MONGOLIA'S ECONOMIC PROSPECTS

RESOURCE-RICH AND LANDLOCKED
BETWEEN TWO GIANTS

Edited by Matthias Helble, Hal Hill, and Declan Magee

JUNE 2020

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On the cover: clockwise from top left: Sermsang Khushig Khundii Solar Project in Mongolia (photo by Ariel Javellana); genetic engineering laboratory, School of Art and Science at the National University Mongolia (photo by Eric Sales); Sainshand School No.2 (photo by Kevin Hamdorf); producing Gobi cashmere (photo by Tsogtbaatar Khishigdorj); farmer using climate-smart agriculture methods (photo by Eric Sales); coal mine in Dundgovi *aimag*, southern central Mongolia (photo by Matthias Helble).

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Foreword

Mongolia is a country whose long history has done much to shape the world that we live in today. Its more recent history is a story of great resilience and strength in forging mutually beneficial relationships with its two giant neighbors, and of bravery in launching itself wholeheartedly into democracy and market economics. These characteristics of resilience, strength, and bravery are evident today as the world faces one of its greatest challenges in the coronavirus disease (COVID-19) pandemic. Mongolia has exhibited each of these characteristics in its decisive response to the COVID-19 pandemic and the early promise of this response strategy. But, despite success in containing the outbreak so far, Mongolia, like many other countries, remains vulnerable.

Mongolia has seen remarkable economic progress in the last 30 years. Its gross domestic product per capita has increased almost threefold since 2000 in real terms. However, the country's economic growth has not always been steady, but has been marked by many boom-and-bust cycles revealing an underlying vulnerability. A large part of the growth and its volatility is explained by the exploitation of the country's rich natural resources. Dependence on them is a boon in times of high commodity prices, but it is also a source of economic instability and uncertainty. Mongolia is trying to diversify its economy as one strategy to manage this instability. But diversification cannot be achieved overnight; it is a long-term process requiring decades of carefully selected and designed policies.

This study looks back over the development of Mongolia since it started its economic and political transition in the early 1990s. It explains how Mongolia was able to successfully navigate through initially difficult years and rebuild its economy into a market-based system. Early on, Mongolia saw the advantages of an open economy, manifested by its accession to the World Trade Organization and by attracting substantial foreign investment into the mining sector. Mongolia has also developed into a solid democracy with a vibrant civil society and free media. Still, as in every country, many challenges remain going forward.

The current country partnership strategy between the Asian Development Bank (ADB) and Mongolia, approved in 2017, sets out an ambitious program building on ADB's experience in Mongolia working on health, education, economic reforms, transport, urban development, regional cooperation, and environmental sustainability, with a special focus on strengthening governance and driving gender equity forward. This country diagnostic study comes on the eve of ADB's next country partnership strategy, which will be approved in 2021. The study therefore aims to identify the main policy challenges lying ahead and to outline possible solutions. We hope that the study provides policy makers with new and strategic thinking on how to best tackle obstacles that hold back the development of the country. The general public in Mongolia and those abroad with an interest in the country should also find that its up-to-date analysis of the country's main sectors and issues is informative and useful. The main conclusions of the study are the following.

First, in terms of macroeconomic policy, the focus should be to limit the volatility induced by the high fluctuations of commodity prices. Mongolia has already started a substantive fiscal consolidation and enacted new laws that should help to smoothen the growth path of the economy. To be successful, macroeconomic policies must be consistently applied. To reap the true benefits from such policies, Mongolia needs to ensure that sensible macroeconomic policies become an unmovable part of Mongolia's policy mix in the future.

Second, closely connected to macroeconomic policy is the management of Mongolia's natural resources. Going forward, the government needs to ensure that mining revenues become more stable and that foreign investors can count on a predictable fiscal regime. Part of the revenues should be placed in a permanent savings mechanism in a way that is consistent with ongoing debt management and debt servicing policies. The mining sector will continue to bring wealth to Mongolia in the years to come so policies must also focus on ensuring that the sector remains dynamic, with new opportunities regularly created and operating standards in mining continuously improving.

Third, the Mongolian economy has already successfully entered interesting niche markets abroad, including in promising services such as engineering services for the mining industry. Mongolia's geographical location, often seen as a millstone holding the country back, places it on the doorstep of the world's most dynamic large economy of the last 30 years. This creates unending economic possibilities and opportunities. Further efforts are needed to capitalize on these advantages through a long-term regional cooperation and integration strategy. Diversification is an important part of the strategy, but it will take time and should be complemented by other policies, including

macroeconomic policies that can reduce Mongolia's vulnerability to fluctuations in commodity prices in the short run. Diversification can only succeed if the government facilitates international trade. Export and import procedures need to be further simplified. In order to meet international standards, firms need to have better access to internationally accredited laboratories. ADB has been supporting those activities, most recently by modernizing border crossing points and strengthening laboratory standards. These efforts will help to ease trade and give large and small firms the opportunity to access foreign markets more easily.

Fourth, another important area for further investment is infrastructure. Needs for modern transport infrastructure remain large. And given the substantial costs, the government must prioritize and allocate the scarce resources to projects that perform well, and find ways to encourage more private sector investment into infrastructure. In the energy sector, the reliability of electricity supply should be increased, and the pollution created by energy generation, including for heating, must be further reduced.

Finally, as people continue to move to the capital, the Mongolian economy is transforming into a services-based economy. The government can support this shift by preparing its young people with the right skills, matching labor market needs. As the current COVID-19 crisis shows, a well-functioning health system is the foundation of a prosperous society. Further improving the quality of health-care and access to it, including in rural areas, constitute investment opportunities with high returns.

Mongolia is very rich in natural resources, but more importantly it is a country with many talented people. We hope that this study helps to show how to make most of both endowments. ADB has been supporting Mongolia since 1991 and, since then, the relationship between ADB and the Mongolian people has evolved into a strong partnership based on a shared commitment to Mongolia's sustainable development. We are very much looking forward to our continued collaboration with Mongolia and its people.

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Abbreviations

ADB	—	Asian Development Bank
AFCCP	—	Authority for Fair Competition and Consumer Protection
BOM	—	Bank of Mongolia
CAREC	—	Central Asia Regional Economic Cooperation
COMECON	—	Council for Mutual Economic Assistance
DBM	—	Development Bank of Mongolia
EITI	—	Extractive Industries Transparency Initiative
FDI	—	foreign direct investment
GDP	—	gross domestic product
GIZ	—	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
HSES	—	Household Socio-Economic Survey
ILO	—	International Labour Organization
IMF	—	International Monetary Fund
JMEPA	—	Japan–Mongolia Economic Partnership Agreement
km	—	kilometer
Lao PDR	—	Lao People’s Democratic Republic
LFPR	—	labor force participation rate
MIAT	—	Mongolyn Irgenii Agaaryn Teever
MP	—	member of Parliament
MW	—	megawatt
NPL	—	nonperforming loan
PRC	—	People’s Republic of China
PTA	—	preferential trade agreement
REER	—	real effective exchange rate
SMEs	—	small and medium-sized enterprises
TVET	—	technical and vocational education and training
US	—	United States
USAID	—	United States Agency for International Development
VAT	—	value-added tax
WTO	—	World Trade Organization

MONGOLIA

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CHAPTER 1

The Economy: An Overview

Hal Hill and Matthias Helble

Mongolia is a lower-middle-income, landlocked, and resource-rich open economy that is in transition. These features, together with the country's rich history, have defined its development trajectory in the recent past and are shaping its economic future.

With the looming collapse of the Soviet Union in the late 1980s and the withdrawal of Soviet troops from Mongolia, largely peaceful demonstrations demanding democracy gathered momentum from late 1989 in Ulaanbaatar's Sukhbaatar Square and other major points of public assembly. In March 1990 the government agreed to have the country's first multiparty elections, which were held in July. The Mongolian People's Revolutionary Party won and invited opposition figures into a coalition administration.

The country then embarked on a radical new economic and political strategy that included consolidating democratic practices, "big bang" economic liberalization, and the normalization of relations with countries other than the Soviet Union, including, importantly, the People's Republic of China (PRC) and the United States. In 1991, Mongolia sought membership in the Asian Development Bank, the International Monetary Fund, the World Bank, and the World Trade Organization,¹ and support from Western donors.

The transition from a centrally planned, communist, Soviet-dependent economy to an independent, market-oriented economy was both chaotic and rapid, and undertaken with little advance preparation. The economy and living standards had been sustained by very large Soviet aid, and the country ran a

¹ Mongolia applied for General Agreement on Tariffs and Trade (GATT) Membership in 1991 and after accession negotiations, became a member of the World Trade Organization in 1997, ahead of the PRC and the Russian Federation.

large trade deficit with the Soviet Union, equivalent to about 30% of gross domestic product (Pomfret 2002). This aid, which included energy, food, raw materials, capital equipment, and market access, abruptly ended. The ownership of practically all state assets, including dwellings and livestock, was privatized. The subsidies that had sustained state-owned enterprises, which dominated the economy during the Soviet era, were terminated. Public social services, including education, health, and pensions, were severely curtailed. Living standards plummeted, although this was mitigated in part by the large-scale return to a subsistence and nomadic economy. In the chaos, electricity and other basic utility services were cut off for a year or more in some regions. Mongolia's economic contraction was one of the severest in post-Soviet economies (Pomfret 2002). Put simply, the institutions to manage a market economy were not in place.

The country more or less weathered the storms of the transition period. Elections in 1992 returned the government with a mandate to moderate the pace of liberalization and tackle deteriorating living standards. The worst of the economic decline was over by 1993, from when the economy began a slow recovery. A backlash against reforms resulted in a change of government through democratic means, with the Democratic Union coalition taking power in 1996. Despite this turbulence, Mongolia was on the path to becoming a modern, democratic, and market-oriented economy.

This chapter, in its analysis of the Mongolian economy, examines the factors that shaped the country's democratization and strategies that can accelerate its socioeconomic development. In doing this, it is important to draw attention to Mongolia's distinctive historical, institutional, and structural characteristics as contextual factors. In essence, these include the following six features:

- The economy and its institutions retain many of the features of a country and a polity in transition even though it has been 3 decades since the transition from a centrally planned to a market economy started.
- Geography and natural resource endowments shape Mongolia's development outcomes. With a population of 3.31 million people (2020) and an area of 1.56 million square kilometers, Mongolia is the world's least densely populated country, and therefore as a corollary, its resource-based activities have a strong potential comparative advantage.
- The landlocked country (one of 49 in the world) has the special characteristic of sharing a border with two powerful economies, the PRC and the Russian Federation.

- Mongolia has a harsh climate. Much of the country is snow-covered and inaccessible for as much as half the year, and is vulnerable to environmental fragilities.
- Mongolia has a highly unusual economic structure dominated by the capital city and mining, which account for about 65% and 20% of gross domestic product (GDP) respectively. The GDP of this small, dualistic economy was just \$13 billion in 2018.
- The high concentration of exports is caused by Mongolia's small size, geography, and natural resource endowments. The country has one of the world's highest export concentrations (in products and market destination) outside the Middle East.

This introductory chapter, which draws on the study's seven other chapters, is organized as follows: the next section gives an overview of Mongolia's socioeconomic characteristics and development, and is followed by an analysis of the economy's performance. The chapter closes with policy recommendations.

1.1 Economic Overview

Special challenges of transition economies

Mongolia retains many of the features of a typical transition economy that undertook a “big bang” liberalization. The policy decisions taken during the early 1990s—including the macroeconomic policy settings affecting the speed and extent of liberalization—continue to be felt. According to Dwight H. Perkins, a leading authority on transition economies, “the move from a centrally planned economy to a market economy is more complex than often assumed. A wide variety of institutions must be created—often from scratch—when a country transitions from a command system to a market system. The managers of these new institutions must also learn to operate in a very different way than in the old system, and that can take time” (Perkins 2018).

Pomfret (2002) sets out the issues clearly. There is no textbook that charts the path of transition from central planning to a market economy. The elements of transition may be classified into six major areas: price and trade reform, macroeconomic policy, enterprise reform, financial reform, labor markets, and social policies. Mongolia followed the experience of most transition governments in losing control of macroeconomic policy because

of soft budget constraints and large, unsustainable fiscal deficits. But like most other countries that went through this transition, the government managed to regain at least a semblance macroeconomic control, partly with the assistance of four International Monetary Fund (IMF) programs during the 1990s. Mongolia's prices and international trade were liberalized quickly and effectively.

In most transition economies, enterprise reform was messy and "kleptocracies" thrived because of an absence of regulatory frameworks and competition policies. In these countries, the efficiency gains that could have been expected from privatization rarely materialized. In Mongolia's case, the rapid transition to democracy may have ameliorated some of these problems, but the divestment of state assets was not orderly. Financial reform was also difficult. Crises in the banking sector are common to most economies in transition, a reflection in part that banks in centrally planned systems are an arm of the state and are geared to the needs of state-owned enterprises. Governments in most cases were slow to introduce prudential and other reforms, and were reluctant to relinquish control over the allocation of capital. Mongolia fits this pattern, with its highly concentrated bank structure and recurring financial scandals, including those at the Development Bank of Mongolia (DBM).²

Living standards in most transition economies fell sharply, as secure employment in the public sector shrank, cradle-to-grave welfare systems were dismantled (or their coverage greatly eroded), and inflation hurt those reliant on wage incomes. These were all characteristics of Mongolia's transition.

On socioeconomic outcomes, the country experience of transition economies varied from modest and relatively brief declines (several East European countries and Viet Nam) to catastrophic and protracted effects, especially where conflict ensued. The pace and nature of liberalization was in retrospect a determining factor for these outcomes. As Pomfret (2002: 119) puts it, "the best performing European and Asian economies, Poland and the [PRC], have both been characterized by slow privatization, ... while ... the relatively rapid privatization in the [Russian Federation] is widely viewed as a significant source of generally mediocre performance." That Mongolia privatized and liberalized more quickly than most other transition economies raises the question of whether it is still grappling with the repercussions of decisions taken in the 1990s. This is a recurring theme in the current chapter.³

² The DBM was established in 2011 and describes itself as "a for-profit, legal and government entity."

³ Rossabi (2005) examines the political debates and contending schools of thought over this period. Griffin (1995) provides an early and mainly critical assessment of the reforms. Several of their findings—for example, the lack of attention to the special needs of the agriculture sector—have proven to be correct.

Eight stylized facts on the economy

There is a growing body of literature on the defining features of the Mongolian economy and its development trajectory and outcomes. The World Bank (2018d) identifies the key development challenges as macroeconomic instability; the need for economic diversification; poverty reduction and unemployment; improved infrastructure, transport, and environmental amenities; and governance. USAID (2010) draws attention to a broadly similar set of issues: the need for economic diversification; the country's geopolitical position; inflation; the development of the domestic financial sector; the social agenda as it relates to poverty, unemployment, and the economic divide; food security; infrastructure and transport; the environment; and governance and planning. The IMF has produced several reports on the Mongolian economy, such as IMF (2008), in addition to its ongoing monitoring under Article IV and program agreements, such as IMF (2018c). Consistent with these reports, the following are eight stylized facts that characterize the economy's development and potential.

Historical legacies. Mongolia can, as noted earlier, be understood only in the context of its distinctive history. The country dates its modern history from the Chinggis Khan era, 1206–1227, when the Mongolian empire extended to the Middle East and beyond. This meant that trade routes between Asia and Europe became relatively safe for travel, resulting in an expansion of trade. Openness to the world, and a willingness to embrace foreign cultures, marked the mentality of Mongols. For most of the 20th century, however, the country was isolated economically, politically, and socially apart from its connections to the Soviet Union and Council for Mutual Economic Assistance (COMECON). Following the Sino-Soviet split in 1960, Mongolia was cut off from a neighbor with which it had important contemporary and historical ties, until relations with the PRC were normalized in 1987. That all changed in 1990: an authoritarian state gave way to an elected democracy, the country opened up to international trade and investment, its citizens were free to travel, prices were determined in the market place, the state no longer provided employment and old-age security, and private ownership became the norm.

In a new climate of openness, Mongolia's policy makers and society in general had no experience in dealing with foreign traders and investors, especially the sophisticated large mining companies that began to enter the country. Although democracy took root quickly, independent agencies and checks on the legal system, electoral processes, monetary and financial regulators, and much else in government had yet to be put in place. Inflation quickly

accelerated. The currency became internationally traded and volatile. International relations had to be established in a rapidly changing world order. Rising poverty and inequality stoked social problems. The government's inexperience at economic management saw international debt escalate to unsustainable levels. Not surprisingly, as Rossabi (2005) puts it, the "shock therapy," and the individuals and institutions associated with it, became deeply unpopular and foreshadowed the later introduction of stop-gap populist fiscal and other measures. These legacies are still being felt.

Democratic progress, institutional deficits. Democracy was quickly and durably embedded in Mongolia (Rossabi 2005). Mongolia has held national elections every 4 years since 1992 and 1993. The two main parties, the Mongolian People's Party⁴ and the Democrats, continue to dominate politics and political change is generally peaceful. Because of this, Mongolia ranks highly on indexes of political freedom, as discussed later in this chapter and examined in detail by Byambajav Dalaibuyan and Julian Dierkes in Chapter 7. Mongolia's media and social media largely operate without restrictions and the country has a vibrant civil society.

These democratic freedoms, however, have yet to translate into significant improvements in institutional quality, notwithstanding a high level of literacy; gender balance; freedom to travel abroad; and, in this century, rising living standards. Apart from voice and accountability, important though this is, there is limited improvement in institutional quality. Bureaucratic reform has been slow and civil servants are poorly paid, forcing many to moonlight or seek other ways to supplement their salaries. Administration change brings a high turnover of civil servants. Independent checks on government (apart from the ballot box) are weak, and the country lacks a high-powered anticorruption agency with prosecutorial powers. Anecdotal evidence suggests the quality of basic government services, including education, health, and agricultural extension, may be weaker than it was during the communist era. The development of an independent and trusted legal system is slowly evolving.

Geography. Mongolia has a unique and challenging geography. Even though there is no systematic global evidence that geography at an aggregate level is a significant factor in economic development, it has shaped Mongolia's population settlements, economic activity and general economic development, and spatial economic patterns in several significant respects. Some of the geographic features pose development challenges.

⁴ The Mongolian People's Party is the successor of the Mongolian People's Revolutionary Party. In 2010, the party decided to drop "Revolutionary" from the name. After this decision, a splinter group formed a new party using the name Mongolian People's Revolutionary Party.

Being landlocked increases the country's economic and strategic reliance on the PRC and the Russian Federation for land access to the ports of Tianjin and Vladivostok. Land freight requires smooth physical interconnectivity of cross-border road and rail networks, and efficient two-way transshipment and customs facilities. As Richard Pomfret argues in Chapter 6, Mongolia has been able to establish workable relations with both countries. But these relations need improving and various bilateral irritants need resolving.

