$26.3 million for expansion of mining operations and production of higher-quality, cleaner coal from EBRD,[3] which is a top leading multinational financial agency. Foreign banks such as ING,

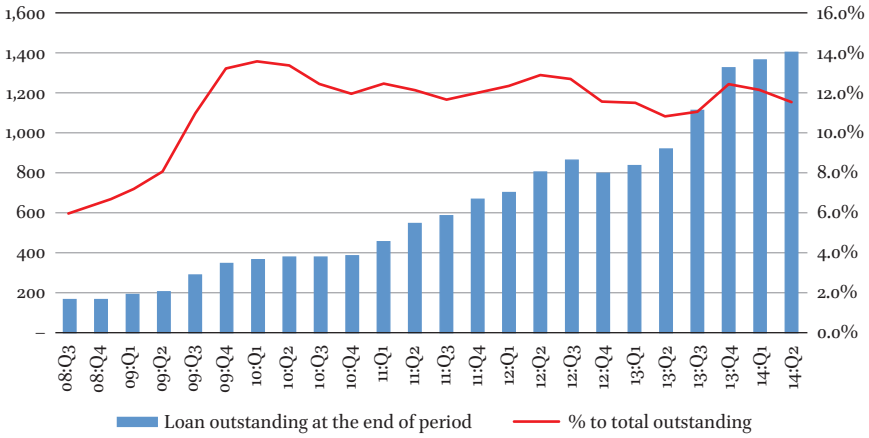

FIGURE 6 *Mongolian commercial banks' lending to mining sector* (*in billion MNT*).
SOURCE: BANK OF MONGOLIA

3 'EBRD and Natural Resources Financing' presentation for Mongolian Women in Business conference, London, 2013 (http://www.admwe.org/).

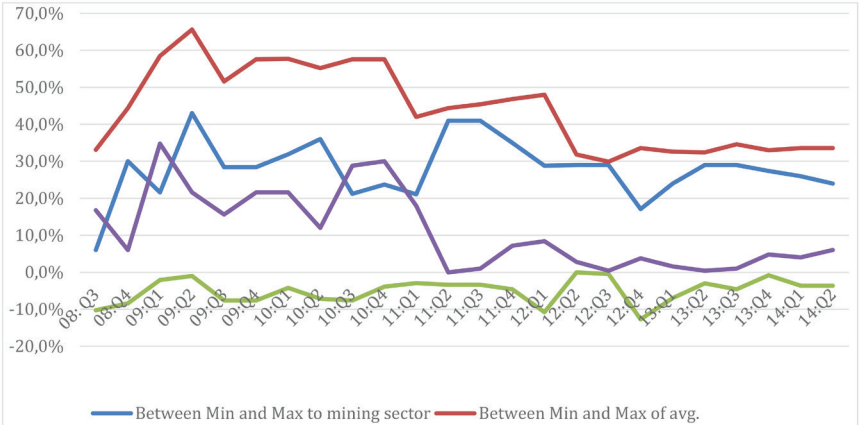

FIGURE 7 *Interest rate gap (per cent).*
SOURCE: BANK OF MONGOLIA

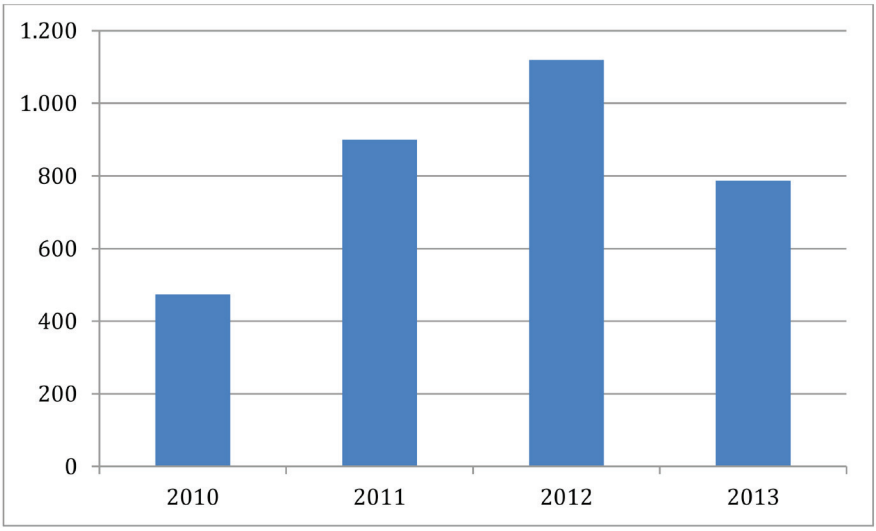

FIGURE 8 *Budget investment in Mongolia (in million MNT).*
SOURCE: NSO (2013)

Standard Chartered Bank (2011), Bank of China and Sumitomo Mitsui Banking Corporation (2013) opened representative offices in Ulaanbaatar to facilitate the financing of large-scale projects.

