

Mongolia: Land of opportunity

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Mongolia: A land of opportunity

If Mongolia was an investment stock, it would be a cross between a large high growth dotcom and an early stage technology play. The growth prospects are excellent, with output from just one of the country's mines (when running at full capacity) equal to the total current GDP of the country. However, the path to this high growth phase is not fully tested. The financial and capital markets are immature, the infrastructure (from roads to power and water) are inadequate and not all of the country is convinced that it should share its wealth.

The country at the end of the rainbow

The undeveloped mineral wealth in Mongolia is spectacular – this is a country that really is sitting on a pot of gold. It has one of the largest undeveloped copper, gold and uranium deposits in the world and is believed to have the largest untapped supply of coal. The challenge is going to be getting it out. Funding the development of the mines and constructing the necessary infrastructure will take large investment, which will have to come from outside the country.

First milestone deal has been signed

Mongolia passed the tipping point when it finally signed a large and significant deal with Ivanhoe Mines and Rio Tinto to develop a copper and gold deposit in 2009. This required four pieces of legislation and a change in the way that the nation viewed foreign direct investment. These changes have paved the way for a pipeline of other contracts to be negotiated.

Investment needed – this is the opportunity

As the mineral wealth development gets into its stride, many opportunities will open up for new businesses in areas as diverse as tourism, renewable energy and information technology. Mongolia needs an upgrade – it needs new housing, new roads, new electricity and water processing networks and all the support functions that massive investment in the country will require. The government claims it is open to foreign direct investment in nearly every sector and will treat foreign investors as equal to domestic investors.

The ride may not be smooth but it will probably be fast, and now is the time to exploit the opportunities that Mongolia offers.

November 2010

ANALYST

Edwin Lloyd 020 3077 5700
enquiries@edisoninvestmentresearch.co.uk

Size of country	1.5m km ²
Coastline	Zero
Border countries	Russia and China
Capital	Ulaanbaatar
Currency	Togrog (MNT)
Exchange rate	MNT1,277/USD (November 2010)
GDP	\$4.2bn (2009)
GDP per capita	\$1,551 (2009)
Population	2.8 million (2010)
Population under 14 years old	27% (2009)
Literacy	97.8% (2005)
Government	Parliamentary democracy
Next parliamentary election	2012
Next presidential election	2013
Exports	\$1.875bn (2009)
Imports	\$2.07bn (2009)

This report has been commissioned by Newcom Group – see Appendix one for details.

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The country and its economy

Mongolia is famous for the empire forged by its leader Chinggis Khan (Genghis Khan), which reached from modern day Poland to Korea and from Siberia to Vietnam. The country as currently defined is much smaller than it was during the dynasties of Genghis Khan and Kublai Khan; even during the 19th century it was over twice the size it is now.

Today Mongolia is the 18th largest country in the world, with a land mass of 1,565,000 km² (just under half the size of India). Despite this size, the population is 135th largest in the world, with an estimated 2.8 million citizens. The population is heavily weighted towards the capital, Ulaanbaatar, with 40% of the total living there. The average population density is just 1.8 people per km² and 36% of them are considered “poor” as defined by the World Bank.

The country is landlocked, being sandwiched between Russia in the north and China in the south. Transport infrastructure is poor and in need of substantial further investment. There are limited domestic sources of investment, so foreign direct investment is a key factor in the rate of infrastructure development.

Mongolians have a traditionally nomadic lifestyle, with 40% engaged in herding and agricultural activities and only 5% involved in mining, the industry that will define Mongolia’s future. Ethnic Mongols now account for about 85% of the population. Most Russians left the country following the withdrawal of economic aid and collapse of the Soviet Union in 1991.

Until 1991 Mongolia was a Soviet-style and Soviet-supported state. As old-style communism broke down in the USSR, Mongolia underwent a change into a democratic republic. Much progress has been made but it is still in transition to a market economy. This is evident both from the debate between the “new” breed of politicians that embrace globalisation and the still-strong nationalists that believe in protectionism and full state ownership of assets, and in the underdeveloped legislative infrastructure to support a free market.

Out of all of the former Soviet Union satellite countries, it is fair to say Mongolia is the most open to foreign investment, particularly in the mining sector. It has not been a smooth road to embracing such international investment and the process is not complete. However, there have been some significant milestones in the process towards clarifying ownership rights, openness, tackling corruption, transparency and balancing foreign investment with national development goals.

Recent sector trends

The Mongolian economy has recently enjoyed growth across a broad range of sectors, following a deep recession in the second half of 2008 and the first half of 2009. Powered by the growth in the mining sector, specifically demand for copper and coal from China, the economic outlook for the country looks stable and positive. The exception to this is the agricultural sector, which has suffered from appalling weather during early 2010 that caused the death of a large number of livestock.

World Bank analysis shows that transport & communications and mining led the recovery from recession. However, it is wholesale and retail trade that have pushed the growth through the second quarter of 2010. A 30% year-on-year contraction in the agriculture sector follows a winter

in which 9.7 million livestock – over 22% of the total herd – died from the impact of the dzud (an extremely cold and snowy winter) during the winter months.

More recently, the budget balance has moved positive for the first time since October 2008, thanks to strong commodity prices, particularly copper, and strong revenues from the Windfall Profits Tax (a 68% tax on revenues arising from prices exceeding base prices of \$2,600/tonne for copper and \$850/ounce for gold, which expires in 2011).

Outlook for the economy

Mongolia's economy is heavily weighted towards mining and agriculture. The country has substantial mineral resources including copper, coal, gold, molybdenum, tin and tungsten.

The government recognises that Mongolia cannot develop its resources on its own. While it needs to make the country attractive to foreign mining investors and construct a financial system that enables effective commercial transactions, it also needs to satisfy nationalistic sentiments in politics and the voting population.

The government needs to navigate some obstacles on its road to a sustainable growth economy:

- An election promise to hand out MNT1.5m to every person in the country of which MNT500,000 would be in cash. The second round of public handouts (MNT50,000 per person, equivalent to \$39) is taking place now and will last until December. Every citizen is given money each month to appease those who argued that some of the benefits of the mineral wealth should be distributed to the population.
- Public sector wages were increased by 30% in October (the argument is that inflation was high during 2009, leading to an effective real wage and salary increase of zero last year).
- The Windfall Profits Tax expires in January 2011. This accounted for nearly 20% of government revenues in 2007 and 2008.
- There are no plans for continued support by development organisations such as the IMF and World Bank.

Combined, these events mean the government has to implement a strict fiscal policy over the next 18 to 24 months. This increases the need for foreign investment to exploit the mining sector.

Recent history – last 20 years

Mongolia's trip to democracy began in 1991 as the country followed the USSR with the end of Soviet-style communism. For the previous 70 years, it was an independent Soviet-supported communist state. That brought with it certain benefits; the principal of which was a well structured education program that remains today. Mongolia prides itself on a literacy rate as high as 97.8% as of 2005.

Since the start of the creation of the democratic state in 1991, the country has developed rapidly, although with a few faltering steps on its way. The first years of its transition to a democratic republic were hard. GDP fell in the early 90s as the country struggled to stand on its own feet. The main political party that formed from the former communist party was soon joined by opposition parties with "democratic" nomenclature. However, the move to a democratic, parliamentary-based

country was peaceful. There have now been nine elections, which have been as orderly as a typical election in the West although election results have been contested afterwards.

The main religion in Mongolia is Buddhism (90% of the population), with Islam, Shamanism and Christianity making up the remainder. Until the 1920s, about a third of the male population were monks, operating from 750 monasteries. In 1928, Khorloogiin Choibalsan rose to power and ordered the destruction of Buddhist monasteries and the death of many of the monks.