Being landlocked means opportunities and challenges for cross-border cooperation. Mongolia's contiguous border regions have the potential for free economic zones that can enable the seamless transfers of goods. Some progress is being made in this area, but much remains to be completed. There is scope for energy cooperation—for example, through the Northeast Asia Super Grid that would connect Mongolia with the PRC and the Russian Federation (and on to Japan and the Republic of Korea). This cooperation could extend to hydropower on the northern border because Mongolian rivers drain into the Russian Federation's Lake Baikal, the world's largest inland water resource by volume.

Mongolia's population settlements are extremely unevenly distributed. About half the population of 3.31 million lives in Ulaanbaatar, a city lacking adequate transport and energy amenities. The other half lives in lightly settled nomadic communities in rural areas.⁵ Providing essential infrastructure, especially roads and telecommunications, is a major challenge. Air connectivity within Mongolia and with the rest of the world is low. The harsh climate accentuates the inadequate transport and logistics services, as much of the country is isolated during the extended winter season.

Between two major economies. Mongolia shares long borders with the PRC and the Russian Federation, and has to maintain cooperative economic, political, and strategic relationships with economies 600 and 100 times larger than its own (the PRC and Russian Federation, respectively).⁶ To Mongolia's credit, it has navigated these relationships successfully, maintained its neutrality, and forged relations beyond these two countries under its "third neighbor" foreign policy.

⁵ Illustrating Ulaanbaatar's first-city characteristics, the second- and third-largest cities, Erdenet and Darkhan, have populations of just under 100,000, about 6% of the capital's population. Erdenet and Darkhan are in the north; the former is based on mining and the latter on manufacturing and education.

⁶ Of the two, the land border with the PRC is longer, about 4,680 kilometers (km), compared with about 3,490 km with the Russian Federation. Mongolia also has a near border (37 km distant) with a third country, Kazakhstan, and it has a small community (about 5% of the population) of Kazakhs.

Mongolia's relationship with the PRC has the greater commercial potential and political complexity of the two, with the PRC a major trader, investor, technology supplier, and source of tourism for Mongolia. The PRC is an immense and growing market on the doorstep of Mongolia. These commercial complementarities will increase as the PRC's technological rise continues, and it loses its comparative advantage in broadacre agriculture.⁷ This is not to say that relations with the Russian Federation are unimportant. Important commercial, educational, and linguistic ties remain as a legacy of Mongolia's 7 decades as a satellite state of the former Soviet Union. Access to the Russian Federation and to the Eurasian Economic Union more generally is important for certain niche products. The Russian Federation is a potentially important energy supplier, and it is important for Mongolia to maintain transshipment access through Vladivostok port. Mongolia also benefits from transshipments through the Russian Federation to the European Union.

Small economy. With a GDP of just \$13 billion, Mongolia is a very small economy, equivalent in size to that of a small city in a rich country. Economically, it is therefore one of the world's smallest countries other than microstates of the Pacific and Caribbean. Apart from geostrategic implications, a country's economic size has no obvious economic implications. That is, there is no clear historical relationship between the size of a country and its economic development. The literature once suggested an inverse relationship, because larger economies were more likely to adopt costly inward-looking commercial policies. But this no longer appears to hold as Asia's populous economies—the PRC, India, and Indonesia—adopted outward-looking policies and began to grow quickly.

Economic size does, however, have implications for economic policy. Other things being equal, small economies need to be, and generally are, more open so that companies in tradable activities can reap the benefits of economies of scale. Because small economies' export space is likely to be more concentrated, their governments need to be alert to the potential dangers of relying on a narrow range of exports. Small economies are also more likely to be dollarized, especially if there is not a high degree of trust in their monetary authorities, and if their commercial relations are dominated by a contiguous major economy with competent macroeconomic management. A potential challenge for very small economies is oligarchic control of institutions because of the narrow pool of technical expertise available. It is therefore

⁷ Broadacre is a term used, mainly in Australia, to describe farms or industries engaged in the production of grains, oilseeds and other crops ... or the grazing of livestock for meat or wool, on a large scale (OECD 2001). Mongolia's citizens have visa-free entry to the PRC, but PRC citizens need a visa to enter Mongolia. Mongolia has not sought membership in the eight-nation Shanghai Cooperation Organization, but has observer status.

important for such countries to be able to access international labor markets for technical expertise.

All these considerations are relevant for Mongolia. It has a largely open trade regime, which Prema-Chandra Athukorala and Matthias Helble discuss in Chapter 5. Its investment regime is moderately open though somewhat opaque. Public trust in the Bank of Mongolia (BOM), the central bank, seems to be high—perhaps surprisingly high given the country’s monetary policy history—as indicated by the relatively low levels of dollarization. In view of the apparent institutional bottlenecks, there is arguably a case for accessing independent technical expertise in the judiciary to the extent permitted by the political system and provided linguistic barriers could be overcome.

Resource abundance. Mongolia is an exceptionally resource-rich country. It has extensive reserves of coal and copper, in addition to gold, oil, natural gas, uranium, and rare earth minerals. Geological surveys have yet to be done for large areas of the country and thus known reserves are likely to be augmented in the future. The government’s statement that the country has the potential to become the “Kuwait of Asia” is perhaps not an exaggeration. Mongolia has potential in renewable energy, including wind and solar power, and, if an agreement with the Russian Federation can be secured, hydropower. This abundance creates opportunities and challenges. Mongolia exemplifies many of the hypotheses advanced in the “resource curse” literature (Sachs and Warner 2001). The fact that the country has found it necessary to sign on to six IMF rescue plans⁸ is indicative not only of the challenges it faced in the transitions of the early 1990s but also of a failure to effectively manage the macroeconomics of resource abundance, as argued by Alexander Lehmann and Junkyu Lee in Chapter 2.

The clearest manifestation of this has been the conduct of fiscal policy. This has generally been procyclical in the sense that governments have typically run fiscal deficits by increasing borrowing during commodity booms. At times, deficits have been run up in advance of anticipated mining windfalls, which have often not materialized on the scale or longevity anticipated.

Consistent with the predictions of the resource curse literature, Mongolia has struggled to manage other dimensions of its resource abundance, and particularly three of them. These are examined in more detail in the following section and in Chapter 2. First, mining taxation arrangements appear to have

⁸ Mongolia entered into six IMF Lending Programs since it joined in 1991. The first was the stand-by arrangement in 1991; followed by enhanced structural adjustment facility in 1993 and 1997; Poverty Reduction and Growth Facility in 2001; a stand-by arrangement in 2009; and Extended Fund Facility (EFF) in 2017 (IMF 2009, 2019b).

been suboptimal, as shown by Dorjdari Namkhajantsan and Marcel Schröder in Chapter 3. Instead of adopting a strategy of open foreign investment and best-practice taxation (perhaps in the form of a resource-rent tax), successive governments have opted for second-best solutions, such as state equity investments and policies on foreign investment that have swung from moderate hostility to open door, thus increasing the risk-adjusted return required by mining investors.

Second, the perception is widespread among knowledgeable observers that Mongolia's resource boom triggered institutional deterioration and diminished social trust. It could be argued, however, that the mining boom occurred before the country was able to put in place strong, independent, and corruption-proof institutions after its transition from planned to a market economy. And third, it is widely believed that the benefits of these booms have been unequally distributed. While governments increased social spending during these periods, as shown by Ariun Bayarjargal and Haidy Ear-Dupuy in Chapter 8, this spending has generally been poorly targeted and not scaled back as the booms subsided.

Boom-and-bust growth. An inevitable corollary of these structural features—a transition economy with high dependence on volatile commodity exports and the business cycles of major trading partners—is volatile economic growth. Since the early 1990s, the annual GDP rate has fluctuated between a contraction of 20% and growth of 17%, which must surely be one of the widest ranges in the world. Since around 2010, the range has been 1.2% to 17.3% growth.

As shown in Chapter 2, Mongolia's macroeconomic management has amplified this volatility for some periods. Fiscal policy has generally been procyclical, the government budget has run long-lasting deficits causing a debt buildup, the economy has become highly dependent on extractive industries and mining-led capital flows, and economic contractions have often been accentuated by having to resort to IMF adjustment programs. Continuously high inflation, mainly due to supply shocks, procyclical fiscal expansion and currency depreciation, and real effective exchange rate appreciation weakened the economy's competitiveness. The only long-term solution to these problems is a fiscal and monetary policy framework that at least partially insulates the economy from commodity price volatility through structural reforms and some sort of sovereign wealth fund mechanism.

Environmental challenges. Mongolia faces environmental challenges that are both country-specific and common to many developing countries.⁹ Institutional changes after the liberalization of the 1990s resulted in heavy stress on pastures. Under the market economy, the ownership of livestock was privatized, whereas land continued to be communally-owned (Lkhagvadorj et al. 2019). This resulted in a huge increase in livestock, from 25 million in 1990 to the current estimate of 68 million. The consequence has been severe overgrazing in the herder economy, in effect the familiar tale of the “tragedy of the commons” in which there are no in-built institutional mechanisms for restricting the animal population to sustainable numbers. The problem is particularly serious for the rapidly growing goat population, as these animals are more environmentally destructive than horses, camels, sheep, and cattle. Yet, they are also the most profitable as a source of supply to Mongolia’s growing cashmere clothing industry.

Overgrazing accelerates soil-cover loss and erosion, worsening the problem of creeping desertification as the Gobi Desert area expands because of the effects of climate change on rainfall patterns. The annual loss of grassland in the PRC and Mongolia could be as high as 3,600 square kilometers. The solutions needed include reducing animal numbers; reforestation, which the PRC is vigorously pursuing to manage desert windstorms (Foy, Kyng, and Meyer 2019); and more careful water management.

The rapid expansion of the animal population is creating animal hygiene problems. The collapse of Soviet-era animal husbandry systems led to poorer animal hygiene in Mongolia, which is restricting the country’s potential as a meat and livestock exporter. For example, the local employment spinoffs from the Yikidiki quarantine farm would have been many times greater if the project had also included integrated abattoir facilities. Global cashmere exports are also facing increasing market access difficulties as major retail chains in Western countries encounter consumer resistance over environmental degradation and animal welfare (Dalton 2019).

Ulaanbaatar and other urban areas face serious environmental challenges. During the extended winter season, the capital is one of the world’s most polluted cities. About 80% of the pollution is due to coal burning by the 220,000 households living in ger areas that are not connected to the grid. In

⁹ See World Bank (2018d, section IV) for a more detailed examination of Mongolia’s environmental issues.

fact, Ulaanbaatar is a city built for a population of about 300,000 people, and it is unable to cope with the large-scale migration from rural areas. Another aggravating factor is an outdated Soviet-era coal-fired power plant that supplies 80% of the city's energy. These emissions are trapped within the mountains that ring the city. Ulaanbaatar's underdeveloped mass transit system has also led to huge growth in motor vehicles that clog the city's streets.¹⁰

Mongolia is an emissions-intensive economy due to its high use of subsidized fossil fuels. The country's largely state-owned, loss-making coal mining companies are required to sell their output at depressed prices to support subsidized power companies. Mining can also pose environmental risks; for example, producing washed coal requires the use of large amounts of water, a commodity that is becoming increasingly scarce.

1.2 Economic Performance

Economic growth

Mongolia's economic growth has been volatile (Figure 1.1). Like all transition economies, there was a sharp economic contraction following the severing of Soviet aid and the sudden adoption of a big-bang liberalization. By the mid-1990s the economy began to recover, before experiencing another downturn at the end of the century, owing to the buildup of unsustainable debt. Growth was strong during the first decade of the 21st century until the 2008 global financial crisis triggered another crisis (and a new IMF program). This, however, was a V-shaped crisis, as the mining boom and continued strong growth in the PRC resulted in 3 years of double-digit growth from 2011 to 2013, when Mongolia was briefly the world's fastest-growing economy. But as emphasized in Chapter 4, this growth was not sustained. By 2016, growth had collapsed to 1%, and the country was forced to enter yet another international rescue program.

Notwithstanding this volatility, six main economic subperiods can be identified: (i) the transition, 1990–1994, involving a sharp decline in economic activity and living standards; (ii) return to growth, 1995–2008, during which GDP per capita recovered to pretransition levels by 2003 and the one debt crisis of 2000 was managed fairly quickly; (iii) a sharp economic crisis in

¹⁰ One ad hoc solution to the problem has been concessional import duties on second-hand Toyota Priuses from Japan.

Figure 1.1: Gross Domestic Product Growth and Real GDP per Capita, 1991–2017

GDP = gross domestic product, MNT = Mongolian togrog.

Source: National Statistical Office of Mongolia. <http://www.en.nso.mn/index.php> (accessed March 2019).

2009, mainly triggered by external shocks; (iv) rapid but unsustainable growth during 2010–2012, fuelled mainly by a mining boom and procyclical fiscal expansion and private consumption growth; (v) economic difficulties after mineral exuberance, 2013–2016, as a result of unprecedented terms-of-trade and foreign direct investment shocks, and a lack of fiscal policy adjustment as indicated by rapid and unsustainable debt accumulation; and (vi) growth recovery and moderation, 2017–2019, mainly due to significantly improved external market conditions and policy support from development partners. Against this backdrop, it is not possible to identify what “normal” growth for Mongolia is. But excluding the transition period, annual growth from 1995 to 2018 averaged 5.5%, albeit with a high standard deviation. Perhaps the most salient feature is growth’s strong correlation with the terms of trade, foreign direct investment (FDI), and mineral exploitation.¹¹

Growth-accounting estimates for Mongolia are very approximate but revealing. Figure 1.2, which draws on Asian Productivity Organization estimates, shows that the growth in total factor productivity, and its capital and labor contributions, during the communist era was overwhelmingly from “perspiration,” with very high levels of investment together with slow or negative total factor productivity growth. Since then, and in a period marked by reforms, total factor productivity growth has been faster, with the contribution

¹¹ Mongolia’s gross national income growth tracks GDP fairly closely, growing somewhat faster during mining boom years, presumably because of the profit repatriations of foreign mining companies. In countries with large numbers of citizens working abroad, remittances typically explain much of the divergence, but in Mongolia they are small compared with other international flows.

of capital being much smaller than in the Communist era, except for the mining boom years. As in most market economies, total factor productivity growth has generally followed GDP growth quite closely.

Several obvious caveats to Mongolia’s national accounts statistics need to be mentioned. The 1990s data must be regarded as approximate, given declining capabilities to gather statistics at that time. Estimates of agricultural production and imputed household consumption in a nomadic herder society are inevitably approximate. And the usual additional limitations apply: for example, unpaid labor and environmental deterioration are not recorded, and information technology services output is recorded incompletely.

Comparative economic growth

What of Mongolia’s performance in comparative perspective? There are no close comparators, and so the choice is inevitably somewhat arbitrary. As points of reference, three other transition, landlocked economies in the region are chosen: Kazakhstan, the Kyrgyz Republic, and the Lao People’s Democratic Republic (Lao PDR). All three are low- or middle-income economies, and all have close commercial ties with the PRC. Mongolia ranks second in this group for income per capita, behind Kazakhstan, also a resource-rich country (Table 1.1.).

Table 1.1: Gross Domestic Product per Capita in Mongolia, Kazakhstan, Kyrgyz Republic, and Lao People's Democratic Republic, 2017

Country	GDP per Capita Current \$	GDP per Capita Constant 2017 \$ as a Ratio of		
		GDP per Capita Constant 2010 \$	GDP per Capita Constant 2000 \$	GDP per Capita Constant 1990 \$
Kazakhstan	9,030	184.5	242.0	119.8
Kyrgyz Republic	1,220	97.7	163.6	121.6
Lao PDR	2,457	374.5	257.4	151.6
Mongolia	3,717	229.7	252.8	152.6

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic.

Source: Computations based on World Bank, World Development Indicators Database.

<https://databank.worldbank.org/source/world-development-indicators> (accessed March 2019).

Mongolia has performed strongly in this group. Its income per capita is about 50% above its pretransition level and similar to the Lao PDR's, which benefits from being in a dynamic region. In the 21st century, its performance has been similar to that of Kazakhstan and the Lao PDR. Since 2010, Mongolia has outperformed Kazakhstan, thanks to a commodity boom, but significantly lagged behind the Lao PDR.

Institutions and governance

For governance, Mongolia's institutional and business-climate indicators are characteristic of many transition economies. Table 1.2 shows Mongolia's performance on the World Bank's Worldwide Governance Indicators for 2000 (chosen because it provides a picture at the end of the transition decade) and 2017, the most recent year available—and compares this with the three countries. Mongolia scores comparatively well on all indicators. As expected, it is by far the highest on the democratic indicator (voice and accountability). It also leads on political stability and absence of violence, rule of law, and control of corruption. But it is behind Kazakhstan on government effectiveness and regulatory quality. As in international rankings more generally, these variables tend to correlate closely with income per capita. Mongolia's governance indicators show small declines over time, except for the larger fall in rule of law. This contrasts with Kazakhstan's general improvement.

Table 1.2: Governance Indicators of Mongolia, Kazakhstan, Kyrgyz Republic, and Lao People's Democratic Republic, 2000 and 2017

Indicator	Kazakhstan		Kyrgyz Republic		Lao PDR		Mongolia	
	2000	2017	2000	2017	2000	2017	2000	2017
Voice and accountability	20.40	13.79	15.42	33.00	10.95	4.43	59.70	56.16
Political stability and absence of violence/terrorism	49.2	45.24	39.68	30.00	28.04	63.33	75.66	74.76
Government effectiveness	26.67	53.85	36.41	23.08	22.05	38.46	46.67	42.31
Regulatory quality	26.15	61.06	50.77	38.46	8.21	25.48	51.28	50.96
Rule of law	14.85	38.46	25.25	17.31	20.30	18.27	51.98	41.83
Control of corruption	9.64	19.71	19.80	12.98	21.32	15.87	45.69	41.83

Lao PDR = Lao People's Democratic Republic.

Source: World Bank, Worldwide Governance Indicators. <http://info.worldbank.org/governance/wgi/#home> (accessed March 2019).

Mongolia's business climate indicators present a mixed picture (Table 1.3). Of the four countries, it is the most open to foreign investment, as shown by the stock of realized FDI relative to GDP. This is a revealed indicator, reflecting very large mining investments, and so it does not necessarily indicate much about the FDI policy regime. Mongolia's ranking in the World Bank's Doing Business project is similar to that of its income per capita, but well behind Kazakhstan's.¹² Its ranking in Transparency International's Corruption Perception Index is the highest of the four countries, confirming Table 1.2's data. Mongolia's ranking on the World Bank's Logistics Performance Index is the lowest of the four, highlighting the need to improve transshipment arrangements with the PRC and the Russian Federation. But, as Chapter 6 observes, this index is difficult to compute for landlocked economies, especially for a country like Mongolia with exceptionally low population density.

