Strategy
Mongolia

Country overview
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Mongolia
Blue-sky opportunity

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Executive summary[1]

Mongolia is a country on the point of transformation. On the Chinese border, it has some of the richest mineral deposits globally. Mongolia has an economy about 25% smaller than Moldova's, with copper, coal, gold and uranium reserves rivalling those of Kazakhstan and Australia. As these resources are brought to market, Mongolia stands a good chance of becoming the fastest-growing economy in the world over the next decade.

The transformation will begin in 2010. The signing of a joint venture between the Mongolian government and the Ivanhoe-Rio Tinto alliance in Oct 2009, to exploit the Oyu Tolgoi copper mine, has set a precedent for the mining industry. The $4bn investment expected over the next nine years in this project alone is roughly equivalent to Mongolia's entire GDP in 2009 There are several other projects with similar world-class assets.

Despite the scale of the mining projects, Mongolia remains remarkably underdeveloped. In a country the size of Western Europe, there are fewer surfaced roads than in Luxembourg (a country slightly smaller than Rhode Island). Mongolia imports a proportion of its electricity from Russia and much of its fresh produce from China. In the capital, Ulaanbaatar, Louis Vuitton, to much fanfare, opened a branch in October, yet there is very little Class A office space. Opportunities in the secondary industries, from banking to real estate, are arguably greater than those in mining.

Natural resource endowment is not the only reason why Mongolia stands out. It also has a quite different political and business environment from the rest of Central Asia. Unlike some of its neighbours, Mongolia has a genuinely competitive political system, with a free press and open elections. According to the World Bank, Mongolia ranks in the top third of countries in terms of ease of doing business – above Spain and Poland, and much higher than any of the BRIC countries.

A transformative natural resources windfall has proved a mixed blessing for many countries. Mongolia will face substantial economic dislocation in coming years. The mild populism of its democratic government has tended towards inflationary policy in the past, and its banking system, budget and monetary institutions are unprepared to absorb the scale of the likely change to the economy.

In the longer term, Mongolia faces the difficulty of managing the interests of its two big neighbours. Mongolia's longest border is with China. The three Chinese regions that directly share a border with Mongolia have a population of 74mn, compared with Mongolia's 2.6mn. The Chinese province of Inner Mongolia is 80% Han Chinese, yet it has a bigger Mongolian population than Mongolia itself. Mongolia's only other border is with Russia, a country that dominated it for 65 years from 1924. To maintain balance with its two neighbours, Mongolia is actively encouraging non-Chinese and non-Russian foreign investors.

Despite the challenges, the transformation of Mongolia now appears unstoppable. According to official estimates, over the next five years, production of coal will double, gold production will treble and copper output will quadruple. The economic transformation will prove a rare test of a largely free and competitive political system to handle a major natural resources windfall.

This report aims to provide an introduction to, and overview of, Mongolia's current political and economic landscape. For portfolio investors, there are currently few investable assets in the country; but Mongolia's geography, geology and business environment make it, in our view, one of the most exciting investment environments among frontier markets.

[1] With thanks to Monet Investment Bank for their input into this report.

Politics

Political climate

Mongolian politics is a mixture of pragmatism and populism. There is genuine competitive input into politics and policy formation. Power has shifted between parties in parliament, and through parliament to the formation of government. A constitutionally weak president has twice served the two-term limit, and twice been removed after one term in power, since Mongolia's constitution was established in Feb 1992.

Power is, however, held by a relatively thin layer of society. With a population of 2.6mn, nearly half of which live in the capital, Ulaanbaatar, Mongolia's political elite is necessarily a small and close-knit group. Business, finance and politics are aligned, and decision-makers tend to know each other well.

Politics therefore tends to be consensual, which sometimes makes for a slow and frustrating decision-making process. The imposition and subsequent withdrawal of a windfall tax on the mining sector in 2006-2008, and the inflationary impact of the country's expansionary fiscal policy in 2007, were politically popular but delayed the launch of some of the larger Mongolian investment projects.

An occasional tendency towards populism is, however, perhaps part of the price of democracy. On the other hand, the political debate is open (Mongolia has more than 50 TV stations), and there are none of the succession fears that tend to haunt other Central Asian countries.

Similarly, there is relatively little of the petty corruption that tends to characterise much of Central Asia. It was a literally unique event in the fifteen years this analyst has travelled the region to see a police traffic officer write out a fine, receive the official sum, salute and hand over a receipt. Figure 1 shows where Mongolia ranks according to the *ease of doing business* indicators put together by the IFIs. Mongolia ranks in the top third globally, alongside Chile and Spain, and well ahead of any of the BRIC countries.

Figure 1: Ease of doing business

Economy	Ease of doing business rank	Starting a business	Dealing with construction permits	Employing workers	Registering property	Getting credit	Protecting investors	Paying taxes	Trading across borders	Enforcing contracts	Closing a business
Singapore	1	4	2	1	16	4	2	5	1	13	2
United States	4	8	25	1	12	4	5	61	18	8	15
Thailand	12	55	13	52	6	71	12	88	12	24	48
Chile	49	69	66	72	42	71	41	45	56	69	114
Mongolia	**60**	**78**	**103**	**44**	**25**	**71**	**27**	**69**	**155**	**36**	**110**
Spain	62	146	53	157	48	43	93	78	59	52	19
Poland	72	117	164	76	88	15	41	151	42	75	85
Italy	78	75	85	99	98	87	57	135	50	156	29
China	89	151	180	140	32	61	93	130	44	18	65
Russian Federation	120	106	182	109	45	87	93	103	162	19	92
Brazil	129	126	113	138	120	87	73	150	100	100	131
India	133	169	175	104	93	30	41	169	94	182	138
Democratic Republic of Congo	182	154	146	174	157	167	154	157	165	172	152

Source: IFC Doing Business Report, 2010

Mongolia has arguably the most competitive political regime and open society of any country on the parallel between Ukraine in the West and Japan in the East. The institutional security underpinning the country's investment environment has more in common with South East Asian economies than it does with those in Central Asia.

Realpolitik

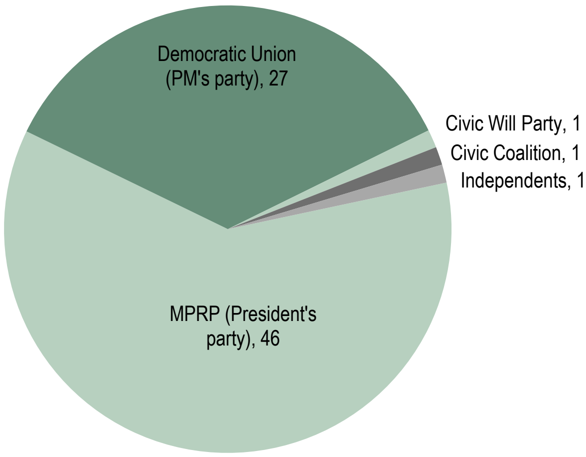
The most powerful political figure in the country is the prime minister, who represents the largest coalition in parliament. Following the prime minister in the power structure are the minister of foreign trade, and more recently the minister of natural resources.