Political situation

Mongolia has been a parliamentary democracy since 1991, when the Soviet-style government collapsed. Political opposition was permitted only after 1990, which was shortly before the peaceful democratic revolution. There are two large parties:

- The Mongolian People's Revolutionary Party (MPRP) ruled Mongolia from 1921 until 1996, then again from 2000 until 2004. From the elections in 2006 until 2009, it was in coalition with other parties to lead government. At the 2009 presidential elections, it lost to the Democratic Party. The party has now renamed itself the Mongolian People's Party and portrays itself as a social democratic organisation having been born firmly in the communist style.
- The Democratic Party (DP) was formed as a result of the union of the Mongolian National Democratic Party and the Mongolian Social Democratic Party (MSDN) in December 2000. The Mongolian National Democratic Party came from a number of other parties in the early 1990s. Some of the early parties that formed the National Democratic Party were originally created during the democratic revolution of 1990, as was the MSDN. The party positions itself as a liberal and social democratic party.

The most recent presidential elections were held on 24 May 2009. A close election resulted in Tsakhiagiin Elbegdorj of the Democratic Party winning by a slim margin, having fought on a theme of change and anti-corruption. The most recent parliamentary elections were fought on 29 June, 2008, in which the MPRP won with a decisive lead. Nonetheless the MPRP formed a coalition to move the large mining projects forward.

Presidential and parliamentary elections are held every four years, so in the absence of an early dissolution, the next parliamentary elections will be in 2012 and the next presidential elections will be in 2013.

The key issues politicians face are avoiding Dutch Disease (the use of the mineral wealth to support current account spending leading to a boom and bust economy), and the accommodation of traditional views that fear foreign investment and argue that Mongolia's mineral wealth should be retained in Mongolian ownership.

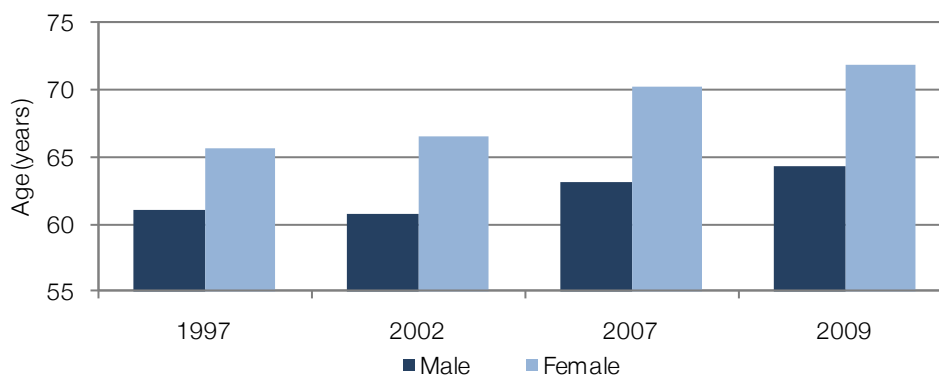
Main performance factors & catalysts for future growth

Population growth

The current population of Mongolia is approximately 2.8 million people. The National Statistical Office of Mongolia estimates that the current annual growth rate is 1.9%, which is twice the level of the early 1990s. Over 40% of the population lives in the capital Ulaanbaatar.

With the rapid improvement in social conditions in Mongolia, the life expectancy is increasing. By 2009, men could expect to live 64 years on average, and women could expect to live to 71. This is an increase of three and six years respectively since 1997.

Exhibit 1: Life expectancy



Source: National Statistical Office of Mongolia

An odd side effect of the growth rate and rapid increase in life expectancy is that, in contrast to many western nations, 27% of the population is under 14 years old, and roughly 59% of the total population is under 30. This relatively youthful population has placed strains on Mongolia's economy but also offers a vital and energetic labour pool that will develop over the next two decades. The country will not face the social security issues from an ageing population for several decades yet.

A beneficial effect of the soviet influence up to 1991 was the importance placed on education. Mongolia has a very high literacy rate – at a level of 97.8% when last measured in 2005. Despite the nomadic nature of much of the population, this moral and legal obligation continues with a 99.2% enrolment ratio of children to primary school (in 2009) and a 93.2% enrolment ratio in secondary school.

Unemployed people numbered just under 39,000 in September 2010 (an unemployment rate of 3.5%), from an economically active population of 1.1 million. However, labour force surveys suggest that if the non-registered unemployed are included, the real unemployment rate is nearer to 9.5%.

GDP

Mongolia suffered a sharp decline in GDP as it changed from a Soviet-style government to a democratic, parliamentary-style republic. Between 1989 and 1993 GDP contracted 22%, but by 1994 growth had been restored. This growth built through the late 90s until a sharp expansion in

economic activity from 2003 to 2008, which included two years (2004 and 2007) in which GDP growth at constant currency exceeded 10%. This was supported by both expansion in output in the mining sector and by rapidly increasing commodity prices.

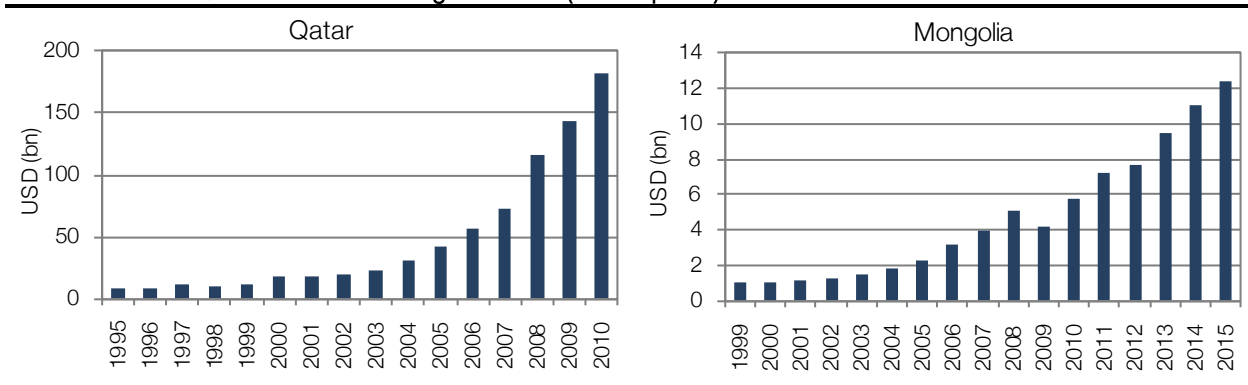
By late 2008 and early 2009, Mongolia joined most other countries in the world in experiencing a rapid and steep recession. The sharp drop in the price of coal and copper showed the importance of these commodities to Mongolia during the economic slowdown.

Mongolia reported a GDP of MNT2,646bn in the first three quarters of 2010, a 6.3% increase on the first three quarters of 2009 when measured at constant 2005 prices. The breakdown of this figure reveals that agriculture contracted 26.5%, while industry expanded 12.3% and services expanded 9%. This reflects the devastating effects of the winter on the livestock herds, combined with the recovering commodity prices.

By September 2010 there were 72,933 businesses registered in Mongolia, an increase of 14.4% from the 63,752 a year earlier. The bulk of the growth came from wholesale and retail trade operating in Ulaanbaatar.

The outlook for Mongolian GDP is positive, with an anticipated solid economic growth over the next few years from stronger mineral production supported increasingly by other industries, such as a recovery in agriculture, and continued strength in the manufacturing base. The development of the Oyu Tolgoi mine alone will be transformational, with Mongolia poised to generate the highest rate of growth of GDP of any country in the world over the next 10 years. There is a high probability that Mongolia will follow the same growth profile as Qatar did following the development of its petroleum reserves.