¹² The project was informed of numerous instances of unwarranted complexity in the business climate, consistent with many other reports. For example, to establish a wind farm project, 256 official signatures were required.

Table 1.3: Microeconomic Indicators for Mongolia, Kazakhstan, Kyrgyz Republic, and Lao People's Democratic Republic, 2018

Indicator	Kazakhstan	Kyrgyz Republic	Lao PDR	Mongolia
Ease of doing business (out of 190)	28	70	154	74
Corruption Perception Index (out of 180)	124	132	132	93
Logistics Performance Index (out of 160)	71	108	82	130
FDI (% of GDP) 2017	90.5	77.2	39.2	162.2

FDI = foreign direct investment, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic. Sources: World Bank, Doing Business project, <http://www.doingbusiness.org/en/rankings>; World Bank, Logistics Performance Index, <https://lpi.worldbank.org/international/global>; Transparency International, Corruption Perception Index, <https://www.transparency.org/cpi2018>; UNCTAD database <https://unctad.org/en/Pages/statistics.aspx> (all accessed March 2019).

The narrative presented by Byambajav Dalaibuyan and Julian Dierkes in Chapter 7 gives a less favorable picture than is suggested by these indicators. The analysis highlights a declining trust in Mongolia in the country's institutions, and a political system presided over by a powerful party duopoly. Recurring financial scandals exposed by the country's independent journalists are symptomatic of these problems (and of the vigor of social media). These problems are particularly contentious during economic downturns, such as the one under way that followed a mining boom. The continued resilience of the political system was demonstrated by the government navigating the stringent conditions attached to a large IMF adjustment program without any major political upheavals. Nevertheless, unlike other successful reformers, the current and earlier crisis episodes have not been used as an opportunity to initiate major durable reforms. It remains to be seen whether political reforms can be introduced that both act as a stronger deterrent to corruption and facilitate the entry of political actors who are better able to represent the evident discontent with the status quo.

Sectoral growth and structural change

Mongolia's sectoral growth and structural change reflect the interplay of several factors, including economic development, the economic transition period (especially the 1990s), seasonal conditions, mineral discoveries and exploitation, the PRC's economic growth, and specific policy interventions.

During the early 1990s, all sectors declined, but especially industry, including the state-owned enterprises that constituted the command economy connected to the former Soviet Union (Figure 1.3). The agriculture decline was

the smallest, buffered by the subsistence nomad economy. Agriculture and services also returned to positive growth more quickly. Even so, agricultural output declined sharply during 2000–2002, because of exceptionally harsh winters that resulted in extensive livestock and crop losses. In fact, the agricultural output trajectory is highly unusual: it is much more volatile than is normally the case for this sector, and it is more volatile than the other two major sectors, reflecting its vulnerability to seasonal conditions. An underlying driver of agriculture growth since the 1990s has, as earlier noted, been the huge increase in livestock numbers.

Figure 1.3: Growth of Agriculture, Industry, and Services Sectors, 1991–2017 (%)

Note: Computations based on gross domestic product at basic prices.

Source: National Statistics Office of Mongolia. <http://www.en.nso.mn/index.php> (accessed March 2019).

Mongolia has considerable potential for downstream agricultural processing if it takes the necessary reforms. The Yikidiki quarantine farm on the Mongolian side of the border with the PRC is a case in point.¹³ This PRC-owned showcase project was formalized during a state visit by President Xi Jinping. The farm has the potential to employ a staff of 60 Mongolian nationals and 10 from the PRC. It is projected that 10,000 animals per day will be exported to an abattoir in the PRC after undergoing a 30-day quarantine period. This implies a stock of about 300,000 animals, with an annual export potential of up to \$70 million. However, the farm's operations have been suspended due to worries that not enough value was being created in Mongolia.

The project offers several broader lessons, which are amplified on in Chapters 4 and 5. It shows the potential for profitable joint ventures with the PRC in

¹³ Yikidiki is a company headquartered in the PRC. It had net sales of MNT2.5 billion in 2018 with a net profit of MNT114 million.

livestock. In the best-case scenario, Yikidiki could be a profitable means of reducing Mongolia's livestock population to sustainable levels, estimated to be 20 million–30 million. With more effective agricultural and animal hygiene services, Mongolia could have extracted much more local value added from this project. For example, if the country's animal husbandry and veterinary services had been effectively maintained and high standards of animal hygiene achieved, the abattoir could have been located on the Mongolian side of the border, creating substantial additional employment opportunities.

Another lesson is that it is a fallacy to oppose this project (and others like it) on the grounds that it might push up domestic meat prices and increase poverty. For one thing, as noted earlier, livestock numbers need to be reduced on environmental grounds. And projects like this hold out the prospect of increasing incomes for the herder economy and rural areas more generally, in the process addressing the government's concern about the alleged “over development” of Ulaanbaatar. It is moreover not clear whether the poor are net livestock producers or consumers. The urban poor are obviously net consumers, and there are more effective alternative instruments for any needed compensation for this group.

Mining has dominated industrial growth, a theme discussed in Chapter 3, with very high industrial growth in 1995, 2001, 2004, and 2013. The high growth reflects major mining developments, mainly centered on operations starting at the huge Oyu Tolgoi copper and gold mine in the Southern Gobi Region and the continued operation of the Erdenet copper mine in the north.¹⁴ Not surprisingly, mining output has also registered considerable volatility. As would be expected, Mongolia has a small manufacturing sector, and this is likely to always be the case. Many industrial state-owned enterprises collapsed during the big-bang liberalization. And when the mining boom became a major growth driver, the tradable goods sector—manufacturing and tradable agriculture activities—was squeezed by the effects of Dutch disease. Moreover, Mongolia's open economy is highly integrated with the PRC's, the world's major supplier of low- and semi-skilled manufactured goods. Mongolia's wage levels are also higher than those in the PRC's neighboring province of Inner Mongolia Autonomous Region. This, together with higher logistics and energy costs, mean that Mongolia does not have a comparative advantage in the production of footloose manufacturing, except for some niche products of the type described in Chapters 4 and 5.

¹⁴ Both the mines are large by global standards—or will become so after the completion of Oyu Tolgoi's second phase. Erdenet, owned 51% by the Mongolian government and 49% by the Russian Federation, is the world's fourth-largest copper mine, contributing an estimated 13.5% of GDP and 7% of government revenue. As noted, Oyu Tolgoi was predominantly foreign-owned until the foreign partner's equity-debt swap.

The growth of the goods sectors has rarely been synchronized, reflecting their different drivers, and it is having a moderate stabilizing influence on aggregate economic activity. Services growth has been more stable, although with larger fluctuations (from 0% to 17%) than is usually the case. Public sector spending has been a major cause of the variability of services growth, with its spending patterns heavily influenced by direct and indirect proceeds from mining. Urbanization, increasing incomes, and the rising formality of the economy have also been factors in the growth in services.

Despite these unusual sectoral growth patterns, the process of structural change has been fairly conventional (Figure 1.4). The share of agriculture in total GDP peaked at 36% in the mid-1990s, but output shrank in the early 2000s amid rising industry and services growth, and agriculture's share more than halved and is now down to 10%–15%.¹⁵ Industry's share of GDP has varied considerably, but typically ranges from 30% to 40% on a gradually rising trend. In most years, services is the largest sector, accounting for about half of GDP, but, again, with considerable year-to-year variation.

¹⁵ The recorded agricultural share in 1991 of 9.4% is implausibly low and presumably reflects the difficulties of maintaining reliable national accounts statistics during the early years of the transition era.

Savings and investment

Mongolia's volatile economic growth is also reflected in its savings and investment patterns (Figure 1.5). Both fell early in the transition period, and remained subdued during the 1990s as a household survival strategy for savings and because of limited business opportunities for investment. Nevertheless, investment held up better, supported by international development assistance and large fiscal deficits. As economic growth picked up, both savings and investment began to recover, although the early 2000s saw a decline in savings. Mongolia has consistently been a net capital importer, as domestic savings have been insufficient to finance infrastructure and resources projects.

Figure 1.5: Investment and Savings, 1991–2017
(% of GDP)

GDP = gross domestic product.

Source: National Statistics Office of Mongolia. <http://www.en.nso.mn/index.php> (accessed March 2019).

As mining gathered pace, investment rose to more than 30% of GDP from 2003 and then to over 50% in the boom years of 2011–2013, a period that also saw extensive overseas sovereign and nonsovereign borrowing (which rapidly raised government spending) and a real estate boom in Ulaanbaatar. After 2013, the share of investment in GDP fell to less than half that of the boom years as the mining boom petered out, the government was forced to adopt a more prudent fiscal policy and private sector credit growth normalized as unconventional monetary policies and monetary injections were phased out. Savings, however, were resilient in this period.¹⁶

¹⁶ It is important to note that figures for saving in particular must be approximate, given the difficulties of estimating savings in rural nomadic households.

Macroeconomic management

How Mongolia managed the macroeconomy is central to understanding its economic development and growth trajectory since 1990. As Chapter 2 points out, few countries outside transition economies have had to grapple with such complex macroeconomic challenges as Mongolia, given the economic and political transitions that it had to make. The transition involved moving from a closed command economy where all major prices were set by the government to an open market economy, and from a communist political system to a democratic one, involving the inevitable public sector spending pressures in a competitive polity. In the transition there were large external shocks, resulting from terms-of-trade volatility and having a large neighbor with the world's fastest growth rate for much of the time since 1990. The magnitude of the challenges is illustrated by the fact that to cope with them Mongolia had six IMF programs since 1991. It has also been a learning experience for the country, with policy makers gradually learning how to better manage the macroeconomy. Three of the IMF's programs were in the 1990s and the rest in the 2000s.

As in all the transition economies, Mongolia experienced an episode of hyperinflation in its transition, with inflation hitting over 300% in 1992 (Figure 1.6). This was for the usual reasons, including state-owned enterprises operating with soft budget constraints and the government trying to maintain its public spending in a collapsing economy. By the late 1990s, however, the

Figure 1.6: Inflation and Exchange Rates, 1991–2017

MNT = Mongolian togrog.

Sources: National Statistics Office of Mongolia, <http://www.en.nso.mn/index.php>; World Bank, World Development Indicators Database, <https://databank.worldbank.org/source/world-development-indicators> (both accessed March 2019).

government was managing these pressures. Importantly, it had begun to learn how to conduct monetary policy in an open market economy. Inflation fell to 6% by 1998, and has been at single-digit levels for about half the years since then. Although inflation spiked again in some years, hitting 22% in 2008, and has been above the level of its major trading partners, the BOM has never completely lost control of monetary aggregates. Its relatively restrained monetary policy is shown by the ratio of M1 to GDP generally ranging from 10% to 15% since the late 1990s. The ratio of M2 to GDP, at about 15% in the late 1990s, has been at just over 50% in recent years, reflecting the country's increased bank coverage.

The inflation outcomes have required frequent depreciations in the nominal exchange rate to restore international competitiveness—except in years of very strong mineral exports, when the effects of Dutch disease have been evident. Figure 1.7 shows the movement of the exchange rate, and of the nominal effective and real effective exchange rates, since 2000. The togrog steadily depreciated against the dollar for most of that period, and at the time of writing, was less than 50% of its value in 2000. The sharpest declines were during the economic crises of 2009 and particularly 2016 and 2017, necessitating the IMF programs. Movements in the nominal effective rate are almost a mirror image of the togrog-dollar rate, which is expected given the

Figure 1.7: Effective Exchange Rates, 2000–2018

MNT = Mongolian togrog.

Note: The nominal and real effective exchange rates are indexed to equal 100 in December 2000. A downward movement indicates a depreciation.

Source: International Monetary Fund, International Financial Statistics. <https://data.imf.org/regular.aspx?key=61545850> (accessed August 2018).

dollar's importance in the pricing of Mongolia's international trade and the relative stability of the renminbi-dollar rate. The real effective rate reflects the combined effects of the nominal rate and Mongolia's inflation relative to its major trading partners. Until 2015 there was a persistent tendency toward appreciation: that is, a loss of competitiveness because of Mongolia's higher inflation and periodic mining booms, most notably in 2008 and after 2010. It took the economic crises of 2009 and the economic difficulties in 2016 to reverse this trend through large nominal depreciations. By 2017, the real rate had reverted to approximately what it was a decade earlier, although it was still significantly higher than in 2000.

To understand these outcomes, it is necessary to examine trends in the country's macroeconomic balances (i.e., the fiscal and current account). They are shown in Figure 1.8 as percentages of GDP from the early 1990s (the current account outcomes were already observed in Figure 1.5, as they are the mirror image of the savings-investment imbalance). Four features are clearly evident in these balances. First, until 2010, they were relatively modest (less than 10% of GDP) for an economy with Mongolia's characteristics. Second, the fiscal balance was almost always negative in this period, and the current account balance has been negative in most years. Both features are as would be expected: in the case of the current account, to draw on foreign savings to finance the many investment needs; and in the case of the budget, to similarly finance the many goods and services expected of government and given the ready availability of highly concessional official development assistance. Third, the major disjuncture occurred during 2011–2013, when for 3 years the country

Figure 1.8: Fiscal and Current Account Balances, 1991–2017

GDP = gross domestic product.

Sources: Bank of Mongolia, <https://www.mongolbank.mn/eng/>; National Statistics Office of Mongolia, <http://www.en.nso.mn/index.php> (both accessed March 2019).

ran extraordinarily large current account deficits of 40% of GDP on average. Fiscal deficits increased only slightly, meaning that most of the increase came from FDI (which financed FDI-related imports of goods and services) and private sector borrowing. As Chapter 3 shows, a significant element of the increase was the decision by Rio Tinto, the major mining investor in Oyu Tolgoi LLC., to convert its holdings from equity to debt. In any case, this was a period of “growing into a crisis,” as current account deficits of this size would likely trigger a debt reckoning unless the borrowed funds were used for exceptionally profitable investments. This led to the fourth phase of structural adjustment, with much lower fiscal and current account deficits from 2015.

These macroeconomic imbalances are reflected in Mongolia’s rapidly increasing indebtedness. Figure 1.9 aggregates the four debt series (public, private, domestic, and external) relative to GDP (see also the data presented in Chapter 2). The data clearly show debt-driven growth since about 2010. Mongolia is now a heavily indebted country, with total public and private sector debt rising from less than 50% of GDP in 1997 to almost 300% in 2017. This makes the economy highly vulnerable to movements in global interest rates. Until the early 2000s, most debt was public and external, because the nascent private sector was not in a position to borrow and there were few domestic financial instruments. Private domestic borrowings then began to rise quite quickly, and are expected to reach about 35% of GDP by 2020, while the government’s fiscal consolidation efforts resulted in declining public debt (relative to GDP).

Figure 1.9: External and Domestic Debt, 1997–2017

GDP = gross domestic product.

Sources: Bank of Mongolia, <https://www.mongolbank.mn/eng/>; World Bank, World Development Indicators Database, <https://databank.worldbank.org/source/world-development-indicators> (both accessed March 2019)

A major change in Mongolia's debt levels and the composition of its debt occurred in the early 2000s. The change was driven by the mining boom; increased foreign investment, part of which was financed by foreign borrowings; and the growing sophistication of the private sector. By 2010 private external debt had become the largest single component of total debt, accounting for over half by 2012. Internal debt then increased dramatically in line with the country's large current account deficits, rising, as a percentage of GDP, from 12.5% in 2009 to 161% in 2016. Public debt, including central bank liabilities also rose, almost trebling to 95% of GDP from 2011 to 2017.

To ease the burden of servicing this heavy public and private sector debt, Mongolia will basically have to grow its way out of the debt. This will entail significant fiscal consolidation, particularly much more careful public spending. In principle, as Chapter 2 notes, the macroeconomic policy framework is in place to do this. The Fiscal Stabilization Law, passed in 2010, specifies a maximum fiscal deficit of 2% of GDP. But this has often been avoided, partly by overprojecting budget revenues and GDP growth and resorting to off-budget spending, including through the BOM and DBM. Fiscal policy has also tended to be procyclical, with boom periods typically leading to an expanded public service wage bill (both in numbers and wage rates), and increased social transfers, neither of which can be wound back when booms subside.

To its credit, the government acted quickly and effectively during the 2016–2017 economic difficulties, when it was faced with a significant challenge in paying its maturing international bonds. This was averted by a \$5.5 billion IMF-led donor rescue package (including the BOM and People's Bank of China currency swap line), equivalent to about 50% of GDP at the time. A dramatic fiscal consolidation ensued of about 20 percentage points of GDP between 2016, when the primary fiscal balance was 17%, to 2018, when a balance of 3% was achieved. This was one of the IMF's most effective programs at that time. Faced with difficult alternatives, the government cut deeply into unproductive spending (for example, its large DBM portfolio); froze civil service salaries and put nondonor infrastructure on hold; and increased "sin taxes," while protecting key social transfers. Higher commodity prices, substantially high export proceeds, and FDI recovery eased the adjustment. But whether this fiscal prudence will be maintained beyond the program and the general election in 2020 remains to be seen.

These macroeconomic outcomes need to be seen in light of the country's institutional context. The BOM is nominally independent, but in practice its operations are significantly influenced by the government. Its governors are

appointed for 6-year terms, but the average term lasts little over half that. The monetary policy authorities are struggling with the danger of falling into a debt trap—on the one hand requiring currency depreciation to increase competitiveness, but on the other hesitating to depreciate because of the large dollar-denominated external debt. Inflation, at about 7%, is very high given the current global environment, and the central bank has an unusually high target rate of 8%. Dollarization is modest, at about 16% of M2, with occasional and generally small divergences in the black market rate.

A shallow financial sector complicates the operation of monetary policy. Although Mongolia is quite “well banked,” little long-term financing is available. Few instruments are available to hedge exchange rate risk. The financial sector is highly concentrated, with the three largest banks controlling two-thirds of sector assets. A stronger capital base, an amelioration of governance, and competition are needed. Foreign banks are not allowed to apply for full-service banking licenses and not many are interested yet in a full-service banking license, except for a PRC state-owned bank. As a consequence, only a few foreign banks have representative offices. Further, they offer very limited services, which increases the cost of foreign companies doing business in Mongolia (for example, for the estimated 7,000 PRC businesses in the country). Private sector debt management could be achieved partly through debt-for-equity swaps, but this would only be feasible on commercially attractive terms and with conducive government policies. In fact, the major swap in recent years occurred in the opposite direction, exacerbating the debt problem.

Trade and foreign investment

Three features dominate Mongolia’s international commercial relations. The first is the rapid opening in the 1990s of a hitherto closed, Soviet-dependent economy. The second is its unusual balance-of-payments structure, including the occasionally very large current account deficits and the corollary of very large capital inflows. The third is its highly concentrated export structure, both in composition and market destination. The three features are briefly discussed here, and examined in more detail in Chapter 3.