Concessions were introduced as another important source of investment sources. The new law on Concessions established procedures for Public Private

Partnership (PPP) in investment and allowed increasing investment in the country on the basis of PPP. The largest completed projects under the new concession framework are a new heavy-duty highway for mining trucks in South Gobi and a power plant; the new incoming ones are railways through the Gobi to China's border (US$0.8 billion), Power plant No.5 project (US$1.4 billion); a new planned highway from China's border to Russia's, and a Tavan Tolgoi power plant in the Gobi, as well as a number of smaller infrastructure projects in the countryside. The Government of Mongolia has a large number of proposed concession projects and international investors such as International Power, Samsung, POSCO and Sujitsu are negotiating such investment.

Budget

Budget financing in Mongolia has been directed toward more social infrastructure for a long time, since most of the infrastructure projects were financed by foreign aid and assistance since the start of the transition to a market economy. Mongolia's economic growth, one of the highest in the world, has been supported by a commodity price boom, which started around 2005, and a rapid expansion of the mining extraction sector, closely related to the industrial boom in neighbouring China. This was the start of a first sufficiently high increase in mining revenue for the country. To catch a large revenue windfall, a new tax on windfall price gains was instituted by 2006 which strongly negatively affected gold miners and the state-owned Erdenet copper plant but created a large additional revenue stream for the country, a first such significant increase in export and tax revenue in the last 20 years.

The new windfall gains tax was levied on gold and copper, which served as a major source for increased public revenue for a number of years before it was abolished in relation to signing the Oyu Tolgoi investment agreement in 2009.

These export revenues financed a sharp increase in budget expenditures, partially for social needs, the so-called 'Children money' allowance system and a development of infrastructure, mainly in energy and roads. A first 'Development' Fund was established by then and a state corporation for mining resources, Erdenes MGL, was founded in 2007 to manage the enlarged mining revenue. As budget revenue increased, Mongolia began to invest more in building infrastructure, primarily in energy distribution and roads. Both these sectors have special importance for the country because of its vast spaces meaning that regional development is based on an extensive network of energy lines and national highways to distribute products and raw materials.

In 2012, budget investment for the first time reached US$1 billion US dollars (in addition to US$0.6 billion of DBM and US$1.5 billion of Government bonds) (see Figure 8). These funds mostly went to infrastructure and urban development. Supplementing these financing sources, Mongolia also utilised foreign aid and loans, mostly concessional ones, and in 2012 the country used 260.8 billion MNT of loans and 213 billions MNT of foreign aid (in total about US$300 million) for various projects.

However, a main specific feature of Mongolia was that, except for traditionally government-owned mining companies, licences for newly developed mining deposits were mostly owned by private companies and it was expected that infrastructure, necessary for mines, as well as financing for downstream industrial projects, would be raised by those mining companies, sometimes utilising the abovementioned Concessions Law framework for PPP projects.

Similarly, for State Owned Enterprises (SOEs) such as Erdenet and others, the mining activities proceeded on the basis of SOE Law, which meant that they have to finance their operations commercially. Only in the case of Erdenes MGL, a holding arm for Mongolian government strategic deposits in mining, government allowed public financing but also pushed more for commercial funding for the company (meaning that budget financing had more social priorities). Erdenes MGL, an owner of a giant Tavan Tolgoi coal deposit, signed an export agreement with Chinese SOE Chalco in 2011 and raised financing of approximately US$450 million through the agreement.[4] It is expected that it will sign a mine development agreement with another foreign investor and raise more financing through IPO as its export infrastructure in the Gobi improves.