Exhibit 2: GDP of Qatar and GDP of Mongolia in USD (current prices)



Source: IMF

The main risk of failing to achieve sustained GDP growth is political. The government is already engaging in its second cash hand-out to every citizen of Mongolia to appease those who believe the mineral wealth should be shared with the population now. Pursuing this practice threatens the country with Dutch Disease (ill-managed mineral wealth causing currency strengthening that in turn weakens the manufacturing base). Mongolia needs to demonstrate that it will invest its relatively new-found wealth into training and development of new service and manufacturing industries.

Resource base

If one needs to identify the single most compelling argument in favour of Mongolia, it is the attractive mineral supply and demand characteristics. In short, Mongolia is believed to have the largest untapped supply of coal in the world and borders China, the hungriest nation for coal in the world. In 2008 China became a net coal importer despite mining 46% of the world's total in 2007. By 2009 its coal imports had doubled to 130m tonnes and, while slightly dulled by slower economic growth, the outlook in China looks set to continue in the same direction. Mongolia is also blessed with gold, copper, uranium and oil.

Supply

Oyu Tolgoi is one of the largest undeveloped copper and gold deposits in the world. Current reserves are 35m tonnes of copper and 42m ounces of gold. It is expected to produce an average 450kt of copper and 330k oz of gold per year, giving a mine life of over 70 years. Ivanhoe Mines (listed in Canada) chose Rio Tinto (listed in the UK and Australia) as a financial and operational partner to exploit these deposits. The most significant progress was made in October 2009 when Ivanhoe Mines and Rio Tinto finally agreed terms and signed a contract with the government of Mongolia to develop the deposit.

Based on current prices, annual revenues would be \$3bn (roughly half of the country's present GDP). Capex for the standalone project is estimated at \$5bn for the pre-production stage between 2010 and 2013, equivalent to nearly 100% of current GDP, with a further \$9bn over the following 20 years of production.

The deal with Ivanhoe Mines and Rio Tinto required the amendments to four laws. These changes and the fact that the Oyu Tolgoi deal was finally signed enable the government to proceed with negotiations on a further 15 strategic deposits. The first of these will be Tavan Tolgoi, which is located in the south of the country and is one of the world's largest undeveloped coking and thermal coal deposits, with 6.5bn tonnes of high quality coking coal potentially available. It is already exporting 3m tonnes each year and 10m tonnes are foreseeable once rail infrastructure is developed.

Demand

China is the principle driver of demand for Mongolia's mineral wealth, both because it is the largest neighbour and because it is turning into the hungriest consumer of these resources.

Copper

Copper consumption is forecast to grow 5.4% globally, according to Codelco (the Chilean state-owned firm that is the world's largest producer of copper), and China is set to consume 40% of this output. Since the largest global copper-producing countries are currently Chile, Peru and the USA, having Mongolia ramp-up copper production on China's doorstep is very convenient.

Coal

In 2008 China moved from a net exporter to net importer of coal. In 2000 its coal consumption matched that of the United States, but now it consumes coal at a rate three times that of the US. China is forecast to import a net 150m tonnes of coal in 2010, equivalent to two-thirds of

Australia's entire annual exported tonnage. This is putting sustained upward pressure on the whole East-Asian region's coal price. Coal fuels 80% of China's electricity-generating requirements and, at an annual growth rate of 7% pa, electricity demand is set to double in the next decade. Some 10% of this may be supplied by wind, solar and nuclear but, all things being equal, electricity production from coal will have to double as well.

Income profiles

Average household incomes have doubled between 2006 and 2009 (from MNT200,000 to MNT402,000) using constant pricing. However, over this period inflation has increased prices by nearly 46%.

The increase in incomes has been asymmetric between urban and rural populations. The reasons for this are twofold: first, the increase in the wage and salary part of household income has been most dramatic, which is less relevant for nomadic herders. Second, and associated, is that the income from household businesses element has declined for rural dwellers over this period as harsh winters take their toll on livestock-based businesses.

Employment conditions for workers in rural regions have deteriorated. Specifically, herders and informal mining workers have experienced decreasing job availability, falling wages (in real terms) and an increase in living expenses.

Poverty remains a real issue in Mongolia, with the results of a 2009 household income and expenditure survey showing the poverty headcount is 38.7%, an increase of 3.5% points over 2008.

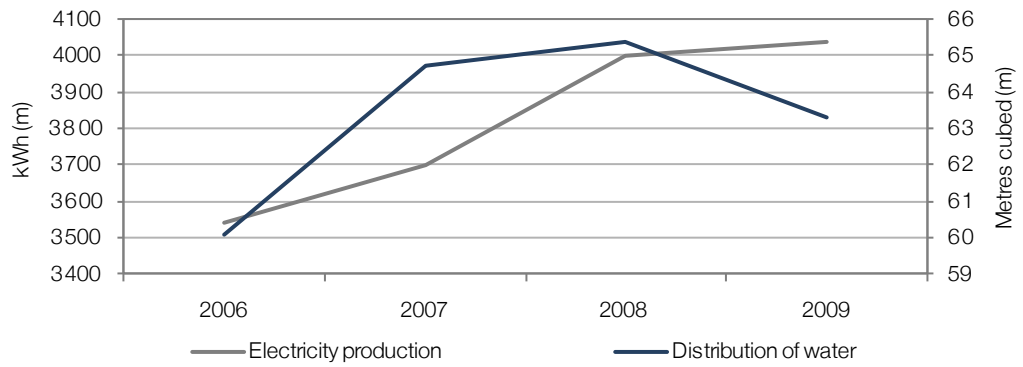
Infrastructure

Mongolia's ability to exploit its mineral reserves and transport them to the customers (China in particular) will be critical to its success. The road and rail network is still at a minimum and the government is not financially capable of building the necessary infrastructure. Between 2006 and 2009 the total rail network (1,815km) in Mongolia was not expanded at all. Over this period the improved road network was extended from 6,281km to 6,692km. Roughly a third of this improved network is to paved standard. Clearly much work remains to be done.

These huge infrastructure challenges will hamper development of mineral deposits such as those at Tavan Tolgoi. These mines need rail transport, efficient border crossings, electricity and water supply. Currently Tavan Tolgoi is exporting close to 3m tonnes per year along a dusty unpaved road. Production is capable of ramping up to over 10m tonnes per year via a new paved road, but any further expansion of production will require railways.

In recent history, the number of companies involved in electricity, gas and water supply has decreased by 3.3% each year. This is reflected in the slow growth in electricity and water distribution.

Exhibit 3: Electricity production and distribution of water



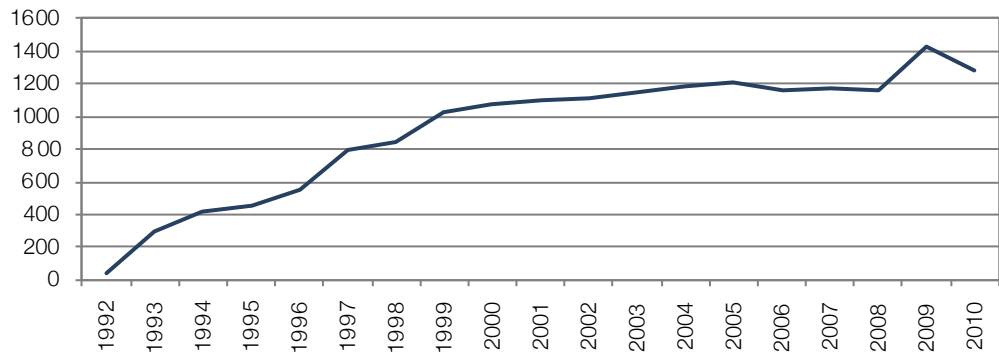
Source: National Statistical Office of Mongolia

Currency

The currency of Mongolia is the Mongolian Tugrik (MNT) or Togrog. The exchange rate against the US dollar was relatively stable from the middle of 2009, when interest rates were raised to tackle the effects of the global crisis, to the end of that year. Since the beginning of 2010 the Tugrik has strengthened slowly but steadily against the US dollar. In September 2010, the average monthly exchange rate against the US dollar was 6.6% stronger than 12 months earlier.