Parliament is roughly split between the Mongolian People's Revolutionary Party (MPRP) and a loose, and sometimes fractious, group of democratic parties. The MPRP holds the same name, and grew out of, the Soviet-backed party that held a monopoly over legislative power from the formation of the Mongolian Republic in 1924 until the break-up of the one-party system in 1990. However, the party has become increasingly pragmatic since politics became competitive, and has moved towards the centre in reaction to the popularity of the opposition parties. It is now a centre-left, mildly populist party, supportive of a private-sector economy and pragmatic about the benefits of foreign investment.

The democratic parties first managed to form a government in 1996, but have been unable to find the discipline needed to maintain a consistent policy platform. Their tendency towards infighting has undermined their popularity, and they lost their majority position in a landslide MPRP victory in the post-1998 election of 2000. The most influential democratic faction, the Democratic Party, formed a government with the MPRP between 2004 and 2006, but the coalition was unable to hold.

The current parliament was elected in June 2008. The MPRP won a comfortable majority, taking 46 of the 76 seats (see Figure 2). Illustrating the pragmatism of the ex-Communist party, it is under the MPRP that Mongolia has finally passed the legislation underpinning the Oyu-Tolgoi JV with Ivanhoe and Rio Tinto, as well as accepting the programme underpinning the standby arrangement with the IMF. It was also under the MPRP that the privatisation of the banking sector took place and, most significantly, the privatisation of land. The tradition of common ownership of land stretched back much further than the Communist period.

Figure 2: Mongolia’s current parliament – the 76 seats of the Great Khural



Source: Monet IB

Outside the direct political structure, there are several business groups with influence. These tend to be generally, but not exclusively, linked to mining. In addition, foreign mining companies have an increasing influence over domestic politics. The biggest of these currently is Rio Tinto, although the Chinese and Russians are likely to have more influence in the future.

It would be misleading, however, to suggest the business community has control over politics, despite the importance of mining. Rather, it is a powerful lobbying group with clear, and so-far managed, interests.

Box 1: President and prime minister

President Elbegdorj Tsakhia

Elbegdorj Tsakhia has been one of the most influential political figures in Mongolia since before the break-up of the Soviet Union. He has a track record of supporting democracy and the free market, and in that sense, is credited as one of the principal architects of modern Mongolia.

During *glasnost*, he led some of the first pro-democracy demonstrations, and was one of the main leaders of the democratic movement in the post-Soviet era. He helped found Mongolia's first democratic party, the Democratic Union, and was one of the authors of Mongolia's constitution. He has twice served as prime minister (1998 and 2004-2006).

Elbegdorj was elected president in May 2009, and has faced a majority opposition in parliament throughout his tenure. The recent election of the leader of the MPRP, Sukhbaataryn Batbold, as prime minister will create direct competition for leadership over policy.

The president is elected for a four year term and serves as head of state, head of the national security council and head of the armed forces. The president can veto legislation, but can be overruled by a two-thirds majority in parliament.

Prime Minister Batbold Sukhbaatar

Batbold is a member of the MPRP and reflects the pragmatic direction in which the ex-Communist party has moved over the past decade. His background is in business and, in the 1990s, he was general director of the Altai Trading Company. Batbold welcomes foreign investment and the private development of Mongolian natural resources, although recognising the need to protect Mongolia's interests.

He joined politics in 2000 as minister of foreign affairs, and has since helped manage the sometimes difficult dynamic between pressure from Mongolia's two large neighbours and the interests of potential foreign investors.

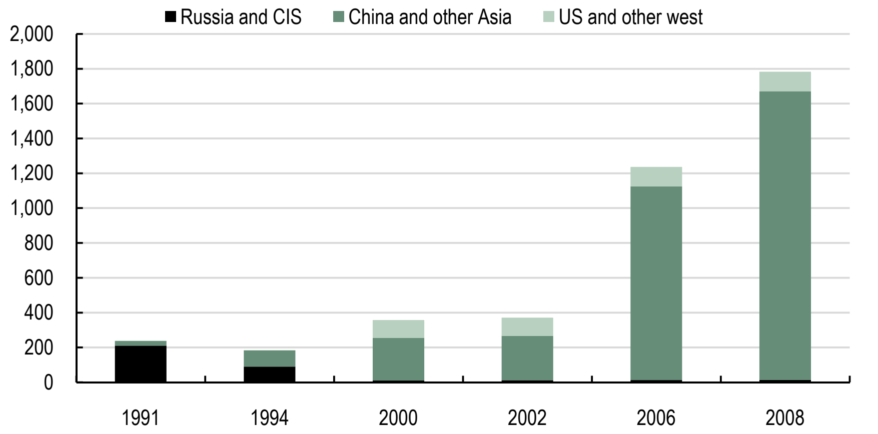
Batbold is Mongolia's 26th prime minister, making the average tenure of a Mongolian prime minister less than a year, although this reflects a rapid succession of coalition leaders during the period of a split parliament. Nonetheless, illustrating the relatively close cooperation between different political factions, Batbold, on taking power, fully endorsed the policies of the outgoing prime minister.

Foreign policy

Mongolia is one of the world's least densely populated countries, sitting on some of the world's richest natural resource assets. Its longest border is shared with China, the world's most populous country, with the largest appetite for commodities. Its only other border is shared with Russia, which held suzerainty over it until 1990. Mongolia's foreign policy is therefore, necessarily, one of balance.

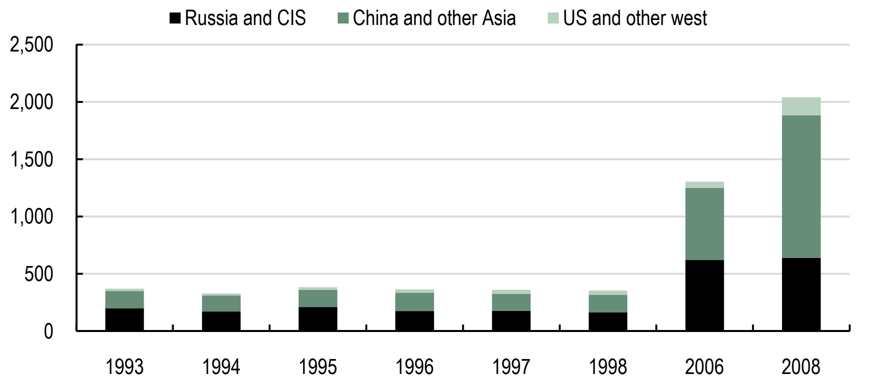
Clearly, the biggest market for Mongolian natural resources will be China. Similarly, the biggest source of imports will be China. Moreover, for reasons of geography (see *Natural resources*, below), Mongolia suffers from an absence of strategically placed fresh water, and therefore fresh food, and is consequently reliant on imports for some of its most basic commodities. In addition, for reasons of history, Mongolia depends on outside, mostly Russian, grids for much of its electricity supply. For similar reasons, Russia also supplies almost 100% of Mongolia's petroleum. Trade is therefore currently dominated by Mongolia's two neighbours. As Figure 4 illustrates, that dominance is increasing over time.