Mongolian past experiences show that mining had not being considered a key priority sector for budget financing and the most important tax payers structure stayed the same even in mining boom years. However, in regards to mining sector, an important change has been made in fiscal policies. A cyclical character or boom-bust cycle for commodity economies is well known and the fact that the dependence of Mongolian economy on mining has grown only in the last 20 years made it more vulnerable to such price fluctuations. In order

4 Chalco is a state-owned Chinese company specialising in trade in metals and minerals. Chalco submitted a bid to purchase a company which owned licences for some coal deposits. Fearing that this would result in price distortions, as China is a main buyer of Mongolian minerals, the Parliament of Mongolia adopted a law which made acquisition of assets in mineral sectors by state-owned companies very difficult (SEFIL Law). The law was in force for about a year-and-a-half and then replaced by a newer Investment Law, adopted in the fall session of Parliament in 2013.

to stabilise the economy, to create a surplus in boom years and spend it in bust years, the country's fiscal system was reformed and a new Fiscal Stabilisation fund established in 2011. It is further expected to transform gradually into a new sovereign wealth fund. The European Bank for Reconstruction and Development report (Isakova, Plekhanov & Zettelmeyer 2012: 15) summarises fiscal reforms as 'To anchor the macroeconomic framework and reduce macroeconomic volatility the parliament adopted the Fiscal Stability Law in June 2010, and the Integrated Budget Law . . . The Fiscal Stability Law foresees a cap on public debt . . . a structural deficit ceiling . . . and a ceiling on annual expenditure growth . . . also strengthens the role of medium-term budgeting and introduces a transparent formula for copper price projections (one of the key fiscal parameters)'.

The recent Mongolian economic downturn proved that the economy is vulnerable to the world price of a few commodities, mainly coal, copper and gold. Thus, the country needs to build a solid infrastructure to strategically manage long-term mineral production revenues and associated risks: a) to establish a Risk management institution in the form of Board or Committee at the Government level; b) to initiate a sovereign price insurance scheme by putting in place an effective hedging strategy in order to protect the economy from the negative consequences of falling mineral prices; and c) to develop a long-term strategic investment programme with a conservative risk approach to allow the Government better to manage and plan long-term sustainable development policies to enable future generations to benefit from today's natural resource wealth. This should be implemented with good legal support and excellent expertise in the field. This is all about a responsible and prudent budgetary strategy.

Foreign Investment as a Key Factor of Economic Growth

Before the mining boom, Foreign Direct Investment (FDI) in the country increased at quite a slow speed, mainly being destined for a small domestic market and partially for export industries such as light industry and mining. The total foreign direct investment commitments made by foreign investors exceeded US$57 million by the end of 1995. While such companies as Sumitomo Corporation and KDD of Japan, Korean Telecom of South Korea, Nescor of USA and others made investments in Mongolia, the total volume was not high at all. At that time, 'in terms of net investment volume in 1995 the United States had an investment of US$1.6 million, followed by Russia with US$14.8 million,

China—US$6.7 million, Japan—US$10.6 million, Italy—US$5.4 million, South Korea—US$5 million, Singapore—US$0.3 million, Great Britain—US$1.1 million, Taiwan—US$1.2 million, Germany—US$0.6' (FIFTA 2000, Foreign investment database).

In 1995, foreign direct investment was largely made in services aimed at domestic market, mining and processing of near-homogeneous goods sectors: 'wool and cashmere processing, knitting, processing of animal bone, intestines, uranium, copper deposits, tourism, communications and cable TV services, processing of hides, skins, sewing, footwear and cosmetics production, metals and stones, exploration of oil, gold, public catering, photo developing' (FIFTA 2000, Foreign investment database). Gradually, by the end of 2001, FDI reached US$457 million as the situation changed. It was not only the absolute number of foreign direct investment-related companies that grew: as of the end of 2000, there were 1600 companies from 61 countries registered in Mongolia with the total investment of US$380 million, of which 72 per cent was made by joint venture companies, 28 per cent by wholly owned companies (FIFTA 2000, Foreign investment database), but also the sectored distribution of FDI changed, directly contributing to increased exports of manufactures: by 2000, light industry emerged as one of largest recipients of foreign direct investments, second only to mining and exploration of natural resources. This was a result of an increase in Mongolian exports of garments to the North American market. An interesting cornerstone was reached when foreign investment in light industry exceeded that in mining in 1999, reaching US$18.8 million compared to US$15.3 million in mining.

However, after liberalisation of the mining and natural resource development sector, since 1997 the liberal economic regime for investments in the mining sector resulted in rapidly increasing inflow of foreign investment in natural resource sectors in the last decade. Initially the investment in mining was mainly directed into exploration of natural resources; Mongolia became one of the top 10 destinations in the world in terms of exploration investment. Gradually the exploration phase shifted to the production phase and the amount of foreign investment grew multifold. FDI in Mongolia in 2009 was four times more than FDI in 2004 (Figure 9). The current Mongolian mining boom was to a large extent financed from private sources and among them, foreign capital has been key for its development (Figure 10).