Exhibit 4: Exchange rate vs US dollar

Note: 2010 figures are to November.



Source: The World Bank

The Bank of Mongolia's interest rate (Central Bank rate) rose from 6.4% at the end of 2007 to 10.25% by September 2008. However, when the global financial crisis hit Mongolia, inflation rose to 34%. In reaction the Bank of Mongolia pushed the interest rate up to 14% in March 2009. Over the following months it was slowly reduced back to 10%. More challenges arose with the dzud in the winter of 2010, which caused food prices to increase. The Central Bank rate was pushed up by 1% in April 2010 to 11%, where it remains.

Geographical context

Trade flows

Situated between Russia and China, Mongolia principally exports and imports to these two countries. It relied heavily on Russia for the seven decades (1920s-1980s) that it was under Soviet influence. Russian is still the second language taught in schools (although this is beginning to change to English) and, while most Russians left the country after the collapse of communism, Russia's influence remains.

China has also featured as an important player in Mongolia's history, not least with the recognition of Mongolia's independence in 1945. China is a country with large resource requirements, which Mongolia can help provide.

During the first nine months of 2010, foreign trade was nearly 54% higher than the same period in 2009. This was broadly reflected both in exports and imports (56.6% and 51.5% respectively), though this left Mongolia a net importer by US\$223m.

China was the destination for 85% of these exports, Canada was second with 5.3%, and the UK marginally exceeded Russia with 2.6%. The exports consist predominantly of mineral products (78%), textiles (8%) and precious metals and stones (7%).

Imports are balanced more evenly between Russia and China, with Russia providing 34% of imports and China providing 30%. The next biggest exporter into Mongolia is the Republic of Korea (6%). The principal imports are fuel (Russia) and vehicles and machinery (China).

Foreign engagement/relationships

During the Soviet era Mongolia was financially supported by Russia. Accumulated debt reached \$11.4bn and was finally settled with a \$250m payment at the end of 2003 – financed through the issue of bonds.

Mongolia recognises the importance of its neighbours Russia and China to its economy, but is also aware of the need to avoid over-reliance on these two countries. To this end it has developed a "third neighbour policy" – the third neighbour being every other country. It has made efforts to develop business relationships with Korea, Japan, the US, Canada and the EU, among others.

Mongolia continues to pursue a process of building credibility with the international community. It has 131 soldiers in Iraq and 15 in Afghanistan. It joined the World Trade Organization in 1997 and the Multilateral Investment Guarantee Agency (MIGA) in 2006. It joined the Seoul Convention on Investment Insurance in 1999 and the Washington Convention on Investment Dispute Settlement in 1996. It has an agreement on mutual protection and promotion of investment with 41 countries and an agreement on avoidance of double taxation with 34 countries. It has also signed a general agreement on trade and economy with 24 countries.

These efforts are yielding positive results. According to a World Bank Report for 2010, Mongolia ranks 60th in terms of ease of doing business – this reflects well on the country when China and Russia are positioned at 89 and 120 respectively.

Investment flows

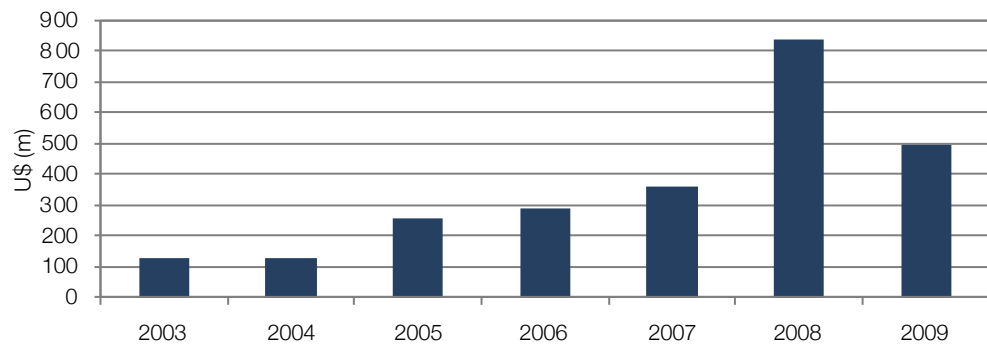
Mongolia has implemented a set of policies to encourage foreign direct investment in the country.

These include:

- access by foreign investment to all areas of production and services (except gambling, drugs, weapons and pornography) and to all parts of the country except protected areas;
- Mongolia accords foreign investors no less favourable treatment than Mongolian investors;
- those businesses that cultivate and plant corn, vegetables, fruits and fodder plants are eligible to half-rate income tax;
- a broad range of spare parts and equipment for light industry, food manufacturing, construction materials and medicine are exempt from the customs duties and VAT; and
- Mongolia has the lowest tax rate in the region, with corporation tax of 10% for profits up to USD 3billion and VAT of 10%.

Over the last few years, the mining sector's role in the economy has grown substantially. It is expected to increase further in the future, becoming the leading contributor to government revenue and a major force of economic growth for the country's development. The sector employs around 45,000 people (almost 5% of total employment). Net foreign direct investment increased by approximately 62% in the second quarter of 2010, and most of this was due to investment inflows for mining.

Exhibit 5: Foreign direct investment in Mongolia



Source: The World Bank

Comparison of business structures

Investment environment

Mongolia's financial sector is still small and growing. The number of listed companies on the Mongolian Stock Exchange declined from 429 in 1998 to 337 in September 2010. However, the aggregate market capitalisation of the companies has increased from MNT35bn to MNT1.18trn (USD890m) over that period – much of this increase occurred during 2010. The exchange trades for one hour each day.

Project financing is not simple in Mongolia.

- The banks are small and largely undercapitalised.
- The total equity of the local banks is just US\$218m.
- Banking law limits them to an exposure of no more than 20% of equity to any single client.
- There is no syndicated loan market.
- Banks cannot take equity in non-financial sector companies above the 10% threshold.

Hence, any moderate to large project requires funding from international investors. Care still needs to be exercised as there is a need for legislation to be tested with respect to ownership rights. This is mitigated by partnering with the larger local companies that allow greater access to government.

Mongolians also have a moderately nationalistic mindset. There is a political body that believes Mongolia's mineral wealth should be retained in Mongolian ownership. The government needs to balance this political mindset, which is echoed by the voters, with the need to develop the enormous opportunities available, for which foreign direct investment is required. These sensitivities are made more complex by influence from Russia and from China, on which the country is already economically dependent.

There are practical issues to investment too. There is a chronic lack of infrastructure in the country. The lack of railways limits the volume of minerals that can be exported irrespective of the level of investment at the mines themselves. There is also a difference in railway gauges between Mongolia and China.

Not surprisingly, total investment in Mongolia is increasing. The full year 2009 level of MNT1,943bn was an 8.9% increase on 2008. The proportion from foreign investors is also rising, to 60% for full-year 2009.

Key local players

There are several diversified industrial conglomerates operating in Mongolia. In most cases the portfolio of businesses is based around one or two key assets, with a selection of smaller businesses or franchises of international brands.

- Bodi Group: with banking and insurance at its core, the portfolio has extensive property interests. It is a Mongolian distributor of Toyota, Isuzu and Skoda.
- Chono Corporation: includes property development, hospitality and logistics.

- MCS Group: founded in 1993 as a consultancy, the group's portfolio includes many aspects of alcohol production, bottling and distribution, and it is the Mongolian distributor of Procter and Gamble.
- Newcom Group: founded in 1993 as a mobile phone operator. The cash generated from this business was reinvested in several different opportunities including an airline, clean energy and property.
- Tavan Bogd Group: among other activities, this group is a distributor of Nestlé, Heinz, Fuji, Xerox and Volkswagen.