Figure 3: Export partners, $mn



Source: National Development and Innovation Committee, Mongolia

Figure 4: Import partners



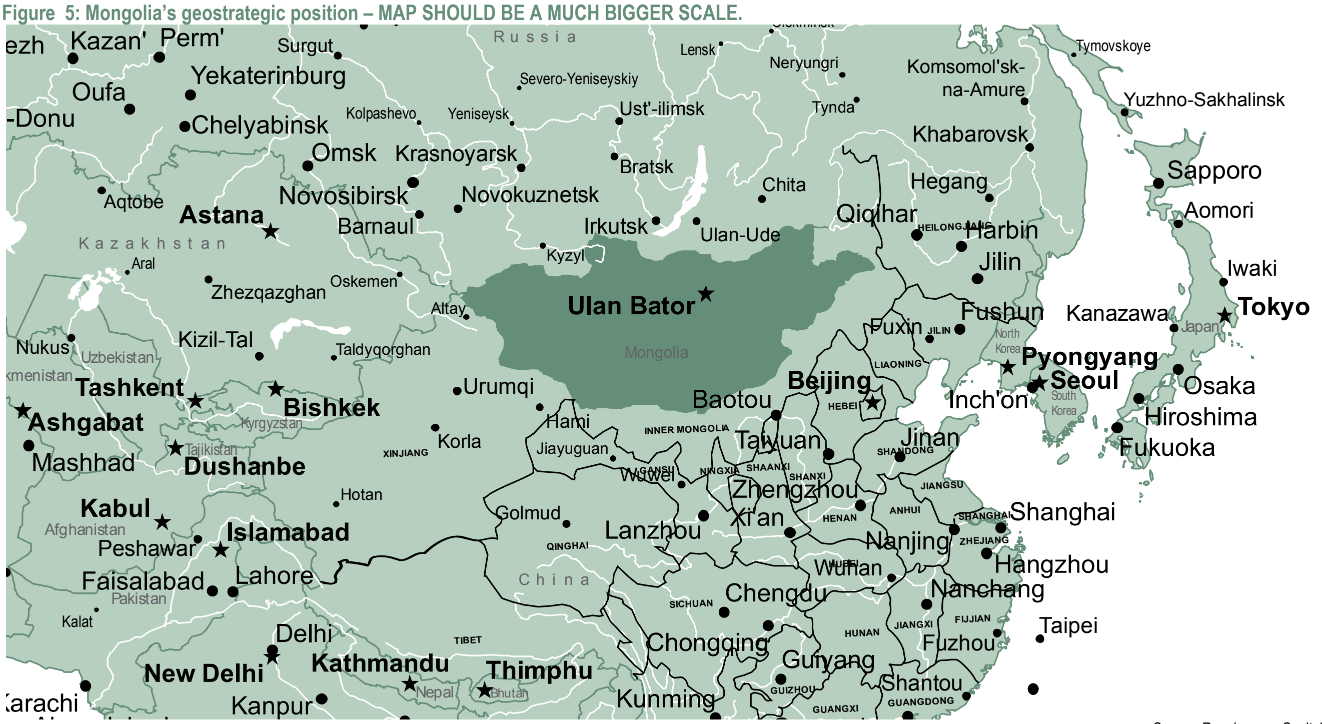
Source: National Development and Innovation Committee, Mongolia

Relations with both Russia and China are generally good. Mongolians have mixed memories of Russia's dominance of the country during the Soviet period, but it is probably fair to say they still view the legacy as more positive than negative. On one hand, during much of the Soviet period, Mongolia's history was repressed – it was not permissible to even mention the name of Chinggis Khan. On the other, Mongolia's independence from China was guaranteed, and the Soviets provided near-universal education and healthcare.

The relationship with China is also complicated. The risk of being culturally overwhelmed by China is viewed as real and is only likely to grow as trade and investment links increase (see *Population density*, below). However, the economic opportunity offered by China is equally well recognised. Mongolia could not be better placed from a trading perspective.

Largely because of this natural reliance for trade, Mongolia is keen to diversify its sources of investment. While competition for access to exploit Mongolia's natural resources is nominally free, there is a natural bias towards non-Russian and non-Chinese partners. Strategic partners are being sought in Japan (which has a surprisingly large presence), Europe, South America and, in particular, the US.

Figure 5: Mongolia's geostrategic position – MAP SHOULD BE A MUCH BIGGER SCALE.



Source: Renaissance Capital

Mongolia's determination to broaden its sources of foreign investment is, in our view, part of the attractiveness of the opportunity. Mongolia's foreign policy is directly linked to its economic policy, and is aimed at developing as many vested interests to the stability and independence of Mongolia as possible. By inviting foreign investors to develop mining assets, and through eventually listing some of its assets, Mongolia hopes to diversify its economic links as widely as possible. We note that resource nationalism, in the sense of preserving long-term interests, is best served through inviting foreign investment.

Demographics

With 2.6mn people spread over 1.6mn km2, Mongolia is the world's least densely populated country. Its population density is about half of Australia or Canada and one-quarter that of Kazakhstan.

Moreover, of the 2.6mn, 1.2mn live in the capital, Ulaanbaatar. Only 40% of the population lives outside urban centres, and that population continues to fall. Although the impact of mining investment has only just begun (see below), the population of Ulaanbaatar has doubled since 1992. The population is growing, although hardly at breakneck speed. By 2020, Mongolia expects the population to have grown to just over 3mn.

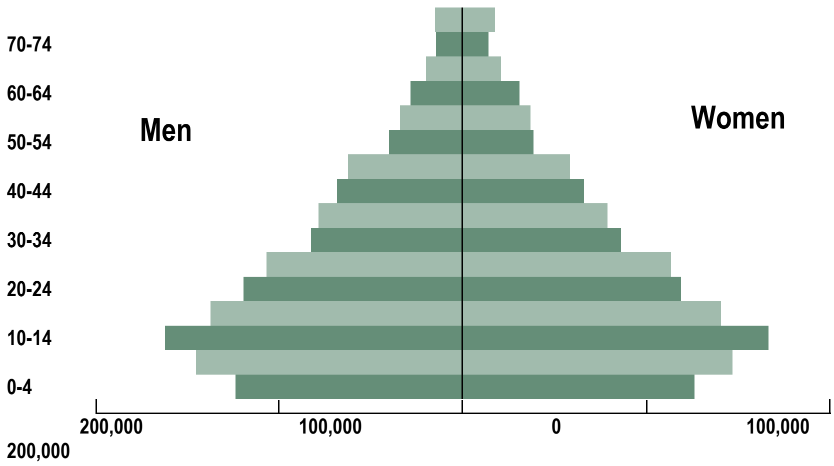
Figure 6: Population trends

	Population, mn	Annual growth rate
2005	2.56	1.40
2010	2.74	1.36
2015	2.92	1.26
2020	3.09	1.13

Source: National Development and Innovation Committee

Nonetheless, while the population is low, Mongolia is set to receive a demographic bonus. The average age of the population is 25, and the three largest population bands are 5-10, 10-15 and 15-20 (see Figure 7).