The main engines of these investment drives are multibillion dollar investments in key strategic deposits of mineral resources for the country, such as Oyu Tolgoi (investment agreement concluded in 2009) (Figure 10) and large-scale private investment in coal and iron ore, which were made in recent

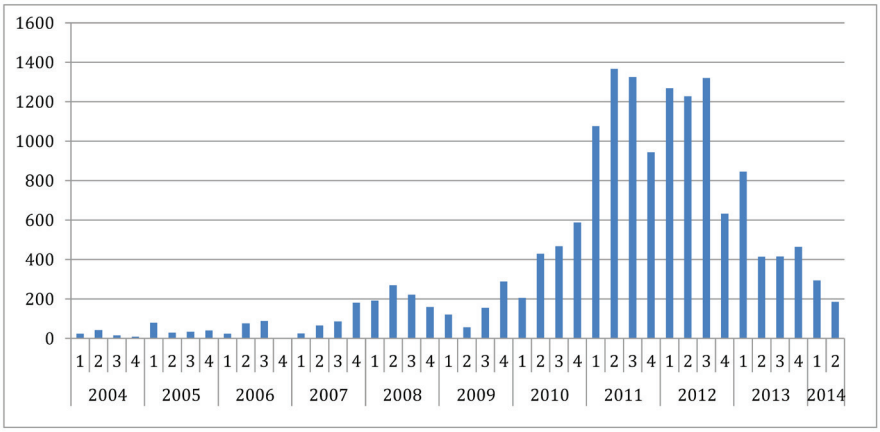

FIGURE 9 *Foreign investment in Mongolia* (US$ *millions*).
SOURCE: BANK OF MONGOLIA

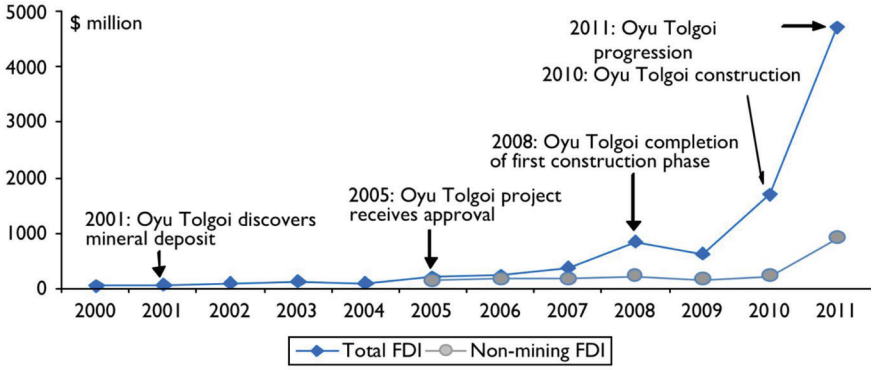

FIGURE 10 *FDI inflow in the country.*
SOURCE: INVESTMENT POLICY REVIEW OF MONGOLIA 2013, NCTAD, CHANTAL DUPASQUIER AND MASSIMO MELONI, INVESTMENT POLICY REVIEWS, DIVISION OF INVESTMENT AND ENTERPRISE

years. In addition, there have been hundreds of private investment projects in mining-related services such as transportation, logistics and finances and other sectors.

Investment ranking of the country (20th in the world) showed a very high FDI/GDP ratio of 36.4 per cent (UNCTAD, Investment Policy Review 2013), one of the highest among the countries compared.

However, since the controversy and change in the law affecting Rio Tinto and the Oyu Tolgoi project, in 2014 FDI had dropped about 80 per cent from its 2011/2012 level. The figures available for 2014 show that it is now back to where it was in 2008 or before because foreign investors seem to have lost faith in the ability of Mongolia to keep to agreements it has signed. It is therefore vital that the Rio Tinto issue is resolved.

By 2012 the structure of foreign investment in the country had changed drastically. Mining now is a dominant field for foreign investment (Figure 11). In the middle of the world financial crisis in 2008–2009, foreign direct investment in Mongolian economy grew by 12 per cent year-on-year; the total amount of annual foreign investment in Mongolia by 2010 already surpassed what had been invested by foreign investors for the previous 14 years from 1990 to 2004.