Major national corporations operating in the country

The Mongolian government presents itself as open to foreign investment in all sectors and businesses. This is the case in practice, although completing the contracts for mining the largest deposits is a sequential and drawn-out process. Anecdotally, investors that partner to some extent with local banks and operate in a strategic investment with one of the large local businesses (that have better access to government) find the process easier. To date, nearly US\$2bn has been invested by sovereign wealth funds in companies with most or all of assets in Mongolia.

Many global multi-national companies now have some form of presence in Mongolia. Companies such as Coca Cola, Nestlé and Toyota have teamed up with local businesses to establish distribution of their products. In some cases (for example, drinks businesses) companies have developed their own manufacturing capability in the country. The largest companies involved in the mining sector include:

- Rio Tinto (£85bn market cap, listed in London and Australia) and Ivanhoe Mines (C\$12bn market cap, listed in Canada). Having agreed rights to mine the copper and gold deposits at Oyu Tolgoi (OT) with the Mongolian government in 2009, Rio and Ivanhoe are investing another \$850m in OT in 2010, on top of about \$1bn to date, with expected total investment of \$5bn and production in 2013.
- Mongolian Mining Corporation (HKD31.5bn market cap, listed in Hong Kong) works open-pit mines of coking coal at its Ukhaa Khudag deposit located within the Tavan Tolgoi coal formation in South Gobi.
- Centerra Gold (C\$4bn market cap, listed in Canada) owns a 100% interest in the Gatsuurt property near Boroo, where it mines gold.
- Mongolia Energy Corporation (HKD17.7bn market cap, listed in Hong Kong) owns approximately 330,000 hectares of concession areas in Western Mongolia at Khushuut, Darvi, Gants Mod, Olon Bulag, Govi-Altai and Benyan-Ulgii for coal and iron deposits. In 2009, the company acquired 2,986 hectares of concession in Bayan-Ulgii for iron sources.
- SouthGobi Resources (C\$2bn market cap, Canadian listed) is one of the largest coal producers in Mongolia in terms of coal sales for export, based on the first nine months of 2009. It owns three significant coal projects in Mongolia: a producing mine, the Ovoot Tolgoi Mine; and two development projects, the Soumber Deposit and the Ovoot Tolgoi Underground Deposit.

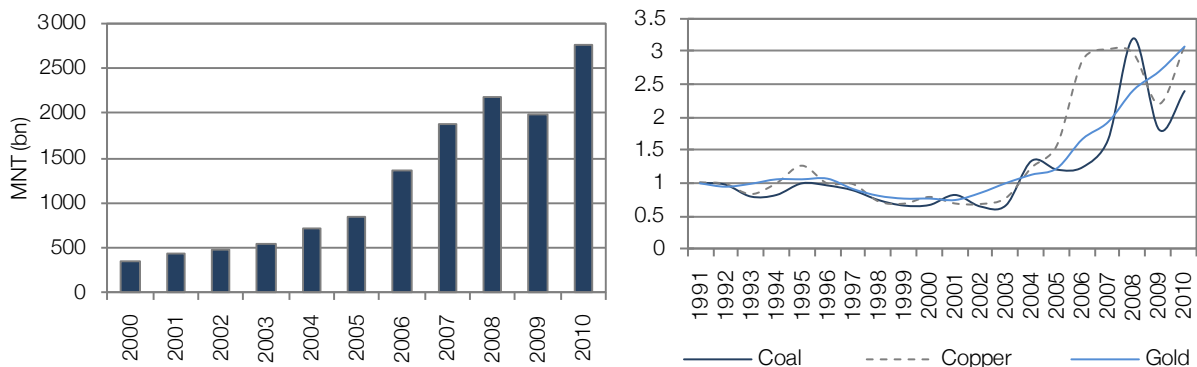
- Entree Gold (C\$318m market cap, listed in Canada) – the company’s Lookout Hill property in Mongolia completely surrounds Ivanhoe Mines’ Oyu Tolgoi project. A portion of the Lookout Hill property is subject to a joint venture with Ivanhoe Mines. The joint venture property hosts the Hugo North Extension copper-gold deposit and the Heruga copper-gold-molybdenum deposit.
- Hunnu Coal Limited (AUD173m market cap, Australian listed). Operating a diverse portfolio of exploration tenements spread throughout the various coal basins of Mongolia
- Petro Matad Limited (GBP199m market cap, London AIM listed). A group focused on oil exploration, as well as future development and production in Mongolia.

Sensitivities

Investments in Mongolia can yield very high rewards but come with challenges and risks. We list below some of the areas that merit consideration.

- Capital markets: the banking system is still fairly embryonic. Nearly every element from electronic transfer of funds to the arrangement of syndicated loans is at an early stage of development. There are organisations available to support investors, and both local and international banks are building a skill base to assist, but the legislative foundation on which these businesses operate is still new and untested.
- The effects of global economic swings. Unlike many developing nations, Mongolia does not have problems with international debt or credit swaps and it is not about to suffer from excessive sub-prime lending. However, it does experience different effects. Following the financial crisis of 2008 to 2009, Mongolia will no longer be the recipient of International Assistance such as the IMF Stand By Arrangement, or program loans from the IMF or other international financial institutions. This will put pressure on the 2011 budget. Furthermore the country will become yet more sensitive to the global commodity prices. The effect of this was felt when government revenues from mining fell at the end of 2008 as a result of copper and coal prices dropping.

Exhibit 6: General government revenues and relative price changes of commodities



Source: IMF and the World Bank

- The Mongolian Stock Exchange (MSE) is one of the smallest in the world. It trades for one hour each day and, while the aggregate market capitalisation of the listed companies has grown substantially, the number of listed companies has declined consistently since 1998. It is expected that a major international exchange will work with the MSE in developing its capability in coming years. The London Stock Exchange has been rumoured to be the exchange in question.
- Corporate governance and disclosure are very poor. The Prime Minister was re-elected in 2008 on a ticket of reform and the President was elected in 2009 on a ticket of change and anti-corruption. Much work remains to be done on the legislative front in the areas of transparency, insider trading, corporate governance, and pension fund regulation.

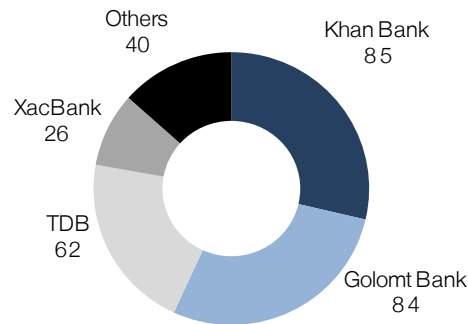
- Mongolia needs to diversify its economy away from mining to dilute the volatility in income associated with swings in commodity prices, and to develop new industries that will replace mining as resources become depleted. A model for this is Chile. Chile takes a levy on mining revenues, which it puts in an “Innovation for Competitiveness Fund”. This fund is used to open the country to trade and foreign investment and to promote investment in human capital and knowledge generation. The aim of the fund is not to pick winners or subsidise or support specific sectors.

Sector profiles

Financial services

The Mongolian financial sector as it stands is not capable of supporting the likely growth in the economy, driven by the mining sector. Specifically, the banking sector is undercapitalised. This is partly because so much of the banking sector liabilities are covered by a blanket guarantee from the government, reducing the incentive of banks to recapitalise.

Exhibit 7: Mongolia banking sector equity (US\$)



Source: Newcom Group

Following the failure of two banks during the financial crisis, conditions are beginning to improve. Non-performing loans as a percent of total loans outstanding amounted to 11.1% as of end-August 2010, down from a peak of 19.7% in September 2009. Finally banks are starting to contribute more retained profits to recapitalise their balance sheets.