Apart from the higher trade costs resulting from its geographic isolation, Mongolia is a very open economy. Total two-way merchandise trade is equivalent to about 116% of GDP. Average tariffs are 5.5% with relatively few deviations around this level, and Mongolia does not rely much on nontariff barriers. The country has only one fully-fledged preferential trade agreement,

namely the Economic Partnership Agreement with Japan. Furthermore, the country has the following bilateral agreements: The Comprehensive Strategic Partnership Agreement with the PRC, the Friendly Relations and Comprehensive Strategic Partnership Agreement with the Russian Federation, and the Strategic Partnership Agreement with the United States. Border free-trade zones, mainly with the PRC, are progressing slowly. Because Mongolia's tariffs are low, the principal benefit of the zones is their scope for providing efficient cross-border trade and logistics, and mitigating other behind-the-border commercial barriers. The main exceptions to this open-trade regime are for certain agricultural products, including wheat and pine nuts. The wheat protection has the most deleterious equity impacts, as it raises the price of bread and noodle products.

Table 1.4 breaks down Mongolia's balance of payments in the transition period (1995 is the chosen year for this); in 2010, when the mining boom was gathering momentum; and in 2017, during the latest economic difficulty. The overall picture is marked by (i) the balance of payments rising dramatically as Mongolia internationalized; (ii) the very small current account surplus of the mid-1990s giving way to very large deficits that were initially financed by official development assistance, but, since 2000, predominantly by FDI, portfolio, and other investment inflows; and (iii) Mongolia's remittances, which are compared with those of some Central Asian countries. The trade balance fluctuated between negative and positive, depending primarily on the value of mining exports. For example, in 2010 it was negative, as imports were growing rapidly (partly to support the mining boom); in 2017 it was positive, as export prices began to recover from a slump while imports slowed in response to the economic downturn. The services trade balance is consistently negative, an outcome that may be reversed if tourism continues to grow strongly or if Mongolia is able to become competitive in other services sectors.

During the transition period, manufacturing accounted for up to half of total merchandise exports. But this began to fall quickly as the old central-planning manufacturing plants were closed, the country's preferential access to global textile markets disappeared with the end of the Multifibre Arrangement, and mining exports began to grow rapidly (Figure 1.10). From 2010 onward, manufacturing was generally less than 20% of total exports and agricultural exports were negligible. Since Mongolia became a mining-dependent economy, this sector's share has generally been at least 70% of merchandise exports, a figure that approached 90% in some years. Services exports have always been smaller than merchandise exports, constituting no more than 15% in most years.

Table 1.4: Balance of Payments, 1995, 2010, and 2017
(\$ million)

Balance of Payments Item	1995	2010	2017
Trade balance	25	-172	1,490
Merchandise exports	451	2,908	5,834
Copper	269	771	1,613
Gold	49	178	595
Merchandise imports	426	3,080	4,345
Balance of services	-38	-303	-1,212
Export of services	57	486	966
Import of services	95	789	2,178
Net primary income	-25	-598	-1,613
Remittances	0	18	63
Net secondary income	77	187	180
Remittances	0	248	211
Current account balance	39	-885	-1,155
Capital and financial account	50	-643	-1,056
Capital account	0	152	78
Capital transfers	0	153	78
Other capital	0	-1	0
FDI	10	1,629	1,446
ODA	209	303	764

FDI = foreign direct investment, ODA = official development assistance.

Source: Bank of Mongolia. <https://www.mongolbank.mn/eng/> (accessed March 2019).

Figure 1.10: Goods and Services Exports, 1996–2018

Source: National Statistics Office of Mongolia. <http://www.en.nso.mn/index.php> (accessed March 2019).

Figure 1.11 contrasts three major international resource flows—FDI, official development assistance, and remittances—relative to GDP. A distinctive feature of Mongolia among lower-middle-income transition economies is the dominance of FDI in its international resource flows since around 2000. Official development assistance was the largest and most stable of the three resource flows during the 1990s and up until 2004. Since then, remittances have been declining absolutely (and of course relatively), except for minor pickups during the crisis years of 2009 and 2017. Remittances have been modest since the early 2000s, although in some transition years they were as large as FDI.

FDI dominated during the mining boom years from 2008, but it fell sharply after 2013 and, as earlier noted, there was a particularly large outflow in 2016 caused by the Rio Tinto equity-debt swap.

Social indicators

Mongolia's living standards are basically determined by its income per capita, although its social indicators are also shaped by the country's history and economic structures. As Chapter 8 observes, during the economic transition, the country had a low-income, egalitarian development model, with cradle-to-grave social welfare and guaranteed employment, overlaid on a nomadic economy with plentiful livestock supplies, except during extreme weather events. At that time, universal literacy was nearly universal and gender

disparities were mild. The transition to a market economy undermined both the state's fiscal capacity to maintain a welfare state and an egalitarian development model. Changes in living standards have broadly moved in tandem with economic growth. The commitment to education remains strong and elements of the welfare state endure.

Table 1.5 shows socioeconomic indicators in the late communist era for the four transition economies. Mongolia ranked second in terms of income per capita, but it lagged behind Kazakhstan and the Kyrgyz Republic in years of schooling and life expectancy, and it had a higher infant mortality rate. Mongolia was well ahead of the Lao PDR (and other poorer Southeast Asian economies, except Viet Nam) on these indicators. Mongolia's gender disparities were by comparison relatively modest—women had more schooling but lower life expectancy.

Table 1.5: Social and Economic Indicators Mongolia, Kazakhstan, Kyrgyz Republic, and Lao People's Democratic Republic, 1990

Indicator	Kazakhstan	Kyrgyz Republic	Lao PDR	Mongolia
GDP per capita (current \$)	1,647	609	203	1,172
Population (million)	16.5	4.4	4.3	2.2
Exports and imports (% of GDP) ^a	149.3	78.8	35.8	58.6
Mean years of schooling	8.1	8.6	3.1	7.7
Male	8.6	9.1	4.3	8.0
Female	7.6	8.1	1.9	7.4
Life expectancy (years)	66.8	66.3	53.6	60.3
Male	61.8	62.3	52.3	57.8
Female	71.5	70.2	54.9	62.9
Mortality rate, infant (per 1,000 live births)	44	54	111	77
Remittances (% of GDP) ^b	0.6	0.1	1.3	0.5
HDI rank	53	76	118	86
HDI rank: GDP per capita rank	10	-23	0	0

GDP = gross domestic product, HDI = Human Development Index, Lao PDR = Lao People's Democratic Republic.

^a Kazakhstan 1992, others 1990

^b Kazakhstan 1995, Kyrgyz Republic 1993, Lao PDR 1990, Mongolia, 1998.

Sources: United Nations Development Programme, Human Development Data (1990–2017), <http://hdr.undp.org/en/data>; World Bank, World Development Indicators Database. <https://databank.worldbank.org/source/world-development-indicators> (both accessed March 2019)

The relative rankings of the four countries have not changed much since 1990, although all their social indicators improved substantially (Table 1.6). For Mongolia, life expectancy is up by 9 years and schooling by 2 years. Infant

mortality is just one-fifth of what it was in 1990. Despite the hardship of the transition period, Mongolians are, in aggregate, much better off now.¹⁷ Gender disparities are the exception: these deteriorated on both health and education indicators (although at the tertiary level, the enrollment of women was higher than for men). Other indicators also show a mixed gender record. For example, Mongolia scores quite well on the United Nations Development Programme's Gender Inequality Index, but the labor force participation rate of women is surprisingly low.

Table 1.6: Social and Economic Indicators Mongolia, Kazakhstan, Kyrgyz Republic, and Lao People's Democratic Republic, 2017

Indicator	Kazakhstan	Kyrgyz Republic	Lao PDR	Mongolia
GDP per capita (current \$)	9,030	1,220	2,457	3,717
Population (in million)	18.2	6.0	6.9	3.1
Exports and imports (% of GDP)	0.0	102.2	75.8	116.6
Years of schooling	11.8	10.9	5.2	10.1
Male	11.7	10.8	5.7	9.8
Female	11.8	10.9	4.6	10.6
Life expectancy (years)	70.0	71.1	67.0	69.5
Male	65.3	67.1	65.4	65.4
Female	74.8	75.1	68.6	73.7
Mortality rate, infant (per 1,000 live births)	9	18	49	15
Remittances, % of GDP	0.2	32.9	1.5	2.4
HDI rank	58	122	139	92
HDI rank - GDP per capita rank	4	-26	15	-2

GDP = gross domestic product, HDI = Human Development Index, Lao PDR = Lao People's Democratic Republic. Sources: United Nations Development Programme, Human Development Data (1990–2017), <http://hdr.undp.org/en/data>; World Bank, World Development Indicators Database. <https://databank.worldbank.org/source/world-development-indicators> (both accessed March 2019)

The incidence of poverty has followed economic growth quite closely (Figure 1.12). For international comparison and consistency over time, the World Bank's PovcalNet poverty lines of \$1.90 and \$3.20 per day (in 2011 prices in purchasing power parity terms) are used.¹⁸ The two headcount series follow

¹⁷ Even so, Mongolia has serious health challenges, such as pollution-related respiratory problems reportedly rising in Ulaanbaatar.

¹⁸ World Bank data are used because, as noted in Chapter 8, the poverty data reported by the National Statistical Office of Mongolia show a relatively small decline in headcount poverty from 36.3% in 1995 to 26.9% in 2016. Because incomes have risen significantly and the official Gini inequality ratio has been fairly stable, the statistics office must be revising upward its poverty line, thus limiting its utility for intertemporal comparisons.

similar trends, rising during the 1990s, then falling quickly with the onset of economic growth. The \$1.90 series, sometimes referred to as a “destitution” measure, suggests that absolute poverty in Mongolia has almost disappeared—and the incidence of poverty for the “middle income” series (\$3.20) is about 5%. This is a very impressive achievement considering that poverty on this measure was over 60% in the late 1990s. Both series recorded only a very slight increase in 2016 as the economic crisis hit, suggesting that the targeted social protection measures were effective. The expenditure Gini index has been moderate and stable since the mid-1990s, ranging from 0.30 to 0.35, a result that is somewhat at odds with popular perceptions of rising inequality in Mongolia. For what the data are worth, international surveys (the Gallup Poll, for example) suggest the global rankings of Mongolia’s self-reported happiness and life satisfaction are similar to its income per capita. Chapter 8 examines trends in poverty and income distribution in greater detail, including with reference to the national poverty line. As is generally the case with poverty estimates, although a common data source is used (that is, national income and expenditure surveys), the international and national headcount poverty estimates typically differ because the two sources employ different poverty lines.

Figure 1.12: Poverty and Inequality Indicators, 1991–2017

PPP = purchasing power parity.

Source: World Bank, World Development Indicators Database. <https://databank.worldbank.org/source/world-development-indicators> (accessed March 2019).

1.3 Summary and Policy Recommendations

Mongolia is at a crossroads. It has achieved much since it embarked on a political and economic transition in 1990. After a particularly difficult decade of deep economic crisis and social hardship, followed by gradual recovery, GDP per capita (and most socioeconomic indicators) were restored to pretransition levels in the early 2000s, a record that is better than in several other transition economies. Mongolia has maintained the integrity of its vast, lightly settled territory, and it is at peace with its neighbors. The country has an open economy adjacent to one of the world's most dynamic regions. And it has tremendous mineral wealth. There is also potential in several nonmining niches, together with historical strengths in agriculture. Mongolians are mostly well educated; civil society is vibrant; the media open; and democratic processes, including peaceful regime change, have been maintained.

But Mongolia's economic performance could and should have been significantly better. The country has not made optimal use of its resource abundance due to the lack of a savings mechanism and its implementation, profligate spending, suboptimal tax and regulatory arrangements, uneconomic public investments, and corruption. The macroeconomic policy framework has not been up to the task of managing large external shocks, resulting in boom-and-bust growth and frequent resort to international rescue packages. Both the private and public sectors are very heavily indebted, making the country vulnerable to global macroeconomic shocks, including rising interest rates and exchange rate volatility. Economic diversification has proceeded slowly, as a result of macroeconomic factors (particularly exchange rate management), sporadic and small domestic investments in nonmining sectors, and slow progress in reforming the business climate. The benefits of the commodity booms have not been evenly distributed. Even though spending on social security rose quickly during the boom periods, it was to unsustainable levels and without effective targeting. Environmental stresses are increasing in urban and rural areas. And perhaps most important of all, the commendable democratic achievements since the early 1990s have yet to translate into better governance through the creation of strong development-oriented institutions.

The following policy recommendations are drawn from this and the seven other chapters of the country diagnostic study.

Macroeconomic policy

Focus fiscal policy on stability objectives to contain future boom–bust cycles. This requires the implementation of a fiscal framework akin to the Fiscal Stability Law passed in 2010 and later amended. The law already contains the necessary debt limits, the structural balance, and expenditure growth. Savings in the Future Heritage Fund should be resumed when the public debt has fallen below an appropriate debt threshold, and once outstanding debt at high yields has been repaid.

Maintain fiscal consolidation, discipline, and proactive budget management. When Mongolia finishes its IMF program, the Parliament's scope for ad hoc spending increases will need to be effectively curtailed. No new extra-budgetary funds should be set up. Budget planning and forecasting should be more realistic. The budget should be properly implemented to ensure that the difference between the approved budget and actual performance is minimal. Scrutinizing budget implementation and fiscal projections and ensuring full transparency are important challenges to meet. Domestic investments should aim at reducing supply disruptions of consumer goods, resolving structural issues and at lowering market distortions to enable more room and flexibility for monetary policy.

Strengthen monetary and exchange rate policies. The next challenge beyond the present adjustment program will be maintaining a low and stable level of consumer price index inflation as the sole target while ensuring financial sector stability. In addition, monetary policy can play an instrumental role with a coherent fiscal policy to mitigate drastic shocks to the economy and employment. Adopting an explicit inflation targeting regime would require a substantial prerequisite condition, significant upgrade in modelling capabilities within the BOM, and financial stability and capital market development.

Increase the level of international reserves in line with macroeconomic objectives to be better prepared for the next downturn. Foreign exchange reserves should be increased opportunistically, without distorting the market, and must be consistent with macroeconomic policy objectives. External economic shocks can be better absorbed through flexibility in the exchange rate, sufficient foreign exchange reserves, and proactive policy responses to the shocks.

Strengthen macro-prudential policies. This is needed to provide countercyclical stabilization across the entire financial system—for instance, through additional capital or provisioning requirements that vary with the cycle. As the capital account becomes more open, foreign borrowing by the banks should be monitored carefully, given the highly cyclical nature of risk premia in the banks' wholesale funding.

Strengthen banking regulations and improve the capacity of banking supervision. A particular focus of this effort should be implementing rigorous asset quality standards and regular stress tests, and putting in place high-quality capital where required. The capital coverage of banks needs to reflect the financial system's highly cyclical nature, and as additional capital is raised, the quality of bank equity should be respected. Preemptive action to deal with nonperforming loans should be regarded as a key part of the crisis prevention mechanism.

Build multilayered financial safety nets with a focus on regional financial safety nets. Regional crisis responses from the ASEAN+3 countries,¹⁹ such as the Chiang Mai Initiative Multilateralization, the ASEAN+3 Macroeconomic Research Office, and the Asian Bond Markets Initiative, underscore the need for Mongolia to strengthen regional financial cooperation in risk identification, mitigation, and response. It is important for Mongolia to build regional financial safety nets similar to ASEAN+3 mechanisms, join the Chiang Mai Initiative Multilateralization, and enter into more bilateral swap arrangements with other countries to tackle the challenges of volatile capital flows.

Management of natural resources

Avoid backloading fiscal resource revenue. As a developing country, Mongolia has large investment needs. However, the current contracts with mining companies, such as equity participation through debt financing, lead to significant delays in receiving profit tax payments. A better strategy is to rely on corporate income tax and other tax instruments.

Smooth revenue from mining. Procyclical resource revenue from mining has, in the past, contributed to procyclical fiscal policy. A more stable income stream from mining could thus help to smooth public expenditure. Increasing reliance on more stable payments, such as royalties, instead of ones that covary positively with commodity prices, such as corporate income tax, is advisable.

¹⁹ ASEAN+3 is the countries of the Association of Southeast Asian Nations plus the PRC, Japan, and the Republic of Korea.

Improve revenue projections. The government needs to invest in its capacity to improve mining revenue projections. There is also a need for better coordination of revenue estimates among the Ministry of Finance, the BOM, the Ministry of Mining and Heavy Industry, the National Development Agency, the Parliament, and the Fiscal Stability Council. When revenue falls short of projections, fiscal expenditure should be reduced rather than incurring deficit spending.

Improve handling of double tax treaties, transfer pricing, and ring fencing. Mongolia has double tax treaties with 26 tax jurisdictions, most of which contain tax-related concessions. Transfer pricing is another challenge for collecting profit taxes. In 2018, Mongolia joined the Organisation for Economic Co-operation and Development and the G20's base erosion and profit shifting initiative (BEPS)—an important step to ensure appropriate tax revenues. The government, however, needs to step up its commitment to BEPS and ensure that tax laws are clarified in relation to transfer pricing.

Establish and implement a permanent savings mechanism. In periods of strong economic growth and buoyant commodity prices, resource revenues should be saved and managed (invested) through various mechanisms, including the Fiscal Stabilization Fund and the Future Heritage Fund, and in accord with public debt management and debt-servicing policies.

Diversification of the economy

Develop a long-term strategy for diversification. Diversification is a means not an end. Diversification can help to reduce structural volatility and increase job opportunities. The government needs to devise a long-term diversification strategy that is economically feasible and consistent with the future development of the mining sector.

Enhance the implementation of existing programs. The government fully understands the need to diversify the economy and has adopted several long-term policy documents. However, the implementation is lacking, monitoring is largely absent, and new policies are adopted without the previous ones being fully implemented or evaluated. Policy documents are also not supported by rigorous cost-benefit analysis, financing, and policy actions, such as public investment plans and annual budgets.

Reduce exporting costs. Many companies find it difficult to penetrate foreign markets because the related costs can be prohibitive, especially for

small enterprises. The government could set up liaison offices in the most important markets. Companies also need affordable access to internationally certified laboratories, especially for metrology and food safety, either domestically or internationally.

Create a conducive business climate. The government aims to improve the business and institutional environment by, among other things, easing tax and customs compliance and trading across borders. Future policy should focus on reducing red tape, the costs associated with getting basic government services, and corruption.

Overcome coordination failures. Businesses across all industries face coordination failures because they lack the opportunity to reach and collaborate with foreign markets effectively. A public entity could play a key role in overcoming these coordination failures by providing a platform for information sharing or matching existing and potential exporters.