Figure 7: Mongolia – Population tree



Source: National Development and Innovation Committee

Mongolia is a relatively homogenous country, both ethnically and religiously. Some 90% of the population is Buddhist (yellow-hat) and 5% Muslim. Moreover, thanks to the Soviet legacy, education and health are pretty good given the country's scattered population. Literacy is more or less universal, and at 67, life expectancy is two years higher than that of Russia.

The very low population density creates its own issues. Inner Mongolia, a Chinese province roughly two-thirds the geographic size of Mongolia, has a population nearly 10x as big. Although Han Chinese make up 80% of the population of Inner Mongolia, there are still more Mongols living there than in Mongolia proper. The three Chinese provinces bordering Mongolia have a combined population of 74mn. Beijing – founded by a Mongol, Kubilai Khan – is only 550 km away from the Mongolian border, and has a standalone GDP roughly 30x that of Mongolia.

Currently, GDP per head in Mongolia is roughly the same as that of China, and a little less than that of Inner Mongolia. This is likely to change very quickly, however, with Mongolian GDP per head accelerating rapidly ahead of its neighbour. Mongolia will inevitably become increasingly reliant not only on Chinese trade, but also on Chinese capital and labour.

Mongolia is fiercely independent, but it will be a major longer-term problem to retain the country’s cultural, ethnic and social identity in the face of the dynamic between the wealth creation of mineral resources and demographic pressures.

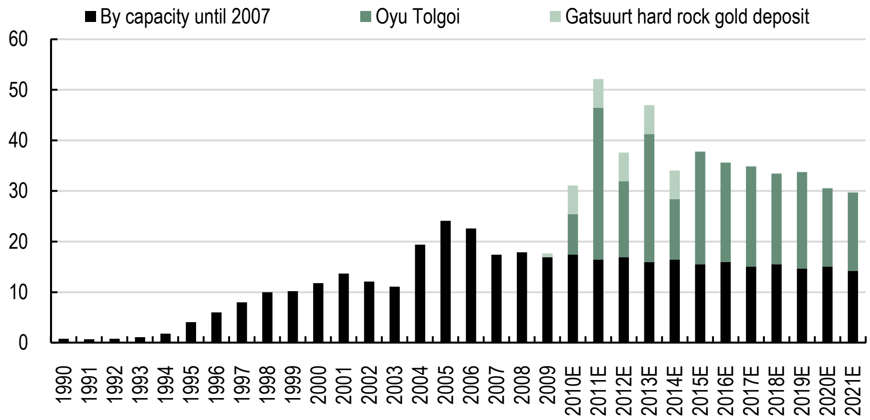
Economics

The capitalist revolution

In our view, the Mongolian economy is about to undergo a remarkable transformation. Despite a current GDP roughly on a par with that of Zimbabwe and half the size of The Bahamas, Mongolia has some of the most impressive natural resource assets globally. There is much debate about the exact scale of Mongolia's current reserves (see *Natural resources*, below), but they are clearly very large relative to both the size of the economy and the size of the population.

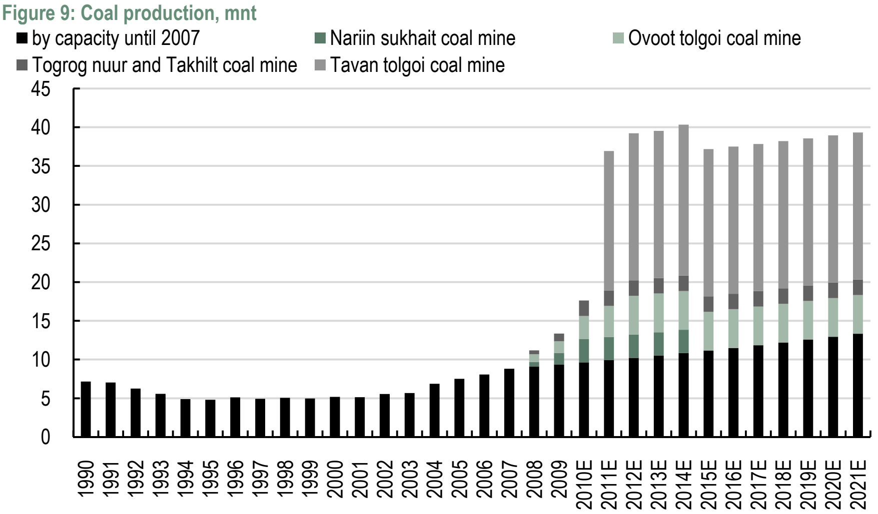
While the scale of reserves is questionable, it is clear that their retrieval will begin in earnest from 2010. In the next five years, the Mongolian government estimates that production of coal will double, gold output will treble and copper production will quadruple (see Figures 8, 9 and 10).

Figure 8: Gold output, tonnes



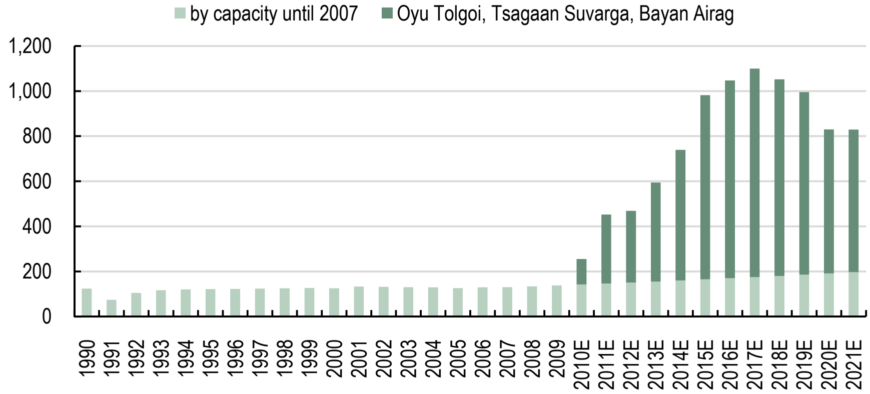
Source: National Development and Innovation Committee

Figure 9: Coal production, mnt



Source: National Development and Innovation Committee

Figure 10: Copper output, '000 tonnes



Source: National Development and Innovation Committee

Moreover, infrastructure is virtually non-existent. Ivanhoe and Rio Tinto expect their recently signed Oyu Tolgoi copper mine project to create around 80,000 new jobs across the country. As it stands, there is no urban centre near the mine. Ulaanbaatar's expatriate population is expected to rise from 3,000 currently to as much as 50,000 within five years. Mongolia has only 1,500 km of surfaced roads – slightly less than half the length of those in this analyst's home county of East Sussex, in the UK, an area roughly one thousandth of the geographic size.