With inflation at 11.2% y-o-y in August, real total lending growth is still very weak at around 5.5% because banks remain cautious. A combination of large non-performing loans still on their books and depleted bank capital constrains them from extending credit. Although the lending rate is nearly twice as high as the Central Bank rate (11%), banks still prefer to buy Central Bank bills due to their low risk, resulting in a tripling of bank holdings to MNT654bn in August.

Since the financial crisis, loans in arrears have halved to MNT85bn (3% of total loans) from the level a year ago. Non-performing loans (NPLs) remain a real concern with solvency an issue, particularly in the construction, agriculture and transportation sectors. The trend of NPLs is encouraging in all sectors except agriculture where the dzud had a terrible effect on the solvency of herders. At the same time concentration of bank lending has increased, with the 50 largest borrowers accounting for almost 30% of total loans.

The slow progress in bank restructuring provides an opportunity for international banks and investors. Demand from mining projects is likely to continue to increase, which will require more credit. If local banks are not sufficiently well capitalised and able to fulfil the needs or are too high risk, then banks outside Mongolia will step in.

To this end, there is a debate in government about the privatisation of the State Bank of Mongolia as part of a process to build confidence with foreign investors. Furthermore, in August 2010 the government took steps to strengthen the banking sector by proposing a Bank Capacity Strengthening and Capital Support Program. The laws would tackle problems such as exceeding limits on a single borrower, classification of non-performing loans, and cross-ownership of finance sector assets. Each bank will have a supervisory action plan drawn up with defined timescales and

a process that needs to be undertaken to bring the bank in line with required adequacy ratios and constraints. Funding and coverage of the blanket guarantee will also be addressed.

Exhibit 8: Sector data

	2006	2007	2008	2009
Commercial bank loans (MNT m)	1,223,287.3	2,056,060.8	2,635,551.6	2,655,000.4
Non-performing loans (MNT m)	60,021.6	68,071.3	188,667.2	462,001.5
Registered companies on Mongolian Stock Exchange	387	383	376	358
Number of brokers and dealers	25	30	41	45
Number of insurance institutions	20	15	15	17

Source: National Statistical Office of Mongolia

Mining services

Despite a long-term strategy to develop an economy that is not reliant solely on mining, Mongolia is, and will be for some time, a country that grows because of its mineral wealth. Unlike the other former Soviet satellite countries, it has significant foreign mining presence. There are approximately 200 fully or partially foreign-owned companies involved, including mining companies from the West, China, Russia and Korea, as well as financial investors and sovereign wealth funds.

Mongolia has considerable resources, the principal ones being copper, coal, gold, uranium and oil. The sector has grown considerably over recent years and we believe it will continue to do so. This growth will drive further investment in infrastructure and industry which, in turn, will generate growth in non mining sectors and spur the country's development. Most recent data (2009) states around 66.4% of total exports deriving from the mining sector, with 32% of government revenue and 28% of GDP attributable to this sector too. In total the sector employs 45,000 people, which is 5% of the total employed base in Mongolia.

The challenge for government is to avoid misusing the revenues from mining. The current redistribution of wealth is because of pressure to give away some of these mining revenues. Every person was given MNT70,000 in February and another MNT10,000 per person per month is being given away starting in August 2010 and running to December 2010. In July amendments were passed that changed the budget to increase spending considerably and as elections in 2012 draw nearer there will be inevitably be pressure on politicians to buy voters.

In 2006 the government imposed a Windfall Profits Tax (WPT), which took a 68% tax on revenues arising from prices exceeding base prices of \$2,600/tonne for copper and \$850/ounce for gold. In August 2009 as part of the agreement to develop Oyu Tolgoi, the government announced that it would abandon the WPT as from 2011. This will have a negative effect on government revenues – in 2007 and 2008 about 20% of income came from the WPT (or 7% of GDP). Without the WPT, the Mongolian government will have to show fiscal prudence. In its place there are reports that the government would like to implement a Royalty Tax with sliding percentage royalties based on global commodity prices.

Mongolia joined the Extractive Industries Transparency Initiative (EITI) in 2006. The EITI aims to encourage mining companies to publish what they pay to the government, and for governments to disclose what they receive. These two reports are then matched to see if there are any discrepancies between what the industry claims it has paid and what government acknowledges receiving. As a result of this initiative, discrepancies between the reports have been dramatically reduced, from MNT25bn in 2006 to MNT431m in 2008.

Exhibit 9: Sector data

	2006	2007	2008	2009
Gross industrial output from mining & quarrying at 2005 constant prices (MNT bn)	1,033.2	1,034.2	1,036.2	1,059.2
Monthly average wages of mining and quarrying sector (MNT 000s)	146.1	219.7	328.6	405.8
Production of coal (thousand tonnes)	8,074.1	9,237.6	10,071.9	14,442.1
Share of above from state owned companies	61%	68%	66%	50%

Source: National Statistical Office of Mongolia

Infrastructure

Transportation

Mongolia is a very large country – larger than France, Germany and Spain added together – yet it is very sparsely populated. This makes the transport sector key to the economy. The country is landlocked so sea transportation is not relevant. This leaves road and rail as the principle methods of shifting freight in high volumes. There are few freight forwarding regulations in Mongolia and electronic fund transfer systems are also undeveloped. This makes the movement of goods (particularly internationally) expensive, inconsistent and unreliable.

Road remains the key form of transport. Freight turnover increased from 699m tonne-km in the first nine months of 2009 to 1244m tonne-km in the same period in 2010 (a 78% increase). Carried passengers also increased by 13%. This is despite a very low proportion of roads being paved. In the centre of Ulaanbaatar, about 27% of roads are paved, but in the outskirts this falls to just 2.6%. In total, across the whole country, 6,692km of road are improved (end of 2009) of which 2,824km are paved.

Railway transport also grew in the first nine months of 2010 by 30% to a freight turnover of 7460m tonne-km. The bulk of this growth was exports (50% growth). There has been no expansion of the railways recently – there were 1,815km of railway in Mongolia at the end of 2006, and still the same at the end of 2009. The government does, however, plan to build more railway lines in three phases to increase the network by 5,683km.

Communication

Mobile phones have rapidly developed as the primary means of communication in Mongolia. This is partly as a result of the dismal lack of fixed line telecoms infrastructure and because of the convenience and portability of the technology. At the end of 2009 there were 2.2 million mobile phone subscribers, giving a penetration of 80%. We would expect mobile penetration to exceed 100% if Mongolia follows the path of other low fixed-line density nations.

In common with late-stage developing countries, the fixed-line telecommunication network is considerably less developed than the mobile network. By the beginning of October 2010 there were actually 500 fewer fixed lines in the country than 12 months earlier.

To emphasise the importance of cellular phone technology in Mongolia's society, it represented 84% of all communication revenue generation in the first nine months of the year. The remaining 16% includes all postal, courier, fixed-line telephony, internet and TV and radio transmission revenues added together.

Power

Mongolia has a total installed electricity generation capacity of 923 MW (2009) and uses 673MW. The publicly available capacity (excluding that self-generated by businesses) is fully used, and generated by outdated plants in need of upgrading. Total energy consumption during 2009 was 3,034m kW hours, marginally down on the 3,093m kW hours in 2008. A small amount of electricity (186m kW hours) is imported from Russia. Otherwise 99% of the remainder is generated from coal.

Exhibit 10: Sector data

	2006	2007	2008	2009
Labour force employed in the transport industry (000s)	31.0	33.2	35.8	68.7
GDP at 2005 constant prices of transport, storage and communication (MNT m)	346,429	438,598	528,554	592,300
Freight transported by Railway (million tonne km)	9,225	8,360	8,261	7,852
Freight transported by Road (million tonne km)	458	661	782	1,160
Number of mobile phone subscribers (thousands)	770	1,175	1,746	2,208
Electricity generation (million kW hours)	3,544	3,700	4,000	4,039

Source: National Statistical Office of Mongolia

Real estate

Real estate represents just shy of 10% of GDP in Mongolia and is growing at 29% per year (2009 over 2008).