Infrastructure and connectivity

Identify the most promising investments. The scope for transport improvements in Mongolia is huge, but cost-benefit analysis is difficult given the range of externalities and the long life of road and rail projects. The government must identify a method for prioritizing future investment while maintaining fiscal balance and external debt sustainability. The recent increased emphasis on issues such as road maintenance and road safety is good and should be continued. It is also important to ensure high standards of infrastructure evaluation and management, so that scarce funds are being allocated to high-priority and well-performing projects. In this context, some simple quadrant-type project management tools could be applied that have often been effective in other countries.

Promote competition in air transport. Opening the New Ulaanbaatar International Airport will be a good opportunity to adopt an open skies policy. Protecting MIAT Mongolian Airlines is far less important than increasing flights and reducing airfares, which will promote trade and tourism.

Reform the energy sector. Tough decisions need to be taken on the balance between increasing power supply and reducing air pollution. Continued reliance on three obsolete and environmentally unfriendly power stations for Ulaanbaatar's electricity and heating should be tackled sooner rather than later. A clear pricing policy, including phasing out fossil fuel subsidies

(accompanied by social transfers for the poor), is necessary for encouraging the use of renewables.

Increase the reliability of electricity supply. This is essential for all sectors and especially e-development. Internet connectivity policy appears to be on a good path.

Trade

Make the export development strategy an integral part of the overall macroeconomic policy stance. The BOM's current inflation target of 8% does not seem consistent with the objective of effectively integrating the Mongolian economy into the global economy, because it undermines the international competitiveness of the economy. Export promotion, especially for the nonmineral sector (organic food, cashmere, supply chains in livestock products, tourism services, renewable energy etc.) should become an important economic policy objective. In order to increase exports, corresponding institutional reforms should be promoted, the legal and regulatory environment improved, and export-guarantee and financing facilities further developed.

Lower trade costs and make trade policy more predictable and transparent. Trade costs are high because of high transport and logistics costs. In addition, trade is unnecessarily burdensome because of overly complicated procedures, including appeal procedures, documentation requirements, and the lack of a mutual electronic information exchange. The government should develop hard and soft infrastructure and logistics to reduce these costs, and refrain from increasing tariffs beyond the applied most-favored-nation tariff because it creates unnecessary uncertainty for businesses.

Carefully consider preferential trade agreements. When deciding on new preferential trade agreements, the government needs to fully understand and balance the risks and opportunities. Although preferential trade agreements can stimulate trade, they tend to have a positive effect only in the short term and always remain a second-best option compared with multilateral and unilateral trade opening. Furthermore, market access in developed countries hinges crucially on compliance with stringent product standards, including sanitary and phytosanitary standards.

Tap into the growth potential of meat products and products from animal husbandry, particular cashmere clothing and footwear. A prerequisite for promoting processed food exports is to set up an institutional mechanism

to help producers and exporters meet international food safety standards. Attracting foreign investments, including their know-how and technology, is also essential. The expansion of these sectors has to be first and foremost on the basis of environmental sustainability.

Facilitate trade in services. As the economy is shifting toward services, this sector has a large potential for additional trade. Opening certain services sectors to foreign competition can increase quality and lower prices. It can also enable Mongolian service exporters to increase their international competitiveness.

Institutions and governance

Better implementation of anticorruption regulations and provisions. Many anticorruption tools are not being used. All efforts should be taken to empower government agencies, civil society, the media, and popular movements to use these tools. In this context, it is vital to ensure independent prosecutorial powers.

Increase the transparency of election finance. Because the government has recently gained experience with implementing open-data policies, it should improve the practice of election finance disclosure and information accessibility by increasing the capacity of the Mongolian National Audit Office and through participatory and digital methods, such as real-time donation reporting and the integration of government databases.

Strengthen the democratic quality of the justice system. This will be key to restoring public confidence in political and economic institutions, and for underpinning business confidence. The independence and legitimacy of the court system should be improved by enhancing transparent, independent, and carefully balanced self-governance mechanisms; namely, the Judicial General Council and the Ethics Commission.

Improve procedural transparency and clarity of government issuance of licenses and permits. This is especially needed in priority and high-risk sectors, such as specialized inspection and customs. The government and business associations should seek out opportunities to collaborate on the effective implementation of laws and policies related to issuing of licenses and permits. Industry and business associations need to be proactive and leading voices in improving business practices in health and safety; environment, social, and community participation; and corporate accountability and ethics.

Social sectors

Expand active labor market policies. This should include technical and vocational training for skilled workers, skills certification mechanisms, entrepreneurial skills training, career counseling, and technology and information communication training for the youth, people living in rural areas, and disadvantaged groups.

Facilitate flexible forms of employment. This should be done in the formal sector to reduce gender inequality in labor-market participation. Flexible forms of employment could include transforming maternal leave to parental leave, expanding the availability of childcare, introducing flexible enrollment to childcare, and training programs that target women who return to the labor market after birth and adults over 40 years.

Consolidate social welfare programs. Multiple social welfare programs with sometimes overlapping benefits are costly to administer and often not efficient. The programs should also be redeveloped and streamlined to improve the social welfare system's targeting and to enhance its fiscal sustainability and effectiveness to ease the impact of shocks. To achieve this, an effective impact evaluation mechanism is needed to eliminate overlapping of social welfare benefits, enhance the efficiency of programs, and reduce the system's burden on the government budget.

Introduce a legal and institutional framework for the supplementary pension fund. This is needed to complement the social insurance system, which is financially unsustainable.

Improve the quality of education and health. Investing more in capacity development and facilities will be essential to improve the quality of both, and in the context of ensuring adequate access to education and health services in remote areas. The school curriculum should be updated to meet the needs of the future workforce.

Promote healthy lifestyles. This can be done through public awareness programs and as part of the school curriculum. These methods are effective in preventing diseases common in Mongolia, including obesity and cardiovascular disease.

CHAPTER 2

Macroeconomic Management

Alexander Lehmann and Junkyu Lee

Mongolia is fortunate in being able to exploit its vast mineral resources and of being a direct neighbor to the People's Republic of China (PRC) and its immense market. Unlike many other competing commodity-exporting countries, Mongolia's resource-exploration costs are relatively low and mineral reserves are expected to last for many decades. However, the country's dependence on one main market and on a few commodities as Mongolia's principal exports instills an unusual degree of volatility in the economy. And the experience of other resource-dependent countries shows that the presence of mineral wealth does not necessarily translate into sustained and equitable growth. The big challenge for the government in the coming years is to strengthen the institutions and policy processes that can guard against the "resource curse."

This chapter examines the challenges for fiscal, monetary, and financial policies arising from resource-related volatility. The government has made some progress in tackling macrofinancial vulnerabilities and reforming institutions under the ongoing adjustment program led by the International Monetary Fund (IMF).¹ But beyond this program, the country still needs to build the capacity to withstand renewed macroeconomic shocks and for institutions to carry out their mandates.

The rest of the chapter is ordered as follows. The next section examines Mongolia's macroeconomic challenges linked to the resource dependency of the country's immense mineral wealth. Section 2.3 reviews evolving designs for a fiscal framework that contains resource-related volatility, fosters intergenerational savings, and strengthens the management of public expenditure. Section 2.4 looks at the options for stability-oriented

¹ The IMF approved a 3-year Extended Fund Facility arrangement in 2017.

monetary and exchange rate policies, including through macroprudential policies. Section 2.5 examines the role of the financial sector for growing and diversifying the economy. The chapter closes with policy recommendations for macroeconomic management and financial policy.

2.1 Macroeconomic Management Challenges

Mineral resources and macroeconomic volatility

An important juncture in Mongolia's economic transition came in 2009 with the country's largest mining project—the Oyu Tolgoi copper mine—starting up. This ushered in not only an opening to capital flows and international trade but also the start of a transformation from Mongolia being a largely agricultural economy to becoming a highly resource-dependent one. The first phase of the Oyu Tolgoi project—open-pit mining—attracted investment of about \$6 billion, and when production commenced in 2014 mining exports increased by 30%.

Mongolia's mineral reserves are estimated at \$1 trillion to \$3 trillion, a substantial mineral wealth (IMF 2015). Unlike many other resource-rich countries, Mongolia's mineral deposits have an exceptionally long reserve horizon, which has crucial implications for designing a fiscal framework.

Mining accounted for 22% of gross domestic product (GDP) in 2018, and international commodity prices have become a significant source of volatility for the economy. Foreign direct investment (FDI) is largely driven by mining investments, and direct investment funding of mining projects is dependent on a small number of very large projects, which in turn are influenced by the global exploration cycle. From the 2011 peak of the mining investment cycle, when gross FDI inflows totaled over 40% of GDP, inflows dropped to near zero in 2015 (and were sharply negative net of repatriations). This decline in the most important source of national savings happened just as international commodity prices were again falling.

The balance-of-payments crisis and economic difficulties in 2013–2016

Because of the high level of Mongolia's resource dependency, economic growth has been much more volatile than in other countries in the region, including in its other resource-dependent countries. The boom-and-bust cycle of 2006–2018 highlighted how this inherent volatility was aggravated by

highly procyclical, unsustainable, and inconsistent macroeconomic policies. A lack of economic buffers and national savings, evident in low foreign exchange reserves and an elevated public debt ratio, has undermined policies aimed at maintaining sustainable and inclusive growth.

The period 2010–2012 saw strong price increases for Mongolia's main exports and unprecedented capital inflows, but prices have significantly decreased and FDI collapsed since then and these adverse changes continued for 4 years (Figure 2.1). This double shock was aggravated by the end of the commodity super cycle, the PRC's investment reversal from developing and emerging economies to advanced countries and uncertainty over the regime for foreign investors in Oyu Tolgoi's second phase for underground mining. After registering the world's strongest but temporary growth rate in 2011, Mongolia's mining boom quickly reversed and growth could not be sustained because the high growth rate was fully driven by temporary mining-related capital flows and procyclical expansions. Both terms of trade and FDI shocks resulted in a balance-of-payments crisis in 2013 and caused problems for the macroeconomic management. While monetary and fiscal stimulus measures helped mitigate external economic shocks in 2013–2014, growth fell to 1.2%–2.4% in 2015–2016 due to continued deterioration of external conditions and the total collapse of FDI while the stimulus measures were phased out. Four consecutive years of adverse changes in the external market conditions, low economic growth, high fiscal deficit, rising public debt, falling FDI and

Figure 2.1: Terms of Trade and FDI, 2006–2018

FDI = foreign direct investment, LHS = left-hand scale, RHS = right-hand-scale, YOY = year-on-year.
Source: ADB estimates, statistical data from the Bank of Mongolia and Customs General Administration of Mongolia.

capital inflows undermining the quality of bank assets and damaging investor confidence together resulted in the 2016 economic crisis.

To counter these unprecedented huge shocks, the government initially took various stimulus measures. The Development Bank of Mongolia (DBM), set up in 2011, took on a major role in channelling additional spending to designated sectors, including infrastructure, urban development and agribusiness. This was initially kept off-budget, contributing to a consolidated budget deficit of 15% of GDP in 2016 as estimated by the IMF. During the balance-of-payments crisis in 2013–2014, the Bank of Mongolia (BOM), the central bank, provided monetary injections through commercial banks. This was an attempt to abolish supply shocks, support liquidity in the banking sector, and mitigate the adverse impacts of the balance of payments on the labor market and employment. Though these policies did relieve some pressures, external conditions continued to worsen leading to major balance of payment pressures, which, when combined with looser monetary conditions contributed to currency depreciation and increased public debt in local currency terms. Growth fell significantly from 7.9% in 2014 to 2.4% in 2015, and then to 1.2% in 2016 as difficult external conditions continued.

The 2017–2020 IMF Extended Arrangement

By the end of 2016 Mongolia's economy was in serious trouble. Exports and FDI collapsed and there was an acute risk to sovereign and external debt sustainability, and the country's capacity to borrow in international bond markets was in doubt. Although a more predictable regime for foreign investments had been established, FDI, predominantly into mining, came to a standstill and relations with major foreign investors needed to be rebuilt. The rapid expansion in the domestic financial sector in precrisis years led to excess private debt and loan defaults when the crisis hit. Although Mongolia's banks ostensibly had sound bank capital ratios, doubts lingered about the quality of assets in the banking system and standards in banking supervision.

In May 2017, a 3-year extended arrangement was agreed with the IMF that was backed by additional funding from the Asian Development Bank and World Bank, bilateral funding from Japan and the Republic of Korea, and an extension of the foreign currency swap line from the People's Bank of China.² The immediate priority of the IMF-led program was to restore

² Mongolia's access to the IMF's facility was \$425 million, equivalent to 435% of its quota. Combined with the other funding, the total financing package amounted to \$5.5 billion. Disbursements were originally scheduled for April 2017 to March 2020, based on quarterly reviews.

fiscal sustainability and reduce public debt; improve the central bank's independence, governance, and focus on core responsibilities; strengthen the financial sector; foster economic diversification and inclusive growth; and protect the most vulnerable in society. The government agreed to structural reforms as part of the program's objective to end recurring boom-and-bust cycles, and to lay the foundations for sustainable and inclusive growth. The government committed to substantial fiscal consolidation to be largely met by reducing capital spending programs. Because monetary policy had already been tightened significantly, the BOM's objectives focused on rebuilding foreign reserves, redressing weaknesses in policy making, and remedying government interference in central bank operations.

Clearly, macroeconomic management had been overwhelmed by the volatility of the commodity cycle, and the foundations of monetary and fiscal policy needed to be strengthened to shield the economy from future commodity market volatility. One manifestation of the crisis was the proclivity for off-budget spending through, among other things, DBM programs and the directed lending of the BOM. This contributed to a rapid increase in credit expansion that was exposed by the worsening external conditions. The government has made generally good progress on the extensive structural reforms it agreed to under the IMF program, so that a sounder framework for policy making should be in place by the end of the program in 2020.

Building on this progress, Mongolia will, in the coming years, need to tackle three interrelated challenges. The challenges are well-known to policy makers in resource-rich countries and are all linked to the resource curse—a recurring theme over the rest of this chapter.

Preempting the effects of Dutch disease

Economic growth in resource-rich countries generally does not live up to the promise of having an abundance of natural resources. One explanation is Dutch disease (van der Ploeg 2019; IMF 2012). Mongolia's procyclical budget spending and high nonresource trade deficits are, at first sight, evidence of this phenomenon. The real effective exchange rate as a measure of the relative price of tradable and nontradable goods began to appreciate around the time of the first mining investment in 2009 and did not depreciate until the 2016 balance-of-payments crisis (Figure 2.2).

Figure 2.2: Nominal and Effective Togrog Exchange Rate, 2011–2018

Note: A declining trend represents a depreciation.

Source: Bank of Mongolia. <https://www.mongolbank.mn/eng/dblistneerreer.aspx> (accessed July 2019).

This structural trend is rooted in a lack of absorptive capacity, which reflects the economic, institutional, and political constraints that result in a declining rate of return on investment. As in the case of international aid, rapidly expanding domestic investment from natural resource revenue will run into these constraints, resulting in inflationary pressure and adverse impacts on the nonresource sector (IMF 2012). In light of these constraints, it is imperative to contain the rate of public domestic investment and spending increases. This requires above all a rule for long-term savings that are allocated to assets outside the country, thereby containing domestic demand.

Developing a fiscal framework to contain volatility

A second related challenge arises from the macroeconomic volatility induced by international commodity markets and Mongolia's concentrated export structure, which is aggravated by procyclical fiscal spending. That output volatility adversely affects macroeconomic performance and development objectives is well known. Adverse impacts arise, for instance, where excessively rapid growth of spending puts a strain on managing this spending, or when the credit cycle results in over-leveraged private balance sheets. The previous boom-and-bust cycles in Mongolia offers ample evidence of these effects. An objective of both the government and the IMF program is to strengthen the

capacity and buffers for countercyclical stabilization. Above all, this requires having a fiscal framework akin to the Fiscal Stability Law of 2010. Only when a fiscal anchor such as this is in place can monetary and exchange rate policy and macro- and micro-prudential supervision play their roles in promoting macroeconomic stability.

Raising efficiency in public investment

Mongolia has experienced periods of rapid growth in government spending followed by equally rapid contractions (Figure 2.3). Frequent deviations in revenue flows have undermined planning in ministries and other agencies, in particular for social spending. The widely available program for subsidized mortgage credit, which is yet to be fully targeted to households most in need, is an example of this.³ A common phenomenon in the budget planning of resource-rich countries is rising public spending during booms and abrupt cutbacks during commodity price declines. The lack of absorptive capacity for increased public spending typically results in a decline in investment efficiency. Evidence of this is in the poor selection of projects or wastage arising from investment processes. In both instances, public investment spending exceeds the economic value of the capital installed (IMF 2012).

Figure 2.3: Fiscal Revenue and Expenditure Growth, 2001–2018
(%)

Source: National Statistics Office of Mongolia. http://www.1212.mn/Stat.aspx?LIST_ID=976_Lo8&type=tables (accessed July 2019).

³ Mongolia's indicators in the World Bank's Country Policy and Institutional Assessment for quality of budgetary and financial management have declined slightly in recent years, but the latest 2016 data show the country remains in the middle of a group of comparator countries in Europe and Central Asia.

Tackling the resource curse that is evident in these three challenges is daunting. Yet, several developing countries with resource wealth and institutional maturity comparable to Mongolia's have shown that strong institutions can put in place a framework for sustainable development.

2.2 Fiscal Policy and the Framework to Govern Resource Revenue

Mongolia's public accounts can draw on an exceptionally large share of resource-related revenue. Mineral resource revenue accounts for about 6% of GDP, and a quarter of total government revenue (IMF 2018b). This is set to become more significant as the major mining projects expand. As in other resource-rich countries, the budget's resource dependency caused repeated periods of inflation and overheating, followed by rapid deflation, leaving unsustainable levels of public and private debt.

These problems are acute in Mongolia, because its concentrated export structure that leaves it highly exposed to industrial production in the PRC and to fluctuations in mineral prices, especially copper and coal prices. The processes for managing public capital spending are underdeveloped, and frequently generate inefficient and incomplete projects.

Early designs for savings funds

In 2007 the government set up the Mongolian Development Fund to use excess mining revenue to invest in human and economic development. In 2009, that fund was replaced by the Human Development Fund. This early framework for investing in development, however, lacked broad political support. In the 2008 election campaign, for instance, both the ruling and opposition parties promised substantial universal cash handouts; as a result, the Human Development Fund, contrary to its original intention, was largely used to fund social programs.

This lack of discipline in government expenditure resulted in considerable spending pressure. Reductions in the rate of value-added tax and social security contributions and increases in civil service wages contributed to a much higher structural deficit than anticipated. The effects of procyclical fiscal policy were accentuated by looser monetary policy at the time. The 2008 global financial crisis abruptly ended Mongolia's commodity boom and resulted in twin deficits (fiscal and the balance of payments), extremely high

inflation, systemic instability and the financial crisis, loss of thousands of jobs, and sharp contraction of economic growth from 8.9% to -1.3% within just 12 months. The effects of this were made worse by a surge in credit, inflation, and a rapid depletion of foreign reserves. In 2009, the government asked the IMF for an 18-month standby credit arrangement.⁴

The 2010 Fiscal Stability Law

An agreement between the main political parties in 2011 banned election promises of the type described in the previous section, although loopholes quickly emerged and spending pressures persisted. Against this backdrop, the Fiscal Stability Law represented important progress. The objectives stated in the law were a welcome affirmation of fiscal discipline and stability. They established the following three key constraints (IMF 2012, background paper, supplement 1).