As the investment projects undertaken by international corporations grew in size, in 2009 FDI exceeded US$870 million and in 2010 exceeded US$1 billion thresholds for the first time in history. Similarly, at that time Central Bank reserves officially hit US$2 billion US. Statistics show that in 2011 FDI was as high as US$4 billion and in 2012 about US$3.7 billion (5554 billion MNT and 5213 billion MNT respectively: NSO 2013).

Investment in mining also led to an increasing inflow of portfolio investment in the country's assets leading to high growth of the stock exchange in the country (Figure 12). Growth of FDI stimulated overall investment growth;

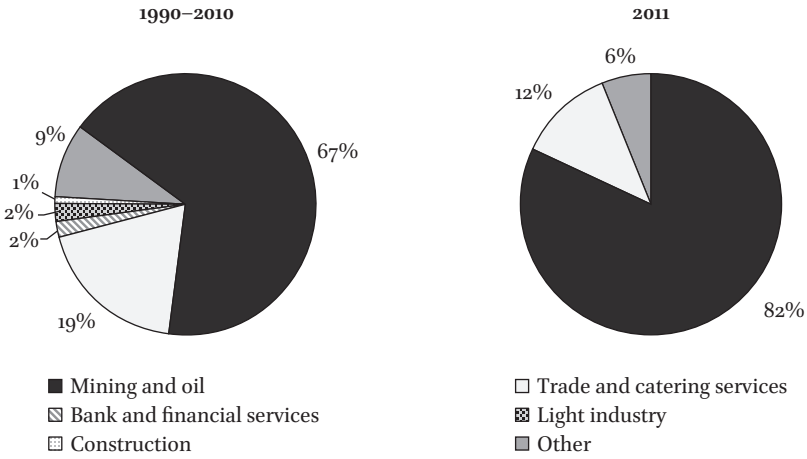

FIGURE 11 *FDI composition.*
SOURCE: UNCTAD, INVESTMENT POLICY REVIEW OF MONGOLIA, 2013

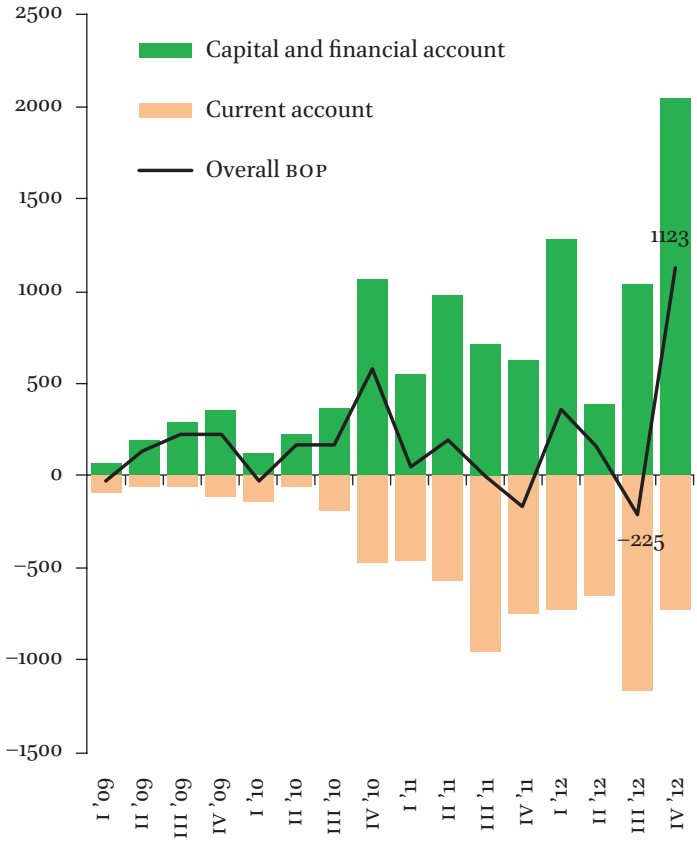

FIGURE 12 *Capital inflow into the country.*
SOURCE: BANK OF MONGOLIA, 2013

by estimates of private investors, investment represented 40 per cent of Mongolia's 2010 GDP and a staggering 55 per cent of GDP in 2011.