Residential: residential prices continue to rise, although were temporarily depressed in 2009 by the global financial crisis and its effect on commodity prices. The price rises are a function of the supply and demand imbalance. Much of the old stock of housing is low quality, unsafe and uncomfortable. New build is limited by financing. In the meantime, demand is increasing as business executives and labourers come into the country, and the net migration of the population from the countryside to the towns continues (due to better wages and social infrastructure). During 2009, 97 residential buildings were constructed for 6338 households.

Nearly two-thirds of Ulaanbaatar's residents live in informal settlements called gers, where the properties are largely temporary, and where there is a lack of infrastructure such as water, sanitation and paved roads. These gers continue to expand and present a real planning challenge to the government.

Commercial: demand for offices and industrial premises in Mongolia is driven by foreign companies investing in the country. A glut of buildings that started before the recession has resulted in weakness in pricing, leaving Mongolia with one of the lowest commercial rent rates in the region. Four hotels, 38 commercial and service buildings and 46 office buildings were completed in 2009.

The overall outlook for real estate is very positive. Demand for residential property is high, demand for commercial property will recover quickly as GDP grows, and development of many large residential conurbations to support mine workers will be required.

Exhibit 11: Sector data

	2006	2007	2008	2009
Monthly wages of the real estate sector (MNT '000s)	91.6	132.4	251.7	264.9
GDP of the real estate sector at 2005 constant prices (MNT m)	228,863	224,947	269,100	2,767,412
Real estate and property renting businesses	3244	3973	4253	4481

Source: National Statistical Office of Mongolia

Food manufacturing

Food manufacturing in Mongolia is centred round processing meat, dairy, flour and associated products, alcoholic drinks and salt.

The total value of the food manufacturing industry grew from MNT267bn in the first nine months of 2009 to MNT351bn in the first nine months of 2010 – a 31.7% increase. The largest contributor to this growth was the 53% growth in the manufacture of drinks (including alcohol) over this period.

Western countries such as Coca Cola have been eager to come into the country and set up manufacturing operations (which Coca Cola did in 2002).

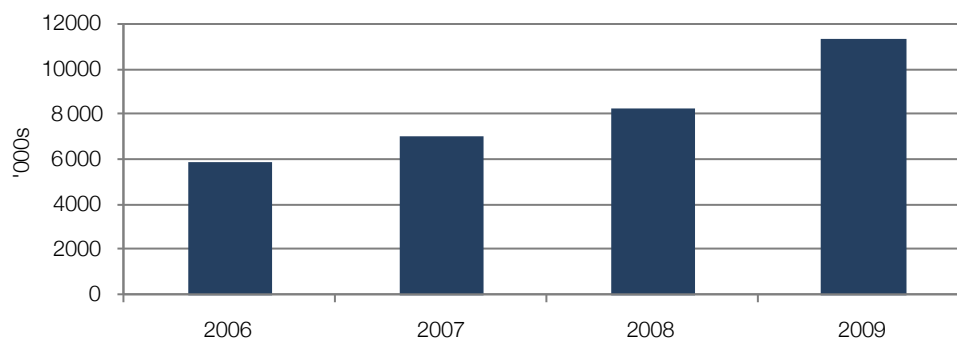
Exhibit 12: Sector data

	2006	2007	2008	2009
Food manufacturing as a percentage of gross industrial output	6.7%	7.8%	12.1%	14.6%
Production of beer (thousand litres)	7,393	18,377	19,891	32,445
Manufacture of bakery products (thousand tonnes)	10.2	13.0	13.2	12.8

Source: National Statistical Office of Mongolia

Meat processing is a high priority subsector for the government, since it is capable of substantial growth (there is a limited amount of arable land in Mongolia so crop growing is not as scalable). The number of livestock slaughtered for consumption grew strongly between 2006 and 2009.

Exhibit 13: Livestock slaughtered



Source: National Statistical Office of Mongolia

The effect of the dzud in 2010 slowed this subsector growth. In the first nine months of 2010, the value of this industry showed no growth over the same period in 2009.

Agriculture

Agriculture represents an important part of Mongolia's economy, with a historic level of 21% of GDP (2009) generated by the 35% of the labour force that are involved in herding or agriculture activities. Agriculture generates over 10% of the export income of Mongolia.

Livestock husbandry is the most important element of the agricultural sector (82.5% of the sector output). Following a very harsh winter (the dzud of 2009-2010) in which 22% of the herd died (nearly 10 million livestock animals), the sector contracted 30%. During the first nine months of each year, herders might expect to lose 3.5% of their herd. During 2010 this number for cattle, sheep and goats has jumped to 21-24%. In turn, this has caused an increase in non-performing loans at banks, and also caused a migration of nomadic herders to Ulaanbaatar and other cities. This has affected both the unemployment rate and the demand on already scarce food resources. Fortunately these effects have been partially balanced by the 88% increase (at constant prices) in coal mining output. The effect of the dzud on herding has also resulted in an increase in milk, meat and cheese prices, which are feeding through into inflation at a time when income for workers in the agricultural sector has been hard hit.

The most important agricultural crops include wheat, barley, potatoes, vegetables, tomato, watermelon, sea-buckthorn and fodder crops. During the Soviet-influenced era the agricultural policy was to provide sufficient crops, vegetables and livestock feed to fulfil domestic requirements and generate excess for export. At this time, the country produced 700,000 tonnes of crops, 100,000 tonnes of potatoes and 500,000 tonnes of livestock fodder. Following the move to democracy and multi-party politics, until 1996 the government promoted a policy of moving assets from state ownership to private ownership to improve productivity. The result was the opposite. With little experience of running businesses and inadequate management resource, sector productivity fell significantly. To address this, Mongolia's government implemented a new campaign: ATAR III (the cultivation campaign). The result of this was that in 2009 Mongolia was once again self-sufficient in flour, wheat and potatoes.

Exhibit 14: Sector data

	2006	2007	2008	2009
Labour force in agriculture, forestry, fishing and hunting (thousands)	391.4	385.6	377.6	348.8
Monthly average wages in agriculture, hunting and forestry (MNT '000s)	65.8	90.5	158.1	175.2
GDP contribution from agriculture, forestry and hunting at 2005 constant prices (MNT m)	654,054	757,440	801,177	813,494
Milk production (thousand tonnes)	450.1	465.6	457.4	493.7
Cereal production (thousand tonnes)	138.6	114.8	212.9	391.7

Source: National Statistical Office of Mongolia

Tourism

Mongolia's remote, unspoiled landscapes, range of terrains and the variety of flora and fauna have been recognised internationally; some 13% of the country is now protected in some form. Due to the poor road and rail links, the principle method of tourist entry into Mongolia is air.

In 2009 1.44 million passengers visited Mongolia, a decline of 9.5% from 2008, largely due to the global financial crisis. Of these, 282,500 were tourists.

By the end of 2009, 472 businesses existed for tourism purposes, a decrease of 21 or 4.3% compared to 2008. By contrast, the 2,400 employees engaged in this sector at the end of 2009 was up by 356 or 17.5% compared with end-2008.

However, as the financial crisis eases, tourism in Mongolia has begun to grow once again. By the end of third quarter 2010, the number of people visiting Mongolia was up by 19.8%. The mix of visitors reflects the mix of countries that export to Mongolia: China (40%), Russia (26%) and the Republic of Korea (10%). Some of the largest percentage increase in visitors came from Australia (note the importance of mining to this country), Japan (a large vehicle exporter to Mongolia) and Canada.