- A ceiling of 2% of GDP was set on the structural deficit. This was set to insulate fiscal spending and economic activity from revenue fluctuations caused by volatile commodity prices. The structural fiscal balance is set on the basis of a 16-year moving average of major mineral prices, and gives only limited weight to projected prices that are based on a relatively objective data picture. A similar structural-balance rule worked well in Chile.
- Budget-spending growth must not exceed the growth of nonmineral GDP. This is to ensure that higher spending does not cause a surge in inflation or real exchange rate appreciation. This constraint was particularly important at the time, because of the imminent expansion of the Oyu Tolgoi copper mine.
- A public debt ceiling of 40% of GDP in net present value terms was set to prevent excessive borrowing against future resource revenue. In addition to the limit on the structural balance, this constraint further underpins debt sustainability. Importantly, this ceiling is based on a comprehensive definition of the public sector, thereby constraining the quasi-fiscal deficits that emerged in previous years.

The Integrated Budget Law, passed in 2011, also established a framework for intergovernmental expenditure approvals, and for central government budget planning around a 3-year plan, within which annual budgets would be revised on a rolling basis. The law required supplementary budgets for all additional spending.

⁴ A standby arrangement of SDR153 million, or 300% of Mongolia's quota, was agreed in April 2009, and concluded in September 2010.

The Fiscal Stability Law also sets the dual objective of fiscal stabilization and accumulating intergenerational savings. The fund established under the law gets the excess of actual over structural mineral revenue. The fund's stabilization component finances a deficit should actual revenue fall below the structural level. Oddly, the fund's rules could also require savings financed by public borrowing. Once the fund exceeds 5% of GDP, the excess could be invested in long-term assets.

Implementing the Fiscal Stability Law was quickly complicated by falling commodity prices that began a new in 2012, the year before the law was due to take effect. Ahead of that, Parliament amended the law and modified its parameters several times. The debt ceiling limit was delayed until 2018, which put the lack of political ownership of the constraints envisaged by the law in the spotlight. Repeated deviations from the original budget targets led to price pressures and overheating, and to complications in the delivery of many budget lines, including for social spending.

The Government of Mongolia first tapped the international bond market with a \$1.5 billion bond issue in 2012 which contributed to debt pressure when external conditions deteriorated in subsequent years.⁵ The initial sovereign rating, and subsequent investor demand, were based on expectations of the Fiscal Stability Law taking effect, and of imminent revenue from a further expansion of the major copper mine. In the event, commodity prices collapsed, the law's implementation was put on hold, Mongolia's fiscal policy record deteriorated rapidly, and relations with the major investor in the Oyu Tolgoi project became strained. Mongolia, at that time, was particularly exposed to widening emerging market risk spreads when a "tapering" of quantitative easing by the Federal Reserve was expected in 2013.⁶

Ongoing reforms

The 2017 IMF-supported program envisaged a gradual return to the debt ratios envisaged in the Fiscal Stability Law. The risk of a sovereign debt crisis quickly receded, as revenue projections were more than met in 2018 amid unusually strong economic growth and mining investment. This windfall was largely saved and the government has begun to refinance and pay back debt (Figure 2.4). Nevertheless, the fund established under the Fiscal Stability Law is not yet operational. Under the terms of the IMF program, a reduction in the substantial and costly public debt stock was prioritized over saving in largely low-return assets (IMF 2017).

⁵ Mongolia issued a 10-year \$1 billion bond and a 5-year \$500 million bond.

⁶ State entities have tapped bond markets on three further occasions, for a cumulative \$2.9 billion.

Figure 2.4: Public Sector Debt and Deficits

Sources: For government budget balance, National Statistics Office of Mongolia. <https://www.en.nso.mn> (accessed July 2019).; for public debt, IMF (2018b).

The government is moving forward with wide-ranging fiscal governance reforms. These include the following.

- The Law on the Development Bank of Mongolia, passed in 2017, strengthens the bank's independence and shields it from political interference in project selection. The DBM's spending is monitored within the fiscal framework.
- The government and the BOM's joint mortgage program will be transferred to the government budget gradually.
- Ongoing reforms aim at limiting the Parliament's ability to increase budget spending on an ad-hoc basis or to amend the approved budgets, thereby containing procyclical spending.
- An independent fiscal council has been set up (IMF 2018b).

The government nevertheless revived the concept of a sovereign wealth fund in the form of the Future Heritage Fund, which started operations in 2017 as an intergenerational savings fund. Among other things, it will get 65% of revenue from mining royalties, the dividends from state-owned enterprises and the state's own mining stakes, and a certain share of excess mining sector revenue. In mid-2019 the fund was due to pay off the remaining liabilities from the Human Development Fund and begin building a net balance. At this point a fully resourced asset management unit and risk policy will become necessary. When the fund has accumulated 10% of GDP, additional inflows can be used for transport and energy infrastructure as well as other projects, and for export

promotion. The Future Heritage Fund will therefore become an important part of domestic expenditure planning, and it will be essential to integrate it within the regular budget cycle.

A fiscal framework adapted to Mongolia's mineral wealth and capacity

The Fiscal Stability Law remains in abeyance. It was designed with the support of extended technical assistance from international development partners, and was based on best practices in other resource-dependent countries, including Chile. The law comprehensively addresses the inherent procyclicality of the Mongolia's budget. Commodity price fluctuations will be insulated through a structural revenue assumption. The expenditure growth rule was adopted to deal with the risk from the further expansion of mineral production and related royalties, which was important given the imminent expansion of Mongolia's main copper mine, and a very rapid expansion in government spending around that time.

The law was not based on the permanent-income rule, as were the fiscal frameworks of Norway, the Russian Federation, and Timor-Leste, whose resource booms were expected to be more short-lived than Mongolia's.⁷ Given Mongolia's long-lasting resource extraction (potentially over 60 years), macroeconomic stability was the central objective. Expenditure is delinked from resource-price volatility through a limit on the structural deficit—and by basing this largely on past prices, the law dealt well with the typical over-optimism in forecasts made by outside experts. In addition, the limit on expenditure growth reflected the concern that a rapid expansion of mining revenue would strain domestic absorptive capacity. Both criteria deal with short-term stabilization, while debt sustainability is ensured through a public debt ceiling.

Arguably, the original Fiscal Stability Law could have allowed greater flexibility for growth-enhancing expenditures. Mongolia's capital stock remains scarce and numerous development challenges will require public investment, including in coordination with development partners. Other resource-dependent countries, such as Chile, have created considerable flexibility within their fiscal frameworks. It was clear at the time, however, that Mongolia faced severe problems of absorbing rapidly increased fiscal expenditure.

⁷ The permanent income rule states that budgetary use of a sovereign wealth fund needs to be limited to income generated by the fund plus permanent resource income, keeping the sum of below-ground and above-ground financial wealth constant.

Rapid spending surges would lead to real exchange rate appreciation, rapid increase in consumer loans, and excessive private debt. Inadequate capacity in domestic institutions governing the public expenditure process would likely reduce the efficiency of projects. Public debt management should be tightly connected to the country's income-generating capability. Limits on public debt in a future fiscal framework need to reflect Mongolia's proclivity to growth shocks and the large foreign currency component in public debt.

Strengthened public expenditure management

To implement its development goals and strategy, Mongolia will need to upgrade its expenditure planning. This will require a fiscal framework that makes spending lines at the level of ministries, agencies, and subnational municipalities predictable and that contains past volatility. A sound framework for project selection and execution will also be needed, on the back of strengthened competence in the civil service.

The Integrated Budget Law, passed in 2011, already put in place a process for investment planning and budgeting, with clearer responsibilities for individual agencies, and it defined the flexibility that ministries and agencies would have in implementing their budgets.

The government is currently in the process of rationalizing its public investment program, eliminating low-value projects, and aligning the remaining projects with national development priorities. In principle, public-private partnerships and concessions can leverage the expertise and capital of the private sector, including foreign investors. However, the role of the Ministry of Finance in scrutinizing projects needs to be strengthened, and coordination with other agencies needs to be clarified for public-private partnerships to become a viable approach.

2.3 Monetary and Exchange Rate Policy

Like strengthening public expenditure management, monetary policy requires a clearer focus on stability objectives. Low and stable level of inflation and financial sector stability should remain the Bank of Mongolia's key objectives. In addition, stability of employment and the labor market is a crucial macroeconomic policy objective in terms of economic security. Finally, strengthened independence should allow the BOM to resist participating in policy programs that belong in the fiscal sphere. Because of the exposure of exporting countries to repeated terms-of-trade shocks, commodity exporting

countries generally opt for floating exchange rate regimes in which the currency is allowed to depreciate in response to a negative terms-of-trade shock and to appreciate as export prices recover (Frankel 2018). In this way, the flexibility in exchange rate supports counter-cyclical stabilization and enables necessary economic adjustments.

The disciplined targeting of a price level automatically counteracts shocks to terms of trade. Of course, it is difficult to target price stability for a suitable basket of goods consistently and the exchange rate may appear a more transparent anchor.⁸ In fact, consumer price inflation and terms-of-trade changes have shown a close correlation in Mongolia for many years; Figure 2.5 underlines this correlation at least until 2015. Commodity booms have been associated with expanding monetary aggregates, credit growth, and inflation. The subsequent deterioration was characterized by decreased foreign reserves, diminished credit growth, and private sector debt problems ensued.

Figure 2.5: Terms of Trade and Inflation, 2001–2019
(%)

LHS = left-hand scale, RHS = right-hand scale.

Source: For terms of trade, International Monetary Fund, Commodity Terms of Trade. <https://data.imf.org/?sk=2CDDCCB8-0B59-43E9-B6Ao-59210D5605D2>; for inflation, National Statistics Office of Mongolia. <https://www.en.iso.mn> (both accessed July 2019).

Central bank policy prior to the 2016 crisis

When commodity prices fell during 2012–2016, Mongolia’s monetary policy was initially highly accommodative, alongside an already expansionary fiscal stance. The BOM initially lowered its policy rate from 13.25% in December

⁸ These benefits typically favor floating exchange rate regimes, and only few commodity exporters have adopted rigid exchange rate pegs (for example, Cameroon).

2012 to 10.5% in July 2013 when annual inflation decreased from 14.0% to 7.8% in that period. When currency depreciation accelerated in the second half of 2013 due to a substantial decline in capital inflows, the BOM attempted to absorb the shock through exchange rate flexibility rather than tightening the monetary policy stance, keeping the rate unchanged at 10.5%. The BOM started tightening monetary policy in July 2014 by increasing the policy rate to 12.0% and further to 13.0% in January 2015 as capital inflows continued to worsen significantly, threatening the external balance. This also resulted in limiting the monetary policy space to support growth.

Intervention in the currency market may have prevented a more drastic depreciation of the togrog. The rapid decline of foreign reserves meant though that the balance of payments was now reliant on exports, FDI, and external borrowing. As FDI started to dry up, pressure began to build on the economy. In 2013–2014, the central bank launched lending programs through commercial banks directed at specific sectors, including construction, manufacturing, agriculture, and households (in the form of mortgages). In total, over 25% of GDP in liquidity was injected into the economy (IMF 2017). This put pressure on the BOM's balance sheet and the IMF subsequently recommended moving the lending programs to the government budget.

The BOM started to phase out its unconventional policies from the second half of 2014 in response to the parliament resolution to limit and stop its monetary injections to banks. At the same time, continued negligible capital inflows in 2015–2016 meant there was no financing to support growth. Because both fiscal and monetary policy room was limited, and with a stagnant financial sector, the economic situation became ever more serious, culminating in 2016 with low growth and reserves and a high budget deficit and debt.

Commercial banks purchased substantial sovereign debt due to the ample supply and high yields. Government bonds, typically the most liquid domestic financial asset, are a standard component of commercial bank balance sheets, but excessive exposure to the bonds creates risks if their credit quality or the banking sector were to deteriorate. Such a situation makes it more difficult for prudential policy to contain risks to bank balance sheets.

Mongolia should continue its flexible exchange rate regime⁹ and the BOM's intervention should be limited by smoothing out excessive volatilities in the exchange rate, supporting foreign exchange liquidity of the financial sector,

⁹ The IMF's 2018 *Annual Report on Exchange Arrangements and Exchange Restrictions* defines Mongolia's exchange rate regime as "floating," mentioning that the central bank has taken preliminary steps toward inflation targeting. A number of controls on capital transactions are in force.

and opportunistically building foreign exchange reserves by purchasing excessive foreign exchange supply from the interbank market.

The current policy framework

After the 2016 crisis, the BOM reinforced a strong commitment to a flexible exchange rate regime.¹⁰ This was appropriate because large external shocks can quickly overwhelm the capacity to intervene and can thus deplete reserves. Exchange rate flexibility, however, placed considerable demand on prudential policy in Mongolia's financial sector, given its high risk of dollarization and the private sector's exposure to exchange rate shocks.

The BOM's monetary policy committee is committed to a stance that contains inflation. In a strong cyclical position, the monetary policy committee has tightened policy, as it did in when strong growth fueled a substantial increase of budget spending and rapid growth in credit and imports, which increased demand-pull inflation in addition to supply-driven pressures. A problem with this stance is that the pass-through from the policy rate to inflation is limited, underlining a considerable component of imported goods in the consumer price index and a certain degree of dollarization in the financial system. In addition, large supply shocks can interfere in the monetary policy.

The low level of the national savings, buffers, and foreign reserves has been a persistent source of vulnerability in Mongolia. Therefore, sustainable capital inflows are crucial to fill the balance-of-payments gap and enable continued increase in foreign exchange reserves. In the early phase of the IMF program, the buildup of reserves was in excess of targets, reflecting a strong cyclical recovery, larger than expected capital inflows and the swap agreement with the People's Bank of China and private banks. Having recovered from earlier, critically low levels, reserve coverage in July 2019 was 5.1 months of estimated 2020 imports. However, accumulation of foreign exchange reserve alone is only part of a sound approach and must be accompanied by a broader set of credible macroeconomic policies.

Developing a stability-oriented monetary policy

Over the longer term, a clearer and more reliable anchor for monetary policy will need to be defined to enhance the transparency of policy goals and strengthen the BOM's credibility. The current inflation target of 8% is among

¹⁰ World Bank and European Bank for Reconstruction and Development Business Environment and Enterprise Performance Survey (BEEPS V).

the highest in the world, and a lower target, or possibly a range, would be more in line with the practice in emerging markets.

An inherent flaw of a target based on the consumer price index is that it contains a large share of food prices and imported goods with highly volatile prices and is exposed inflation emanating from supply shocks. A fall in the international prices of Mongolia's key exports, importantly copper, cannot be countered by an easier monetary stance, because the ensuing depreciation would be reflected in domestic food prices. Similarly, higher international food prices call for policy to be tightened, exacerbating the negative terms-of-trade shock. Many scholars therefore argue that inflation targeting in resource-dependent economies should be based on price stability for a basket of goods produced domestically—for example, in the form of a GDP deflator rather than based on consumer prices (Frankel 2018). This would of course present the central bank with complex problems in defining a robust statistical basis for the monetary policy target.

More fundamentally, the commitment to an inflation targeting regime will ultimately require surrendering what at present remains a secondary target of exchange rate stability within the central bank's operations. For now, it is committed to intervene only to smooth disruptive market developments, and it uses the dollar bilateral rate as a target during interventions. This may be justified given the large dollar assets and liabilities in bank balance sheets, and in the domestic payments system. Over the medium term, the renminbi is likely to gain greater weight, both as a regional reserve currency and in private sector payments and assets. It may therefore be sensible to use a basket of currencies in exchange rate monitoring, and continue to use bilateral liquidity facilities, such as the swap line with the People's Bank of China.

Only a small number of developing countries use an inflation targeting regime, because doing this typically requires meeting demanding preconditions. These include (i) central bank independence, including the absence of quasi-fiscal roles, the presence of operational independence, and a low likelihood of fiscal pressures given moderate public debt and fiscal balance; (ii) inflation forecasting and modelling capabilities in the central bank, including good data availability; (iii) deregulated prices and limited pass-through into domestic prices of variations in the exchange rate, commodity prices and supply shocks; and (iv) minimal potential for conflict with financial stability objectives, given a sound banking system and a reasonable development of local capital markets (Gemayel, Jahan, and Peter 2011).

Mongolia clearly appears to fall short of meeting several of these preconditions. Yet, other countries in the region, including Armenia, Georgia, and Moldova, moved toward inflation targeting well before meeting all of the above criteria, and this appears to have led to upgraded capacity and institutional strength in the central banks in these countries.

The Law on the Bank of Mongolia, passed in 2018, aims to strengthen the bank's governance and autonomy. The law confirms that price and financial stability is the central bank's mandate and that decisions on monetary policy and financial supervision are made in collectively in committee. The law also aims to strengthen the central bank's independence. Like all laws, implementation will be most important and it is still too early to judge the status of that.

An explicit inflation target would also allow the central bank to build up a sufficient level of foreign reserves sufficient to considerably reduce the likelihood of balance-of-payment crises and financial instability, and therefore create considerable policy space. The sufficiency of foreign reserves should be judged not just against the traditional rule of thumb measure of 3 months import coverage but also in light of Mongolia's more open capital account, the likelihood of future external shocks, and the potential need for intervention in a partly dollarized financial system. Setting a target for short-term debt and debt falling due within the coming year, would result in a level of required reserves at 5 months of imports, which seems to be met. The IMF's adequacy calculation for internal reserves suggests a minimum of 6.5 months cover, though possibly considerably higher. Overall, however, the target of 6.5 months of imports (including the swap line agreed with the People's Bank of China) to which the government committed at the outset of the present adjustment program still appears sensible.

The level of success attained in building up and maintaining sufficient foreign reserves will depend on close coordination with fiscal policy, which will need to be commensurately tight. In this sense, the implementation of the Fiscal Stability Law will be crucial for success in price and financial stability. The central bank, under the IMF program, have committed to intervene in currency markets to converge to the agreed levels of international reserves and net foreign asset targets.

Powers in macroprudential policy, or system-wide financial stabilization, have been newly defined and a first measure on retail lending has been taken, as discussed in the following section. The Financial Stability Council identifies

and monitors systemic risks, and proposes actions to mitigate these risks to protect and enhance the resilience of Mongolia's financial system. The council comprises representatives from the BOM and the Ministry of Finance, and the chair of the Financial Regulatory Commission. Although the immediate powers to propose and implement these measures rest with the central bank, the council is a coordinating body that can reflect government fiscal policy and microprudential (bank-specific) perspectives. By engaging with the government through the council, the central bank can establish a direct link between fiscal policy on the one hand, and financial stability and the soundness of banks on the other.