Management of this transformation will be key to the economic and financial stability of the country. The government seems cognisant of the scale of the task, and is putting in mechanisms to diversify the likely windfall from the mining projects. A sovereign wealth fund is being assembled rapidly, and public-private partnership (PPP) laws passed. Equally, consolidation of the banking sector is gradually improving the stability of the financial sector following the mini-crisis at the end of 2007 (see *Monetary and banking regime,* below).

Nonetheless, few countries have had to cope with the likely relative scale of the investment inflows and resulting export revenues facing Mongolia, and none has done so without very substantial economic and social dislocation. Mongolia's domestic banking sector is not bad, but it is entirely incapable of intermediating the likely fund flow. Similarly, while there is a capital market infrastructure in place, it is nowhere near the depth necessary to absorb or manage the scope of activity likely over the next few years. Turnover on the local stock market is $20mn per year.

Growth outlook

It is quite possible, in our view, that Mongolia will take over from Angola and Azerbaijan as the fastest-growing economy in the world over the next decade. Investment in the Oyu Tolgoi copper and gold deposit, signed between Ivanhoe, Rio Tinto and the Mongolian government is expected to total $4bn over the next nine years – equivalent, on a per-year basis, to 10% of Mongolia's current GDP. There are several other investment projects that could be of a similar magnitude.

Assuming only one or two of these break ground, foreign investment could be the equivalent of 15-25% of current GDP for the next five years. This excludes the public infrastructure projects needed to service these investments (schools, hospitals, housing) and the impact on consumption and government spending that will accompany them.

The IMF estimates that Mongolia will be the fourth-fastest growing economy in the world in real terms over the next five years (although we understand this estimate is currently under review). Our rough calculations suggest this is a significant underestimate of the country's growth potential, particularly in the early years. Even under relatively conservative estimates, we think Mongolia could become the fastest-growing economy in the world over the next five years (see Figure 11).

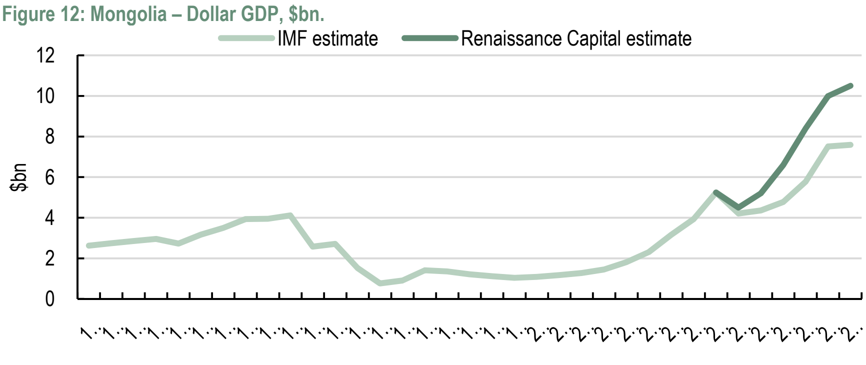
Figure 11: Mongolia – GDP estimates

	2010E	2011E	2012E	2013E	2014E	Total
Mongolia (Renaissance)	**6.0**	**15.0**	**15.0**	**22.9**	**10.0**	**90.3**
Liberia	6.3	9.2	12.8	13.4	12.9	67.7
Turkmenistan	15.3	8.9	8.6	8.1	8.0	59.1
China	9.0	9.7	9.8	9.8	9.5	58.0
Mongolia (IMF)	**3.0**	**6.1**	**15.0**	**22.9**	**0.9**	**55.8**
Ghana	5.0	22.5	7.1	5.3	5.1	52.4
Afghanistan, Rep. of.	8.6	7.9	7.9	8.2	8.9	49.0
Qatar	18.5	13.2	3.4	3.4	3.3	48.1
Timor-Leste	7.9	7.4	7.6	7.7	7.8	44.7
Ethiopia	7.0	8.0	7.5	7.5	7.7	43.7
India	6.4	7.3	7.6	8.0	8.1	43.4

Source: IMF, Government of Mongolia, Renaissance Capital estimates

In terms of dollar GDP, even the more conservative IMF growth estimates imply that the Mongolian economy will expand by 80% out to 2014. We think dollar GDP will more than double.

Figure 12: Mongolia – Dollar GDP, $bn.



Source: IMF, Renaissance Capital estimates

Natural resource endowment

The simple answer to the question about the full extent of Mongolia's natural resources is that nobody yet knows. Across the vast country, only a small proportion has been surveyed. Nonetheless, there are clearly some remarkable assets. According to official estimates, Mongolia has the fourth-largest copper reserves globally and the ninth-largest coal reserves. There are also claims of some of the highest reserves of uranium and rare earth metals, as well as significant deposits of gold, lead and zinc (see Figures 13, 14 and 15).

Figure 13: Copper reserves by country

	Reserves, '000 tonnes
Chile	160,000
Mongolia *	**36,000**
United States	35,000
Peru	35,000
Poland	31,000
Indonesia	28,000
Mexico	27,000
China	26,000
Australia	24,000
Russia	20,000
Zambia	19,000
Kazakhstan	14,000
Canada	10,000

*This estimate is for the Oyu Tolgoi deposit alone. The estimates range from 24,000 tonnes (National Development and Innovation Committee) to 39,000 tonnes (Mineral Resource and Petroleum Authority of Mongolia).

Source: US Geological Survey

Figure 14: Coal reserves by country

	Estimated reserves, mnt)
US	238,308
Russia	157,010
China	114,500
Australia	76,200
India	58,600
Ukraine	33,873
Kazakhstan	31,300
South Africa	30,408
Poland	7,502
Brazil	7,059
Mongolia*	**7,000**
Colombia	6,814
Germany	6,708
Canada	6,578

*The estimate is for the Tavan Tolgoi field only. While the exact size of the deposit is not known, equally there are several other large deposits in Mongolia. The estimate is therefore likely to be to the low side for the country as a whole.

Source: BP, Mineral Resource and Petroleum Authority of Mongolia, Mineweb

Figure 15: Uranium reserves by country

	Uranium reserves, tonnes
Australia	1,243,000
Mongolia (inferred) *	**1,000,000**
Canada	817,000
Kazakhstan	546,000
South Africa	435,000
Brazil	423,000
Namibia	342,000
Uzbekistan	278,000
USA	275,000
Niger	274,000
Russia	200,000
Jordan	111,000
Ukraine	112,000
Mongolia (proven)	**76,110**
India	73,000
China	68,000

*The inferred number is a little unfair to compare with the proven reserves in the rest of the table. But exploration in Mongolia has been less than in any other country, so the proven reserves figure is likely to be an underestimate.