The government has appreciated the importance of tourism as a sustainable and differentiated contributor to the economy. There are several supportive factors to sustain the increase in visitor numbers to the country including the establishment of the Mongolian Tourist Board, easing of visa restrictions, neighbouring Russian and Chinese visitors, and increasing Japanese and Korean business visitors to Mongolia.

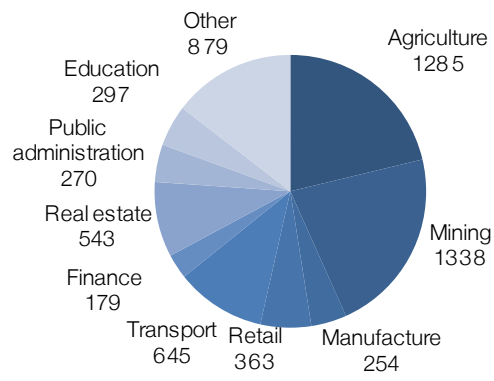
The challenges facing the government in sustaining this growth in tourism include the need to invest more in infrastructure, and to consider the environment and ecology, air pollution (particularly in Ulaanbaatar), and the lack of potable water throughout the country.

Exhibit 15: Sector data

	2006	2007	2008	2009
Chinese visitors	178,941	211,007	196,832	229,451
Russian visitors	79,163	98,759	109,975	108,105
Korean visitors	39,930	43,930	43,396	38,273
Tourist businesses	418	403	493	472
Labour force in the tourism sector	1,793	1,864	2,033	2,389

Source: National Statistical Office of Mongolia

Exhibit 16: 2009 GDP (MNT bn)



Source: National Statistical Office of Mongolia

Appendix one: Newcom Group

The strategic partner of choice

Background

Newcom was established by a group of telecom engineers in 2003. Following deregulation in 1996 it launched Mobicom, one of the first mobile phone operators in Mongolia. The business is 100% owned by Mongolian investors and is one of the three largest investment groups in the country. Driven largely by the success of the mobile phone business, Newcom is now responsible for approximately 4% of the GDP of the country. It supports and promotes transparent governance and manages its businesses to international standards of ethics and social responsibility. It currently employs over 1,800 people.

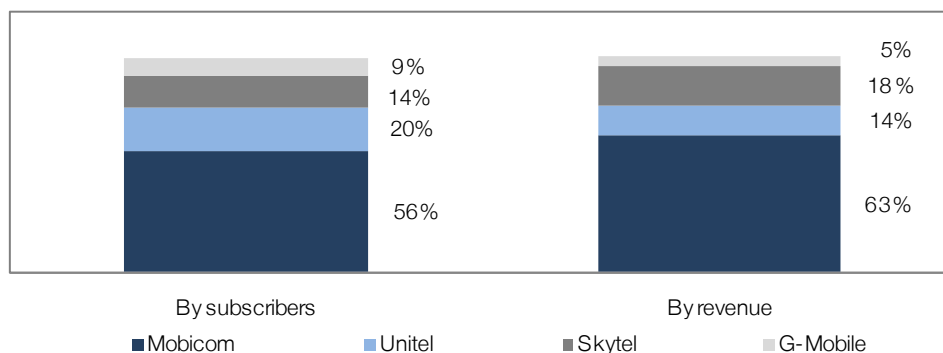
Principle operations

Mobicom

Mobicom is by far the largest mobile phone operator in Mongolia, with a Newcom estimate of just over one million subscribers at the end of 2009, giving it a 56% market share in a four-player market. Newcom partnered with the Japanese conglomerate Sumitomo and the number two mobile operator in Japan, KDDI, to develop the business in which it has a 40% ownership stake.

Mobicom has over 1,300 employees. In addition to mobile telephony, it operates a physical telecoms network that offers wholesale bandwidth and leased-line services. Its network runs to 2,500km of fibre throughout the country, with 400km in Ulaanbaatar alone. In addition, Mobicom has operations in Wimax, payment solutions and content aggregation for applications.

Exhibit 17: Mobicom 2009 market share of subscribers and revenues



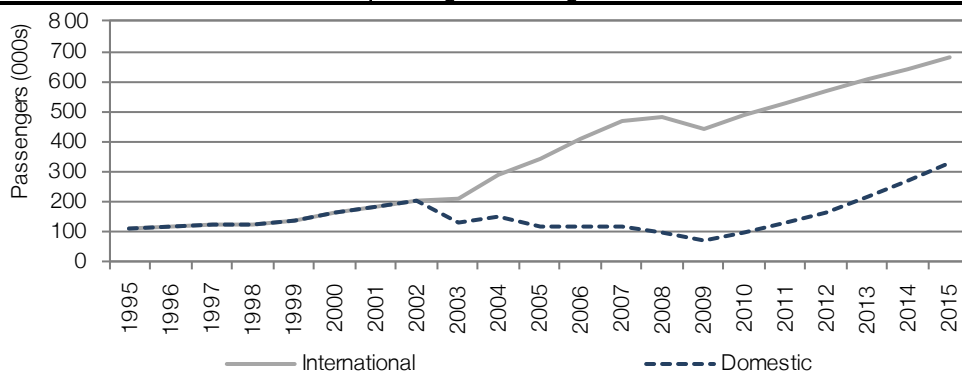
Source: Operators

Eznis Airways

In 2006, Newcom established Eznis Airlines as the second private airline company in Mongolia, using two SAAB 340B aircraft. It is fully owned by Newcom and today runs four SAAB 340B aircraft, employing 200 people. The airline operates to 13 domestic and two international destinations and offers charter flight services.

Newcom estimates that the 60,000 passengers it transports give it a 75% market share of traffic in the domestic market. Revenues are growing at 40% pa, with demand from the mining sector projected to generate growth in the charter business of 30% for the next five years.

Exhibit 18: Historic and forecast air passengers in Mongolia



Source: National Development and Innovation Committee

Clean Energy

Clean Energy is the trading name of Newcom’s energy sector business. Created in 2009, it has formed a joint venture with the European Bank of Reconstruction and Development to build a wind farm in Mongolia. Despite Mongolia’s enormous reserves of coal, in 2005 the government passed the Renewable Energy Program, which mandates that green energy sources account for 20-25% of Mongolia’s needs by 2020. Newcom identified this as another opportunity and developed the concept of a wind park with capacity to generate 50MW and an annual energy production of 122,000 MWh. Construction should begin in 2011 and the wind farm should go online in 2012. Clean Energy plans to build another wind park with an installed capacity of 300MW in the South Gobi region; 17,000 hectares of land have already been acquired for this.

Operations

In addition to the three business listed above, Newcom has activities in retail, financial service, real estate and several other fledgling business opportunities. The Chief Executive is Bold Baatar, a former Executive Director of JP Morgan.

Please contact Sergelen Ts at Newcom Group for more information:

Newcom Group
 8 Zovkhis Buiding, 8F
 Seoul Street 21
 Ulaanbaatar 14251
 Mongolia

Phone: 976 11 313183 (30)
 Fax: 976 11 318521
 Web: www.newcom.mn
 Email: Sergelen@newcom.mn

Appendix two: Sources

- National Statistical Office of Mongolia
- World Trade Organization
- OECD/Korea Policy Centre
- Foreign Investment and Foreign Trade Agency of Mongolia
- Business Council of Mongolia
- Rio Tinto
- The World Bank
- DESA, United Nations
- National Development and Innovation Committee
- Bank of Mongolia
- International Monetary Fund
- Company websites

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Edison Investment Research Limited

Lincoln House, 296-302 High Holborn, London, WC1V 7JH
Tel: +44 (0)20 3077 5700 Fax: +44 (0)20 3077 5750

enquiries@edisoninvestmentresearch.co.uk
www.edisoninvestmentresearch.co.uk