A priority for the central bank in the coming years will be to transfer its quasi-fiscal operations (8% mortgage program) to the government, to maintain low and stable inflation, to aim at a lower inflation target, to ensure financial sector stability, and to maintain macroeconomic stability.

2.4 Financial Development in Support of Growth and Diversification

Mongolia has experienced rapid financial deepening centered on its banking system—a typical development following liberalization in a transitioning economy. Indeed, its banking system is fairly well developed. The ratio of domestic credit to the private sector, at 56% of GDP in 2018, is comparable to that of the region's more developed economies, and is characterized by rapid growth in lending to households that is fueling consumption (Figure 2.6). The task now is to contain risks through both bank-specific and

Figure 2.6: Domestic Credit to the Private Sector, 2005–2018

GDP = gross domestic product

Source: World Bank. Global Financial Development database. <https://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database> (accessed June 2019).

system-wide policies and set up a structure to deal with excess private sector risks while developing capacity to support lending to smaller enterprises, thereby supporting economic diversification. In addition, strengthening the banking sector and its governance and capital base is very important to improve the financial sector's capacity to finance more economic growth that is led by the private sector and is sustainable.

Key features of the financial system

The financial sector comprises 13 commercial banks and the DBM. Partly because of the high concentration of economic activity in Ulaanbaatar, Mongolia shows very strong indicators of financial access for households. Branches or accounts per population for example, are very high even by the standards of middle-income countries (Figure 2.7). By contrast, companies cite access to credit as a major obstacle to doing business in Mongolia, and lending to small and medium-sized enterprises is poorly developed among the major banks.¹¹ Credit from microfinance institutions is not significant, compared to that in other countries in region whose economies are also in transition.

¹¹ World Bank and European Bank for Reconstruction and Development Business Environment and Enterprise Performance Survey (BEEPS V).

Unusually for Central Asia, foreign ownership in the Mongolian banking sector is negligible. This deprives the banking system of valuable skills and technology, as foreign-owned subsidiaries generally have higher standards in risk assessment and governance than local banks. That said, risks from rapid foreign liquidity inflows and coordination problems with supervisors in other countries have been more manageable than in countries whose economies are in transition and that rapidly opened their financial sectors to foreign investors.

The DBM has been a concern for financial stability. Its lending programs aiming at macroeconomic stabilization during 2012–2016 contributed to significant quasi-fiscal deficits. A law on the activities of the bank was passed in 2016, making it more independent and commercially-oriented and subject to supervision by the BOM. In addition, the large subsidized mortgage program has posed a risk to financial stability. In the medium term, the challenge is to withdraw such programs and similar state interventions and move them to the private financial sector, which appears sufficiently well developed, to be allowed to carry on unhindered.

The high concentration in the banking sector—in which the three largest banks account for 70% of sector assets—is a concern for financial supervision. This level of concentration is high, though not unusual for a small country (Georgia, for example, has an even higher concentration). And there is no clear empirical relation between this concentration and indicators of financial access; efficiency; and, more broadly, financial stability. Even so, a danger is that large and systemically important banks may be considered too big to fail, and that moral hazard may encourage unstable funding and lending policies because of the presumption of an implicit state guarantee. The systemic importance of these banks calls for developing tools for bank resolution through which even the largest banks could in principle be wound down, while preserving parts that are essential. A mechanism for public funds to be used for bank resolution would be a considerable challenge given the limited state of both central bank reserves and the local deposit insurance fund. Macprudential instruments, such as capital surcharges, could reflect the additional risks of systemic banks.

Challenges in financial sector development

Financial deepening is in principle desirable because it fosters a better allocation of capital, and alleviates credit constraints of firms wanting to invest. As noted earlier, Mongolia's banks seem to have sufficient depth in aggregate given the size of the economy and, in particular, the very significant

foreign-owned part of the corporate sector financed through FDI.¹² For access to financial services, the sector's coverage of households appears to be good, based on the applicable indicators. This is important for a geographically dispersed country and for micro-entrepreneurs. Credit to small and medium-sized enterprises needs to be expanded by strengthening the capacity of banks to be able to make such loans. The efficiency of Mongolia's financial institutions, as measured by net interest margins and other indicators, does not appear to be out of line.¹³

Mongolia's capital markets are barely developed. There were six initial public offerings in 2018, but public equity markets show very limited liquidity. Mongolia's capital markets could potentially become an alternative source of finance for larger companies, offering longer maturities than bank loans and risk capital. The government has a financial sector development strategy to 2025 that aims to foster a balance between bank and market-based finance, and to make financial services accessible across the country.

The benefits of capital market development are well documented. Sources of finance that are an alternative to cyclical bank lending are particularly important in Mongolia and other resource-dependent economies. Yet, the hurdles are many in this area, which the government and the BOM needed to clear. Market infrastructure and legal foundations need to be developed, for example through corporate governance rules that restrain the rights of company insiders. A major problem is that large institutional investors, such as pension and insurance funds, are lacking liquidity. Even so, several Asian emerging markets that are at a similar stage of development as Mongolia have shown that large domestic companies and banks are able to issue private bonds.

Financial stability policies

Financial stability risks are more pronounced in resource-dependent economies. The state of the domestic financial cycle, evident for instance in private sector credit growth or banks' lending policies, remains closely related to the global commodity cycle and therefore to other components of domestic demand. Against this backdrop, Mongolia's capital buffers need to

¹² The ratio of private credit to GDP of 56% is high in comparison to countries with comparable income and countries in the region, and based on a structural model of financial depth.

¹³ In a widely used ranking, Mongolia places 47th out of 183 countries for the efficiency of its financial institutions, 92nd for depth of its financial institutions, and 22nd for access (Sviryzdenka 2016).

be higher, and the central bank's capacity for regulatory tightening in a credit boom needs to be stronger than in more balanced economies.

An immediate challenge for Mongolia is to strengthen the institutions, regulations, and enforcement mechanisms that manage bank-specific and systemic risks. Standards and capacity in bank supervision have been raised in recent years, with the Basel III standard for bank capital quality and coverage already implemented. Since 2016, Mongolia has complied with international standards for accounting and loan impairment calculations.

The supervisor undertook a comprehensive review of the asset quality in Mongolia's banking system in 2017. The review revealed a system-wide capital shortfall of 1.9% of GDP. While this was less than initially feared, several banks were deemed undercapitalized in term of regulatory perspective or insolvent, such as the Capital Bank. In early 2019 the authorities worked on making sure that capital of sufficient quality could be raised, and, to this end, Capital Bank was closed. Some definition issues on nonperforming loans (NPLs), which should include certain restructured loans, remain to be sorted out. And the inadequate and delayed recognition of loan impairment (forbearance) and incomplete measures in the banking sector recapitalization are an ongoing problem.

Financial development in transition economies is prone to a rapid expansion in credit volume following liberalization or amid bouts of borrowers' confidence. This happened in Mongolia during the 2018 rapid credit growth, particularly to households, as the economy recovered.¹⁴ A danger is that credit growth that is too fast can easily strain banks' capacity for proper risk assessment, and lead to a self-reinforcing feedback between asset prices and credit volumes. This underlines the need for Mongolia to develop further two aspects of system-wide financial stabilization.

The first aspect is to put in place effective tools to counter the financial system's dollarization, which is inherently risky in an open economy with underdeveloped local financial markets. In Mongolia, foreign currency accounts for 16% of bank assets and 20% of deposits. Although this is well below other transitioning economies, substituting foreign currency assets and liabilities in the domestic financial system could quickly undermine the effectiveness of domestic monetary policy and elevate risks from borrowers' unhedged currency exposures.

¹⁴ In early 2019, the growth of consumer lending still stood at 21% in annual terms, having eased from much higher growth rates.

The experience in other emerging markets shows that a credible inflation-targeting regime is vital for effective and sustainable de-dollarization, because low and stable inflation increases confidence in the local currency. An exchange rate moving in both directions indicates currency risk, and households and companies are less inclined to diversify into foreign assets to preserve purchasing power (Kokenye, Ley, and Veyrune 2010). Here, Mongolia needs to make further progress on establishing its inflation-targeting exchange rate regime. Prudential measures that limit borrowers' unhedged exposures, such as increased risk weights on certain corporate foreign exchange denominated loans or reserve requirements on foreign exchange deposits, can complement macroeconomic stabilization, but they cannot be a substitute.

The second aspect for system-wide financial stabilization is the need for more effective macroprudential policy. Macroprudential policy is especially important in resource-rich countries that are exposed to regular terms-of-trade shocks. Booms in credit volume during periods of elevated commodity prices are followed by deleveraging and a deterioration in borrower solvency, including from unhedged foreign currency-denominated liabilities. The evolution of Mongolia's NPLs is evidence of such a cycle.

The Financial Stability Council, the joint decision-making body between the prudential supervisors and the government, needs to articulate and implement a policy to stabilize the financial system for the duration of the credit cycle. Preparing for crises, and developing tools for intervention, including through bank resolution, are key tasks that the council has set itself.

After the 2009 banking crisis, the BOM raised the liquidity coverage ratios of banks, and increased the capital adequacy ratio of five banks designated as systemic (Maino, Imam, and Ojima 2013). The Financial Stability Council put a limit on the ratio of debt service to the income of retail borrowers. This is a useful instrument to contain excessive growth of consumer credit, even though the limit was already set at a fairly high level. Such borrower-based restrictions may not, however, be fully effective in highly informal economies, such as Mongolia.

Table 2.1 shows the heightened use of macroprudential policy instruments in resource-rich countries that are exposed to external shocks. Although Mongolia actively uses these instruments, they could be more directly targeted at procyclical lending.

Table 2.1: Macroprudential Measures in Resource-Rich Countries, 2017

Measures	Mongolia	Chile	Nigeria	Kazakhstan	Colombia	Russian Federation	Canada	Australia
Limits on domestic currency								✓
Concentration limits	✓	✓	✓		✓	✓	✓	✓
General countercyclical capital								
Buffer/Requirement								
Limits on foreign currency loans		✓	✓		✓			
Time-varying/Dynamic loan-loss provisioning		✓			✓			✓
Debt-to-income ratio	✓	✓		✓	✓		✓	
Limits on interbank exposures		✓			✓	✓	✓	✓
Leverage ratio		✓					✓	
Loan-to-value ratio caps	✓	✓			✓		✓	
FX and/or countercyclical reserve requirements	✓					✓		
Capital surcharges on SIFIs	✓		✓	✓		✓	✓	✓
Levy/Tax on financial institutions					✓			✓
Total number of measures	5	7	3	2	7	4	6	6

FX = foreign exchange, SIFI = systemically important financial institution.

Source: Cerutti, Claessens, and Laeven (2015).

Capacity constraints need to be removed. In particular, the shortcomings in bank supervision discussed earlier and data quality gaps need to be overcome. Making more use of macroprudential policy will require strengthened statistical and analytical capacity at the BOM, covering, for example, property market developments and monitoring exposures between financial institutions that could raise systemic risk. A big challenge in this area is to be able to distinguish a healthy further deepening of credit markets (for example, due to improvements in the legal framework) from a destabilizing overheating.

The objective should be to tackle horizontal, cross-sectional risks, rather than risks in specific borrower groups (restrictions on household borrowing, for example). Doing this could result in a broader definition of systemic banks that better reflects the interconnectedness of banks, including through external borrower relationships and exposure to common risks. In this context, the authorities may need to consider countercyclical capital buffers or loan-loss provisioning, which has been successfully used in other countries. Limits

on borrower concentration should also apply to the exposure of banks to the government.

Because of the high concentration in Mongolia's banking sector, the largest banks are inherently risky, and structural policy on mergers should discourage further concentration. A resolution regime could ultimately tackle the problem of certain banks becoming too big to fail, and resolution regimes are being increasingly used in other emerging markets.

For macroprudential policy instruments to be effective, the Financial Stability Council may also need to consider capital-flow-management measures that could limit procyclical and excessive external funding by banks—for instance, through additional reserve requirements. Any measures taken should still respect the principles of an essentially open capital account, and FDI in particular should not be subject to these instruments.

For counter-cyclical monetary policy to be effective it needs to play the leading role in stabilizing the financial system—and macroprudential policy plays a complementary role.

A supportive legal framework and mechanisms for debt resolution

The development of Mongolia's financial system will require strengthening the legal and institutional foundations of credit markets. In recent years, a rising and large overhang of NPLs shows the urgency of implementing the needed reforms and strengthening prudential supervision and regulation (Figure 2.8). Even with stronger prudential supervision, cycles of excess lending will recur, causing a rise in distressed debt in the banking sector if NPL resolution mechanisms are poor and if structural and legal issues on resolving NPLs are not properly addressed. Asian and European experiences from the Asian financial crisis and the European debt crisis have pointed to the challenge that a large overhang of NPLs does not rapidly dissipate even after a quick recovery.

Since 2014 Mongolia has been facing challenges in the banking sector even after the recovery with the help of the IMF-supported 2017 Extended Fund Facility program. The ratio of NPLs to total loans in the banking system rose from 4.2% in 2012 to 7.1% in 2015 and to 10.4% in 2018. The NPL ratios and NPLs showed persistently rising trends. Mongolia's NPLs are also high for foreign-currency loans, reflecting the impact of currency depreciation on

Figure 2.8: Nonperforming Loan Levels and Their Ratios, 2013–2018

LHS = left-hand scale, MNT = Mongolian togrog, NPL = nonperforming loan, RHS = right-hand scale.

Note: Quarterly and yearly data.

Source: Bank of Mongolia. <https://www.mongolbank.mn/eng/> (accessed September 2019).

unhedged borrowers and weaknesses in the mining sector (IMF 2017). The NPL ratio for foreign currency loans to total lending was 20.4% in 2017, twice that of local currency loans (although foreign currency loans account for only a sixth of the total loan stock). Mining and quarrying, manufacturing, and wholesale and retail loans are the three sectors with highest level of NPLs in Mongolia.

The 2017 Asset Quality Review brought to light the inadequate level of capital in Mongolia's banking system, considerable forbearance, and a poor recognition of loan impairment. Banks have still not adopted the required classification of loan quality, including loans that are past due or restructured, which would considerably raise the NPL ratio. That NPLs will remain an enduring challenge calls for strengthening supervision, reforming NPL resolution mechanisms, and fostering NPL market development, including by improving the capacity of banks to resolve their NPLs.

Addressing structural and legal issues for resolving NPLs in Mongolia require strengthening the legal framework and institutional capacity. Key elements of the legal infrastructure include strengthening corporate governance, ensuring a timely and efficient bankruptcy regime, implementing collateral registration and secured transactions, and ensuring a well-functioning judicial system. Policy support should also be provided for key areas; for example, reforming insolvency mechanisms and fostering financial sector restructuring.

Given the highly cyclical nature of Mongolia's economy and financial system, it is essential that comprehensive and holistic efforts and approaches for dealing with distressed debt in the banking sector are considered.

2.5 Policy Recommendations and Conclusions

Prior to the coronavirus disease (COVID-19) pandemic, Mongolia was making a strong cyclical recovery from a crisis in its balance of payments and sovereign debt quality. The government's Economic Recovery Plan¹⁵ has made strong commitments to the IMF and multilateral and bilateral financing institutions, including the Asian Development Bank and World Bank, to put in place a strengthened framework for macroeconomic management. By the end of the IMF-led Extended Fund Facility program, macrofinancial vulnerabilities should be much reduced.

As the current sudden economic downturn due to the COVID-19 pandemic shows, the stability of 2019 may turn out to be fleeting. The government should prepare for a foreseeable expansion in mining revenue and renewed volatility from this and other external shocks. A framework for macroeconomic and financial stability should above all have revised fiscal rules that are credible and supported by all domestic stakeholders. An anchor is needed for exchange rate policy and for strengthened prudential policy that covers individual banks and the banking system itself, and that safeguards against excessive capital inflows. All four policy areas—fiscal, monetary, prudential, and capital flows—need to be closely coordinated between the BOM and ministries and government agencies.

The following policy recommendations are offered for strengthening macroeconomic management.

Fiscal policy. The country's fiscal policy needs to be more focused on stability objectives and containing future boom-and-bust cycles. This requires a fiscal framework akin to the Fiscal Stability Law, which contained debt limits, the structural balance, and expenditure growth. Savings in the Future Heritage Fund could resume once public debt has fallen below an appropriate threshold and once outstanding debt at high yields has been repaid. While the parameters originally set for public debt and the structural balance seem

¹⁵ The Economic Recovery Plan, which followed the IMF's 3-year Extended Fund Facility, has focused on building foreign exchange reserves and setting a sustainable debt path, strengthening the distressed banking sector, and securing stable and inclusive long-term growth.

appropriate, a cap on expenditure growth may need to be adapted because of the still limited capacity in managing public spending.

Further fiscal policy reforms will be essential, particularly to limit the quasi-fiscal activities outside the budget of the DBM and the BOM. Once Mongolia completes the IMF-led Extended Fund Facility program, Parliament's scope for ad hoc spending increases need to be curtailed. The Fiscal Stability Council should play a key public role in this effort by scrutinizing budget implementation and fiscal projections.

Monetary and exchange rate policies. The BOM should aim for low and stable inflation while ensuring financial sector stability. Monetary policy should be proactive toward maintaining macro-financial stability in both expansionary and contractionary cycles. The flexible exchange rate regime should be continued and the central bank's interventions should be limited by smoothing excessive volatility only. The confirmation of central bank independence by law and the commitment to greater flexibility in the exchange rate regime under the IMF program should lay much-needed foundations for monetary policy.

The challenge once the IMF program has been completed will be to define a credible and reliable anchor for monetary policy using a suitable price basket and financial stability as the sole policy targets. Adopting an explicit inflation targeting regime could be a long-term effort and will require a significant upgrade in the central bank's modelling capabilities, and progress being made on financial stability and capital market development. But doing this will free up the central bank to secure a level of foreign reserves that will be a sufficient buffer for the inevitable next downturn. These are still short of the declared target of 6.5 months of imports, which reflects a certain degree of capital account openness and financial sector dollarization.

Macroprudential policy. The country should make its macroprudential policy a more central tool for securing financial stability, and for complementing stability-oriented fiscal and monetary policy, although it cannot substitute for these policies. This will require close coordination between the central bank, the financial markets supervisor, and the government. A reliable medium-term path for fiscal expenditure should be a crucial input for macroprudential policy decisions.