Source: Mineral Resource and Petroleum Authority of Mongolia

The main mining projects currently under discussion are listed in Figure 16. The two biggest of these are the Oyu Tolgoi copper mine and the Tavan Tologi coal deposit. We discuss these in more detail below.

Figure 16: Mongolia's known natural resource deposits

Name of deposit	Mineral type	Estimated reserves	License ownership	Mine type
Tavan Tolgoi	Coking coal	6.4bnt	State owned	Open pit
Oyu Tolgoi	Copper, gold	39mnt, 1,816 tonnes	Ivanhoe Mines	Open pit, underground
Shivee Ovoo	Thermal coal	5.6bnt	State owned	Open pit
Tugalgatai	Thermal coal	3bnt	Tethys mining	Open pit
Mushgia Khudag	Rare earth metals, iron ore	n.a., 24mnt	Mongol Gazar	Open pit
Baganuur	Thermal coal	513mnt	State owned	Open pit
Erdenet	Copper, gold	4.9mnt, n.a.	State owned	Open pit
Nariin Sukhait	Coking coal	211mnt	South Gobi sands	Open pit
Tumurtei	Iron ore	230mnt	State owned	Open pit
Dornod	Uranium	76,000 tonnes	Khan Resources	Underground

Source: Mineral Resource and Petroleum Authority of Mongolia, Golomt Bank

- **The Oyu Tolgoi copper mine** is the largest untapped copper project in the world. With 36mnt of copper, and 720 tonnes of gold, it is roughly 60% of the size of the Escondida copper mine in Chile, the world's largest. The quality of its ore is good, with a grade of 1.16% against a global average of 0.7%.

  According to estimates by the IMF, peak production at the mine will be 900,000 tpa of copper and 50 tpa of gold. These figures will not be reached until 2019, according to the fund, although production will begin to ramp up in 2012. At peak production, export revenues from the mine alone will be the equivalent of 55% of estimated GDP. Government revenue from Oyu Tolgoi alone will be the equivalent of 20% of GDP.

  While the mine's geology is clearly highly favourable, its geography is unique. The mine is only 200 km from the Chinese border. Nonetheless, there is so far virtually no infrastructure in place. Initial estimates suggest it will need $4bn of investment over the next nine years.

  The mine is jointly owned by Ivanhoe (46%), Rio Tinto (20%) and the Mongolian state (34%). Agreement on the project was finally signed at the beginning of Oct 2009, and the next stage of development (after exploration) will begin early next year.

  On its own, the project is expected to propel Mongolia from being the 18th-biggest producer of copper in the world, to the fourth (see Figure 17).

Figure 17: The world's largest copper producers

	Mine production of copper, tpa
Chile	5,557,000
Peru	1,190,281
United States	1,188,000
China	946,400
Mongolia 2019	**900,000**
Australia	871,000
Indonesia	796,889
Russia	690,000
Canada	589,115
Zambia	523,435
Poland	451,900
Kazakhstan	406,500
Mexico	337,527
Iran	249,100
Brazil	205,728
Argentina	180,200
Papua New Guinea	169,184
Democratic Republic of Congo	143,000
Mongolia 2007	**130,200**

Source: British Geological Survey, IMF. Data for 2007 unless stated

The geology of the mine is reasonably complex, and the delays to the signing of the deal with the government illustrate that there are political as well as geological risks to the speed of development. But development will begin from 2010, with immediate implications for economic growth and the money supply.

- **The Tavan Tolgoi coal deposit** is one of the world's largest untapped coking-coal deposits. It contains 7bnt of coal and is located 200 km from the Chinese border and 300 km from the Jinquan industrial centre.

  The deposit currently produces 5.6mn tpa of coal. After investment, output is expected to rise to 30mn tpa, which, at current coal prices, would produce revenue of about $2.5bn a year, or the equivalent of Mongolian GDP in 2004.

  Currently, the mine is 100% government-owned, and the government is open to tenders to buy a 49% stake. Investors from Korea, the US, India, Japan, Russia and China are all bidding. The expected investment in exploration and development is somewhere between $1.5bn and $4.6bn, spread over the next three-to-five years.

  Production at this coal mine alone could advance Mongolia from being the 29th largest coal producer in the world to the 19th. On a per-capita basis, it would become the world's largest producer of coal.

The biggest current mining operation is the JV between the Mongolian and Russian governments to exploit the Erdenet copper deposit. The Erdenet Mining Corporation (EMC) was established in 1978 and is 51% owned by the State Property Committee of the Mongolian government and 49% owned by the Russian government. It is currently responsible on its own for most of Mongolia's 130,000 tpa of production. While this is less than 20% of Oyu Tolgoi's maximum annual expected output, Erdenet is currently responsible for roughly 8% of Mongolian GDP and some 15% of consolidated government revenues[1].

On the deficit side of Mongolia's natural resource balance sheet is water. Many of Mongolia's best natural resources are found in the Gobi desert which covers 30% of the country. While the rest of the country is grassland, it is remarkably flat. This tends to mean that rainfall is low, and most of it is lost.

Most of the country's fresh water drains in from the Altai mountains, to the north. A changing climate, and the melting of the snow in the Altai range mean the supply of fresh water has already decreased by 25% according to some estimates. Further depletion is expected in the future.

Many of Mongolia's planned mining operations are water-intensive and located in the south of the country, away from the main sources of fresh water. It is clear, therefore, that Mongolia will have to, at a minimum, undertake some pretty intensive irrigation projects and will quite likely have to find an alternative source of water.

[1] Estimates on Erdenet's contribution to the budget and GDP are derived from data in Business Mongolia.com

Infrastructure

As indicated above, Mongolia has a very basic infrastructure. The road system peters out either side of Ulaanbaatar. There is only one main railway line, the Trans-Siberian Railway, completed in 1955. Connecting Ulaanbaatar with Moscow and Beijing, it remains the most important link to the outside world. Most of the coal currently exported is transported out of the country by truck along a purpose-built road into China, where it is burnt in Jinquan. Aside from roads and the Trans-Siberian Railway, Mongolia is virtually devoid of transportation infrastructure.

Despite the abundance of coal, Mongolia is not self-sufficient in energy. The North of the country depends on imports from the Russian electricity grid, while the South will likely have to import from China to fuel mineral extraction.

The government has extensive and large-scale plans to develop the country's infrastructure. Public investment is expected to grow somewhere between 8-22x, but it is fully recognised that the scale of the necessary investment can only be met by the private sector. Construction of office space and residential real estate is increasingly evident in Ulaanbaatar.