Developing a Regional Financial and Transit Hub

The Presidents of Mongolia, Russia and China met together in September of 2014 in Dushanbe, Tajikistan and agreed to establish trilateral contacts jointly to build an economic corridor linking China, Mongolia and Russia, to harmonise 1) the 'Silk Road Economic Belt' initiative to recover the famous historical trade route linking China with Central Asia and Europe; 2) Russia's transcontinental rail plan; and 3) Mongolia's 'Steppe Road' program. This first-ever tri-

lateral meeting has built a foundation for Mongolia to use a vast economic opportunity and benefit from this economic cooperation to connect two of the largest world markets through its own natural geographical advantages: so from being land-locked, Mongolia would like to become a land-transit country to earn benefits from China and Russia's interest to involve Mongolia in the implementation of the regional long-term projects in infrastructure, power sector and mining industry, that might create a massive business opportunity for Mongolia to become a regional financial and transit hub. Prior to the tri-party meeting, Mongolia and China signed a joint declaration upgrading their relationship to a 'comprehensive strategic partnership' and signed 26 agreements in trade, infrastructure, mining, energy and financial cooperation. It will attract a tremendous amount of investment and FDI will play a crucial role. To realise this mission using the best international practices such as a Singapore economic development model, a country needs an integrated long-term strategy to build financial expertise, reliability and trustworthiness in the financial sector, stable social and political conditions, the rule of law, an independent judiciary, and stable, competent, and honest government that pursued sound macroeconomic policies with budget surpluses and stable Mongolian currency (Lee Kuan Yew 2000: 72–3).

Conclusion

In 2008–2012 new laws and institutions were created to absorb and direct capital flow in new sectors: PPP or concessions, Development Bank of Mongolia which used borrowing overseas, a new Stability fund, SME fund, local development funds in each province and community development grant systems. Many of these new concepts have been used to attract investment which came in abundance. In 2011, the real economic growth rate of Mongolia surpassed 17.5 per cent per annum, making it one of the fastest-growing economies in the world. The growth rate was 12.3 per cent in 2012 and 11.7 per cent in 2013.

These very high rates of economic growth have been fuelled by one of the world's largest investment/GDP ratios, 55 per cent for 2011 and as high as 64 per cent for 2012, and have made Mongolia one of the top five countries in terms of 'best investment', according to CNN Money ranking (2012). In 2012, total investment in the country's economy was equal to almost US$6 billion (NSO 2013), of which foreign investors' share was about 66 per cent or US$4 billion. Similarly, in 2012, budget investment for the first time reached US$1 billion and in addition the Government of Mongolia has raised US$0.6 billion of DBM bonds and US$1.5 billion of sovereign bonds. Supplementing these financing sources,

Mongolia also utilised foreign aid and loans, mostly concessional, and in 2012 the country used 260.8 billion MNT of loans and 213 billion MNT of foreign aid (in total about US$300 million) for various projects. The Mongolian private sector also invested almost 1 billion US dollars in 2012 alone, raising as much overseas through various sources like IPO, private placement bonds and loans.

While mining is a key sector and a factor behind this financing, and often the mineral deposits are used for raising capital, the new institutions have helped the country to diversify its investment sources, use new methods of attracting investment such as concessions and PPP, and created mechanisms for raising and utilising finances from overseas. These measures have resulted in high economic growth rates and further accelerated budget investment and foreign aid and loans investment. The key, however, as one can see, has been the large investment projects, primarily the Oyu Tolgoi project, a real champion for FDI. While the financial side of the agreement is sometimes criticised in Mongolia, one cannot underestimate the overall impact of the project on the development of the economy. As the project is planned to increase exports of the country further and other new large projects are under discussion (Tavan Tolgoi coal project), the impact of large investment projects, often related with increasing FDI inflow, and the perspectives of Mongolian economy for the foreseeable future are indeed expected to be bright. The capital market would complement substantially to raise capital and allocate resources with the growing demand of mining projects. It should be developed together with building an independent efficient judicial system for the financial sector such as a financial ombudsman service and reforming national social and pension funds to institutional investors.

In addition, mining and its finance must be considered within the framework of good corporate governance, transparency and rule of law, which are a keystone for the mining sector to contribute at sustainable speed to economic development. There is discussion and criticism of government policy as to whether mining could be the only main long-term source of economic growth. Thus, to avoid a 'Dutch disease', a robust policy on economic diversification and commodity price risk management in all levels of Government and business entities would have helped Mongolians to reduce side effects from mining. One of the solutions for the funding of huge mining finance needs possibly to be discussed and solved in the proposition of building the Mongolian financial sector as a future financial hub for the region, taking advantage of the fact that its neighbours, both China and Russia, are going to bring potential business growth in the long run and reduce over-dependency on mining in order to accelerate trade and diversify its economy, while Chinese demand for

Mongolian and Siberian resources will necessitate the construction of new rail and road links, akin to the 'silk roads'.

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