Equally, the government is planning to invite private money through a series of PPP deals. The necessary legislation for PPPs was written early in 2009 and is expected to be accepted by parliament by the end of the year. For those of us with experience of PPP arrangements in the CIS, this looks like lightning-fast bureaucracy.

Budget

During the Soviet collapse and the following decade's economic aftermath, Mongolia went through the fiscal wringer as the government struggled to deal with the social fallout from the loss of implicit and explicit subsidies from Moscow. By 2003, the NPV of public sector debt had reached 70% of GDP, according to the IMF.

Over the next decade, the government faces precisely the opposite issue. The tremendous expansion of new markets as a result of the paradigm-shifting Chinese and Asian demand for natural resources will pump a lot of funds into the hands of the Mongolian state. How it handles the windfall will, in our view, determine whether Mongolia makes a success of its natural resources.

The first signs are rather populist. The government plans to split windfall funds into three parts: One-third will be saved in a sovereign wealth fund, to be managed along the lines of those of Chile and Alaska. One-third will be invested in infrastructure, and the remaining third will simply be handed out in the form of direct government cash rebates to each Mongolian citizen.

The populist aspect has been tried before, and resulted in a wave of inflation in 2007-2008 (see below). The increase in metals prices in 2006-2008 resulted in a big increase in spending, with real expenditure growing nearly 50% in 2007. The increased expenditures proved predictably difficult to cut as mineral prices collapsed in 2008 and 2009. As a result, the budget deficit widened to 5-6% of GDP. The 20% of GDP hole in the budget ex-mineral revenues illustrates how fiscal spending has left the government vulnerable to the vagaries of the world's metals markets (see Figure 17).

The budget deficit pushed the government towards an IMF standby arrangement which was signed in Apr 2009. The government has successfully restored fiscal discipline, reining-in expenditure by 15% in 2009. However, given the potential scale of the next windfall, it remains unclear whether fiscal discipline can be maintained once reliance on the IMF recedes. If populism resumes, the inflationary impact could be considerable.

Nonetheless, barring a sharp and sustained drop in the prices of copper, coal, uranium and gold, the Mongolian government has little to fear on the fiscal side in coming years (see Figure 18). One can only wonder what drove two of the rating agencies to deliver a verdict of B on the Mongolian sovereign (see Figure 19), but presumably the world can expect a series of upgrades in coming years.

Figure 18: Mongolian consolidated budget, % of GDP

	2006	2007	2008	2009e	2010E
Total expenditures	40.5	53.6	55.7	45.6	44.2
Total Revenues	48.7	56.4	50.9	39.6	40.2
Nonmineral revenues	37.3	38.7	35.1	33.4	32.9
Overall balance	8.2	2.8	-4.8	-6.0	-4.0
Nonmineral balance	-3.2	-14.9	-20.6	-12.2	-11.3
Financing					
Foreign		1.0	0.6	0.8	2.1
Domestic		-3.8	4.2	1.6	0.6
Donor support		0.0	0.0	3.6	1.4
Real expenditure growth	25.8	48.5	15.4	-15.3	1.7

Source: IMF

Figure 19: Sovereign ratings

	Foreign currency debt	Local currency debt	Outlook
Moody's	B1	B1	Positive
S&P	BB-	BB-	Positive
Fitch	B	B	Negative

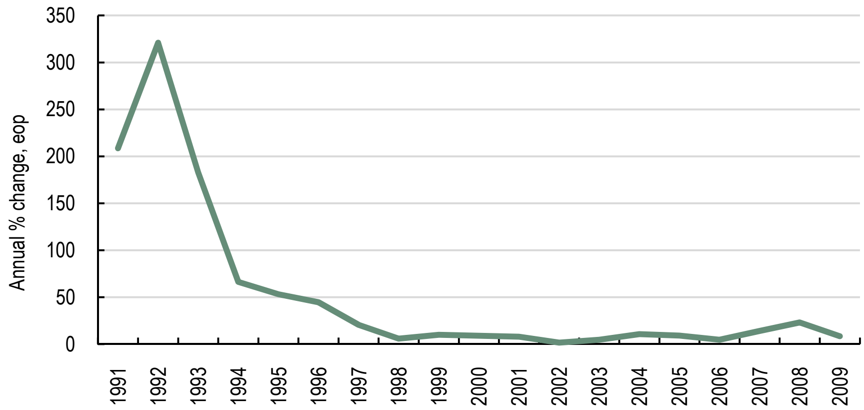
Source: Bloomberg

Monetary and banking regime

Over the past 20 years, Mongolia has experienced the full gamut of very high inflation, orthodox IMFology, stability, capital inflows, fiscal stimulus, inflation and a mild credit crunch. The bruising rollercoaster may have prepared the monetary authorities for the coming inflow, but this seems unlikely. The monetary and banking system is unprepared for the sort of capital inflow likely to be associated with the development of the resource assets. High reserve and money supply growth, inflation, an over appreciated exchange rate, and a real estate bonanza seem eminently likely to us.

In common with most of the Central Asia region, Mongolia underwent a period of very high inflation in the 1990s, as the country monetised its deficit after the break-up of the Soviet Union. A combination of better fiscal management and dirty targeting of the exchange rate pulled the inflation rate down to single digits between 2001 and 2007 (see Figure 20).

Figure 20: Mongolia – Annual inflation



Source: IMF

In 2006 and 2007, a more confident government lowered taxes, passed a controversial windfall tax on metals producers (later withdrawn), and increased public sector salaries and transfers. The result, predictably enough, was a boost in money supply, credit and inflation. Banking loans to the private sector grew by nearly 90% in 2007, and inflation soared to 27% in 2008.

The rapid expansion of credit

A combination of the global credit crunch, a slump in metals prices and a tightening of monetary policy throughout 2008 brought inflation back under control, and prices in 2009 look set to remain in single digits.

Nonetheless, we think the brief period of commodity euphoria in 2007 likely provides a blueprint for what awaits the Mongolian monetary authorities in coming years. Metals prices seem more likely to rise than fall, but even if they remain roughly where they are, the expected capital inflow and eventual current account surplus are likely to result in a rapid increase in reserves and money supply.

The Mongolia National Bank expects international reserves to increase from $600mn in 2009 to $6.4bn in 2015. This seems conservative to us, given the likely investment requirements, but even this increase would imply that the unsterilised monetary base could rise by a factor of 5 out to 2015.

The stock market

Mongolia's fledgling equity market has a market capitalisation of just under $500mn. Turnover on a good day is roughly $100k. Nonetheless it does exist, and there is a bourse on which stocks trade. There are 360 listed companies in Mongolia, with most of the larger ones based around metals and mining. The five largest are listed in Figure 21.

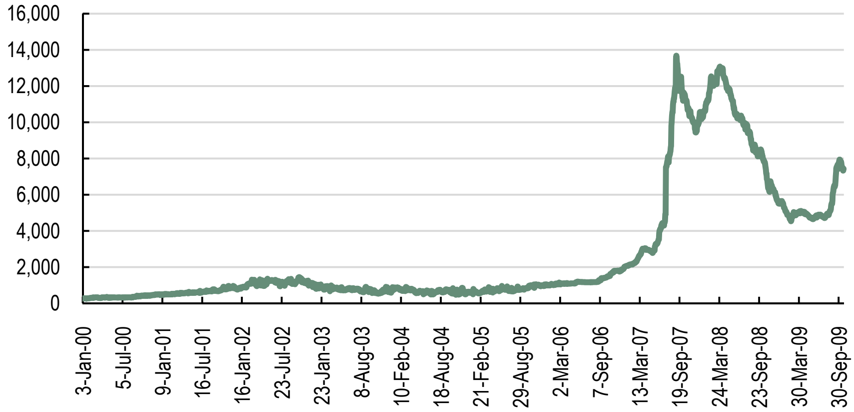
Figure 21: Top-five listed companies

Name of joint-stock company	Sector	MktCap, $mn
Mongolian Tsahilgaan Holboo	Communications	71
Baganuur	Mining	58
Tavan Tolgoi	Mining	41
Shivee Ovoo	Mining	40
APU	Industry	34

Source: Monet IB

Performance has been predictably volatile. The market went up by a factor of 5 in late 2007, collapsed by two-thirds in 2008, and has just started to recover more recently (see Figure 22). Clearly if the macro situation described above comes through, liquidity alone will be enough to drive a major re-rating.

Figure 22: Performance of Mongolian top-20 index



Source: Monet IB

In the medium term, Mongolia wants to develop its financial sector to help absorb some of the expected ballooning in national savings. There seems to be a broad recognition that a reasonably deep debt and equity market is a prerequisite to help manage the future financial inflows. While Mongolia is unlikely ever to develop a broad enough market to entirely cushion fluctuations in commodity prices, a developed domestic capital market will provide the Mongolian central bank with some means of sterilising increased liquidity.

The next wave of resource privatisation is likely to begin in 2010 and the government is keen to engage the institutional investor community to manage the necessary investment. In one of his first speeches, newly appointed Prime Minister Batbold focused on the need to develop an equity market in order to maximise the potential of its resource assets. The government is keen to encourage domestic listing, and seems inclined to legislate a minimum listing requirement in

Ulaanbaatar. If the expected savings flows materialise, there is likely to be a rapid growth in funds available for a domestic equity market. Figure 23 lists the next wave of companies to be privatised.

Figure 23: List of companies to be privatized in 2009-2012

Companies	Industry	Privatization method	Share percentage to be privatized
Baganuur JSC	Coal mine	IPO	26%
Shivee Ovoo JSC	Coal mine	IPO	41%
Powerplant 2		Tender	Concession agreement
Powerplant 3		Tender	Concession agreement
UB and provincial Electricity Distribution companies	electricity distribution channels	Reorganization, reduce state ownership	
Erdenet	Copper	IPO	to be agreed with Russian party
MongolRosTsvetMet	Metals	IPO	to be agreed with Russian party
Ulaanbaatar Railway	Railway	Spin off companies based on the type of activities	
Mongolian Airline	Airline	International Tender	less than 51%
Mongolian TeleCom	Telecom	Offer to Korea Telecom, international tender	
Mongol Post	Postal business	IPO	49%
Mongolian Stock Exchange	Stock exchange	IPO	66%
Darhan Metallurgical Plant	Metals	Tender	
Hutul Cement cylicat	Construction materials		
Erdene Zam	Road company	Tender	to be agreed with Japanese party
Auto Impex			
Asgat JSC	Mining	IPO	51%
Agrotechnical Corporation		closed Tender	
Erchim Corporation		closed Tender	
Colleges and vocational schools		management buy-out	

Source: Monet Investment Bank, State Property Committee

Besides the potential development of the domestic capital markets, there arises the interesting question of which international exchange Mongolian companies will choose to list on. There are several traded companies with an interest in Mongolia, all of which are traded in Toronto, London or New York[2]. Hong Kong, however, seems a more geographically appropriate exchange. The decision on an exchange will indicate in which direction Mongolia will be looking for investment – East or West. The debate itself is an interesting reflection of how this part of the world sees the shift in the centre of gravity in global finance in the aftermath of the developed world financial crisis.

[2] Ivanhoe (IVN.CN), the JV partner in Oyu Tolgoi, is currently the only company of size to offer exposure to Mongolia. It is listed in Canada and the US. PetroMatad (MATD), the oil exploration company listed on AIM is the only other company we have identified that has all its major operations in Mongolia. Both are interesting assets. For further details, please contact Renaissance Capital.

Conclusion

Over the next decade, Mongolia is likely to prove a case study on the impact of a natural resources windfall on a small economy. Its proven reserves and proximity to China have long made the country an obvious target for investment. The agreement reached over revenue-sharing between the government and the private sector leading up to the signing of the Oyu Tolgoi JV is the precedent that means the transformation of the economy has likely begun.

It is tempting to be sceptical. Most of Mongolia's Central Asian neighbours have tended towards brittle autocracy. From Angola to Venezuela, undiversified economies with large natural resource windfalls do not have a particularly successful track record.

Mongolia seems different to us, however. There is no monopoly on power. While it may not quite be Switzerland, the government seems genuinely competitive, and society refreshingly graft-light. Legislation is in place to give both foreign companies and the country a reasonably fair share in the natural resource bounty. Domestic political fallout should therefore be minimal and the legal system should be robust enough to protect the interests of both foreign investors and domestic interest groups

There are clear risks. The short-term danger, in our view, is the impact on the economy of the natural resource windfall. Mongolia's banking system and budget face being overwhelmed by the potential financial inflow. A $4bn economy hit by a several-billion-dollar investment will necessarily face a period of economic dislocation. Democratic governments face their own set of weaknesses, and the Mongolian coalition governments have a track record of fiscal populism. We think there is a danger of a sharp and potentially destabilising appreciation of the togrok, higher inflation and unsustainable asset-price appreciation.

We think the longer-term risk is political. Mongolia is a small, wealthy country surrounded by large, ambitious neighbours. Management of the interests of China and Russia through the judicious involvement of outside interests – including, potentially, those of minority investors – will be a delicate balancing act for Mongolia to avoid being overwhelmed.

But despite the risks, the opportunity seems very large to us. The potential for investment in natural resources is obvious and the potential in the auxiliary industries of everything from finance to real estate is equally clear. What, perhaps, makes Mongolia stand out even further, though, is the institutional framework in which these opportunities exist. Mongolia self-defines as a Central Asian republic, but in many ways it feels more like a South East Asian economy. With a little bit of luck, and some already impressive judgement, we think Mongolia may be able to position itself as the next Asian tiger, or, as they prefer, Mongolian wolf, rather than the latest Central Asian resource supplier.

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