Macroprudential policy should aim at counter-cyclical stabilization across the financial system; for instance, through additional capital or provisioning

requirements that vary with the cycle. This could prove to be more effective than targeted borrower-based measures. Exposure to common risk factors and to the largest borrowers, including the government, should also be constrained. As Mongolia's capital account becomes more open, foreign borrowing by banks should be monitored carefully, given the highly cyclical nature of risk premia in their wholesale funding. Implementing these new powers will require upgrading capacity in the central bank and also improved communications with the financial sector and the government.

Banking policy. Mongolia's banking sector is reasonably well developed in terms of the two crucial functions of financial access and its role in channelling natural resource revenue to households and enterprises. But it should not be seen as a sector that can foster economic growth by itself. A priority for the coming years should be to strengthen bank supervision, particularly by applying rigorous asset quality standards, carrying out regular stress tests, and putting in place high-quality capital where required. The capital coverage of banks needs to reflect the highly cyclical nature of the financial system. And when additional capital is raised, the quality of bank equity as a loss-absorbing buffer should be respected.

The concentration of bank assets within the largest three banks is very high, and may require additional prudential measures that reflect the systemic importance of these banks. Some of the country's 13 banks may be too small to be viable. A predictable framework for bank insolvency and resolution should be defined that builds on the experience of a bank closure in early 2019.

Capital market development. The prospects for capital market development are not promising in the near term. This is because of Mongolia's small financial market, the dominance of foreign investors in the corporate sector, and lack of institutional investors. Even so, other countries in the region have shown that a local bond market can meet the demand of large companies for long-term, local-currency funding. Developing instruments that can hedge against currency and commodity price risks should be a priority. As in other countries, assistance by the Asian Development Bank and other development partners and institutions can help upgrade Mongolia's financial market infrastructure, regulations, and laws (in particular on corporate governance).

Preempting challenges of rising distressed debt problems. Because of the highly cyclical nature of Mongolia's economy and financial system, NPLs will be recurring problems. The lessons and best practices in Asia and Europe show that preemptive action to deal with NPLs is an essential part

for crisis prevention, and that strengthening legal, regulatory, and supervisory frameworks and institutional capacities should be part of this effort. NPL markets should also be developed as part of the government's financial market development plans. The Asset Management Company option could be considered for resolving NPLs and fostering NPL market development.

Strengthening multilayered financial safety nets with a regional focus.

Mongolia has a narrow economic base and its crisis episodes highlight its high vulnerability and low resilience to commodity price volatility and external economic shocks. There have been a number of regional crisis responses from the ASEAN+3 countries, such as the Chiang Mai Initiative Multilateralization, the ASEAN+3 Macroeconomic Research Office, and its Asian Bond Market Initiative to develop local currency bond markets. This underscores the opportunities for Mongolia to strengthen regional financial cooperation in risk identification, mitigation, and response. The ASEAN+3 experience shows the importance of building and strengthening multilayered financial safety nets, particularly regional financial safety nets that complement national reserves and global financial safety nets. Mongolia needs to step up efforts to engage to participate in more bilateral swap arrangements with other key countries in the region to tackle the problem of its volatile capital flows.¹⁶

¹⁶ Currently, Mongolia only has access to one central bank swap arrangement with the PRC, the Chinese Yuan/Mongolian Tugriks Bilateral Currency Swap Arrangement. Mongolia is not a member of any existing regional financial safety net similar to the Chiang Mai Initiative in ASEAN+3. Despite a large increase in national reserves in 2018, gross reserves remain below the lower bound of the recommended range of 100%–150% of the IMF's reserve adequacy metric. Moreover, the IMF (2019b) points out that the level of reserves, once short-term on- and off-balance sheet liabilities are netted out, is just above zero. IMF projections based on an adverse scenario, similar to previous commodity price shocks, show public debt reaching 95% of GDP and reserves declining below \$1 billion or just above 0.5 months of imports.

CHAPTER 3

Managing the Natural Resource Abundance

Dorjdari Namkhajantsan and Marcel Schröder

Mongolia has a population of about 3.3 million in a landlocked territory covering 1.6 million square kilometers, making it one of the world's most sparsely populated countries. The International Monetary Fund (IMF) classifies Mongolia as one of 29 resource-rich developing countries, and all are low- or lower-middle-income, using the World Bank's categorization. At least 20% of the exports of these countries are natural resources (IMF 2012).

Resource-rich developing countries have so far failed to transform their natural resource wealth into economic success. Auty (1993) coined the well-known term “resource curse” to explain this paradox. Mongolia is no exception to the resource curse, which makes the economy vulnerable to external shocks, such as falls in commodity prices. Mongolia's resource sector contributes close to 90% of exports (Figure 3.1) and more than 20% to gross domestic product (GDP, Figure 3.2). About 90% of total exports, mostly minerals in raw form, go to the People's Republic of China. While the economy has been experiencing high GDP growth in this decade, income per capita income remains low, at about \$4,000.

A number of mechanisms have been proposed that explain the resource curse. These include a long-term decline in the prices of natural resources; the effects of Dutch disease, which are detrimental to long-term growth; institutional failures; tendencies for armed conflict; and macroeconomic instability due to volatile commodity prices (Frankel 2010).

Figure 3.1: Exports Sectors, 2018

Source: Calculated from data of the Customs General Administration of Mongolia. http://www.customs.gov.mn/statistics/index.php?module=users&cmd=info_full&cid=636&st=1 (accessed March 2019).

Figure 3.2: Mining and Nonmining Gross Domestic Product, 2010–2018

GDP = gross domestic product, MNT = Mongolian togrog.
Source: National Statistics Office of Mongolia. http://1212.mn/Stat.aspx?LIST_ID=976_L05&type=tables (accessed March 2019).

This chapter focuses on issues that are broadly related to two of the mechanisms. The first pertains to the fiscal side of mining. Investments that are important to development, such as infrastructure, health, and education, require sufficient government funding, which resource-rich developing countries, in principle, should be able to tap from the resource sector. The chapter analyzes Mongolia’s fiscal regime; government resource revenue; the extent to which the government benefits from the minerals sector (the “government take,” as the chapter calls this); and how the government take compares with that of other resource-rich countries. Mongolia’s revenue

management—a particularly challenging area for the government—is examined. Among the Asian Development Bank’s developing member countries, Mongolia has one of the most procyclical fiscal policies (Aizenman et al. 2019) and has built up excessive government debt, which required IMF assistance in 2017.

The second pertains to the relationship between foreign direct investment (FDI) inflows and job creation in Mongolia. Studies on FDI in resource-rich countries typically examine the effects of Dutch disease or adverse environmental consequences. Analyzing the labor market stems from the premise that job creation is among the foremost development channels. In this regard, Mongolia is an attractive case study. In 2009, the government and Rio Tinto signed a \$10 billion investment agreement to develop the Oyu Tolgoi copper and gold mine in the Southern Gobi Region, which triggered unprecedented FDI flows into Mongolia in the 3 years following the agreement. A significant proportion of this FDI went to nonmining sectors. It is often argued that these sectors entail greater economic benefits than mining.

The following section gives an overview of Mongolia’s mining sector. After the areas of analysis just described, the chapter closes with policy recommendations aimed at helping Mongolia reap greater benefits from its natural resources.

3.1 Mining Overview

Key minerals

Following the collapse of the Soviet Union, Mongolia attracted the attention of foreign exploration and mining companies that led to the discovery of significant mineral resources, including the Oyu Tolgoi copper and gold deposit. Many mining projects started up, especially during the period when soaring global commodity prices made many projects economically viable. Mongolia’s geology remains relatively poorly studied, however. Geological maps cover 99% of the country but at the scale of only 1:200,000 (MRPAM 2018).¹ In terms of pure geological attractiveness, Mongolia ranked 36th out of 91 jurisdictions in the Fraser Institute’s 2017 survey of mining companies (Fraser Institute 2018).²

¹ Mongolia has put 17.9% of its territory under special state protection and designated a further 18.4% as a special purpose area, prohibiting issuing mineral licenses in these areas.

² This ranking assumes that government policies to attract investments are the same across countries.

Mongolia has 1,170 registered deposits and more than 8,000 occurrences of 80 types of minerals. The most significant proven reserves are gold (1,600 tons), silver (230,000 tons), copper (36.3 million tons), iron ore (660 million tons), zinc (5.9 million tons), coal (9.8 billion tons), and oil (250 million tons). During 2017–2018, Mongolia registered reserves of about 30 tons of gold, 30 million tons of iron ore, 167.7 million tons of polymetallic ore, 125,000 tons of rare earths, 5,800 tons of tungsten, 55.8 million tons of copper ore, 1.9 million tons of fluorspar, and 15,500 tons of uranium. In addition, coal reserves increased by 8.7 billion tons. Mongolia ranks 11th in the world by known reserves of coal, with 22.9 billion tons (2.5% of the global total); 14th for copper, with 60.1 million tons (2.1% of the global total); 21st for gold, with 73.9 million ounces; 12th for molybdenum, with 922,000 tons; 12th for uranium, with 284.0 million tons (1.1% of the global total); and 6th for tungsten with 295,000 tons, at 2.6% of the global total (Table 3.1). Some studies also rank Mongolia's proven reserves of fluorspar 3rd in the world (Mongolian Academy of Sciences 2012).

Table 3.1: Estimated Mineral Reserves and Resources and Their Global Rankings

Mineral	Reserves and Resources ^a	Unit	Global Rank	Share of Global Total (%)
Tungsten	295,204	Ton	6	2.6
Coal	22,926,287,000	Ton	11	2.5
Uranium	284,338,832	Pound	12	1.1
Molybdenum	922,050	Ton	12	1.6
Copper	60,089,235	Ton	14	2.1
Gold	73,881,200	Ounce	21	1.1
Zinc	2,638,294	Ton	30	0.4
Iron ore	1,128,065,000	Ton	33	0.1

^a Some sources indicate that probable reserves of coal and iron ore are 175 billion tons, for example, Invest in Mongolia, <http://en.investmongolia.gov.mn/>

Source: Authors' calculations based on data from S&P Global. SNL Financial Database. www.snl.com (accessed September 2019).

From 2017 to 2018, the state registry added 201 new deposits (Table 3.2). These included 67 placer gold and 9 hard-rock gold deposits, and 24 coal, 14 fluorspar, and 5 copper deposits.

As of 2018, 1,405 exploration licenses had been issued covering 7 million hectares, 4.5% of the country's territory. Since 2009, 1,350 new mineral deposits have been registered (Figure 3.3).

Table 3.2: Mineral Deposits Registered by Type, 2017 and 2018

Mineral	2017	2018	Total
Gold (placer)	25	42	67
Building stone	11	15	26
Coal	15	9	24
Fluorspar	6	8	14
Sandstone	7	3	10
Gold (rock)	4	5	9
Limestone	5	4	9
Iron	5	3	8
Mud deposits	4	3	7
Sand gravel	3	3	6
Polymetal	2	3	5
Copper	2	3	5
Rare earth elements	1	2	3
Tungsten	3		3
Floatstone		2	2
Silver	2		2
Uranium		1	1
Total	95	106	201

Sources: For 2017 data, MRPAM (2017); for 2018 data, MRPAM. (2018b); MRPAM (2018a); all accessed March 2019.

Figure 3.3: Registered Mineral Deposits, 2009–2018

Sources: MRPAM (2017, 2018b).

Exploration work likely suffered because of a moratorium on new licenses during 2010–2015. The government started reissuing new licenses in 2015 only for this to be stalled again in 2016, when a new administration eliminated the application-based, first-come-first-served process granting new licenses for competitive bidding. Figure 3.4 shows the cumulative number of valid exploration and mining licenses for 2008–2018.³

The level of mining exploration is indicative of a country’s attractiveness for investment in the sector. In many countries, the initial geological survey work is often funded by the government because the results can lay the ground for private funds to flow into highly risky—from an investment perspective—exploration work. Mongolia has spent \$4 million–\$5 million a year since 2012 developing geological work, including geological maps and general surveys. Exploration companies spent \$240.0 million in 2012 on exploration work in Mongolia, which fell to \$53.5 million in 2018. This spending appears to be closely correlated to global commodity prices (Figure 3.5).

³ In number of mining claims, Mongolia ranks 15th in the world, with 6,119 such claims, which includes applications and granted licenses. However, a comparison of mining licenses across countries is difficult as each country has different systems and history of license allocation. For example, some countries, such as Canada, grant a large number of licenses that cover a relatively small area of land, whereas countries such as Australia, Botswana, Namibia, and Zambia have given out a relatively modest number of licenses, but they cover a huge area of land.

Figure 3.5: Mining Exploration Spending, 2008–2017

LHS = left-hand scale, RHS = right-hand scale.

Sources: MRPAM (2015, 2018b); exchange rates from National Statistics Office of Mongolia. http://1212.mn/tables.aspx?TBL_ID=DT_NSO_0700_008V1; global spending from S&P Global.SNL Financial Database, www.snl.com (all accessed March 2019).

In terms of global spending on mining exploration, Mongolia ranked 50th in the world on expenditure, totaling \$18.5 million in 2018, based on data from 11 companies (Figure 3.6). According to the Mineral Resources and Petroleum Authority of Mongolia, 91 companies were doing exploration work in 2017, for a total investment of \$53.5 million. On the investment basis, Mongolia ranked 24th in the world in 2017.

Figure 3.6: Global Mining Exploration Investment and Ranking, 2018

PRC = People's Republic of China, US = United States.

Note: Numbers in parentheses are the number of reporting companies.

^a Mineral Resources and Petroleum Authority of Mongolia 2017 data for 91 companies.

Sources: S&P Global.SNL Financial Database; MRPAM (2018b); both accessed 2 April 2019.

Production and exports of minerals

Although the number of active exploration licenses issued by the government has declined since 2008, mining licenses for companies to operate mines and produce mineral products increased from 1,091 in 2008 to 1,673 in 2018. Of these, at the end of 2018 nearly 33% were for gold mining, 19% for coal, 12% for minerals used in construction materials, and 11% for fluorite (Figure 3.7)

Table 3.3 shows Mongolia’s production of major mineral commodities. By value, about 90% of Mongolia’s exports are minerals, of which 97.4% (in 2018) were exported to the People’s Republic of China. Mongolia retains a small amount of thermal coal for its thermal power plants. The Bank of Mongolia (BOM) buys gold directly from producers.

Table 3.3: Mineral Commodities Production, 2010–2017

Commodity	2010	2011	2012	2013	2014	2015	2016	2017
Copper concentrate (in '000 tons)	522.0	513.7	517.9	803.0	1,080.4	1,334.7	1,445.1	1,317.6
Molybdenum concentrate ('000 tons)	4.7	4.2	4.1	3.9	4.3	5.4	5.7	6.2
Gold ('000 tons)	6.0	5.5	6.0	8.9	11.5	14.5	18.4	19.8
Fluorspar ('000 tons)	727.0	658.7	484.4	161.7	303.0	183.5	167.7	108.9
Fluorspar concentrate ('000 tons)	140.7	116.4	157.2	76.4	71.9	47.3	34.1	55.2
Iron ore ('000 tons)	3,076.6	5,193.9	6,898.0	5,011.9	6,293.1	4,273.6	4,936.2	7,694.7
Zinc concentrate ('000 tons)	112.6	104.7	119.1	104.1	93.2	89.6	100.2	82.7
Coal (million tons)	25.2	32.0	29.9	30.1	25.3	24.2	35.5	48.2
Crude oil ('000 barrels)	2,181.4	2,548.9	3,636.0	5,128.9	7,405.3	8,769.3	8,249.8	7,624.1

Source: National Statistics Office of Mongolia. Mongolian Statistical Information Service. http://1212.mn/tables.aspx?TBL_ID=DT_NSO_1100_013V1 (accessed December 2018).

Mining projects are underway in almost every province, although the main mining areas are in the Southern Gobi Region, where the Oyu Tolgoi copper and Tavan Tolgoi coal deposits are located, and in the north, where the Erdenet copper mine and other coal and iron ore mines operate. Uranium and petroleum projects are mostly in the southeast. The Minerals Law, passed in 2006, is the key legislation regulating the sector and defines the country's 16 “strategically important” mineral deposits (Table 3.4).⁴

Resource-rich countries realize the value of their minerals through their fiscal regimes. Ideally, these generate a fair share of mineral rents for the government and attract investments into the sector. The fiscal regime should therefore be designed to maximize government revenue while avoiding investments in the resource sector that become unprofitable. Governments also need to take into account the efficiency and administration costs of the fiscal regime, which may be significant.

⁴ Parliament had 49 projects on the reserve list that could be considered for being defined as strategically important.

Table 3.4: The 16 Strategically Important Mineral Deposits

No.	Deposit	Mineral	Location and province	Reserves
1	Tavan Tolgoi	Coal	Umnugovi, Tsogttsetsii	6.4 billion of which 1.4 billion tons are coking coal quality
2	Nariin Sukhait	Coal	Umnugovi, Gurvantes	125–380 million
3	Baganuur	Brown coal	Ulaanbaatar, Baganuur	600.0 million
4	Shivee Ovoo	Brown coal	Gobisumber, Shiveegovi	646.0 million
5	Mardai	Uranium	Dornod, Dashbalbar	1,104 tons at 0.119% U_3O_8
6	Dornod	Uranium	Dornod, Dashbalbar	28,868 tons at 0.175% U_3O_8
7	Gurvan Bulag	Uranium	Dornod, Dashbalbar	16,073 tons at 0.152% U_3O_8
8	Tumurtei	Iron	Selenge, Khuder	229million tons at 51.15% Fe
9	Oyu Tolgoi	Copper and gold	Umnugovi, Hanbogd	2.2 billion tons, 21.2 million tons Cu, 772.9 tons Au
10	Tsagaan Suvarga	Copper and molybdenum	Dornogovi, Mandakh	16 million tons oxides, 250 million tons sulfide ore with 1.6 million tons of Cu and 66,000 tons of Mo
11	Erdenet	Copper and molybdenum	Orhon, Bayan-Undor	1.2 billion tons at 0.51% Cu and 0.012% Mo
12	Burenkhaan	Phosphor	Huvsgul, Alag-Erdene	192.24 million tons at 21.1% P_2O_5
13	Boroo	Gold	Selenge, Bayangol	24,500 tons at 1.6 g/t Au
14	Tomortein Ovoo	Zinc	Suhbaatar, Suhbaatar	7.7 million tons at 11.5% Zn
15	Asgat	Silver	Bayan-Ulgii, Nogoosnuur	64.0 million tons at 351.08 g/t Ag
16	Gatsuurt	Gold	Selenge, Mandal	40–50 tons of Au

Ag = silver, Au = gold, Cu = copper, Fe = iron, g/t = gram/ton, Mo = molybdenum, U_3O_8 = triuranium oxide, Zn = Zinc.

Source: MRPAM (2016).

Mongolia's fiscal regime is complex because the government relies on many fiscal instruments for revenue collection. The state plays the following three roles in the extractive industry.

Resource Owner. Under the 1991 Constitution, “the land, its subsoil ... shall be subject to the people's authority and under the protection of the State,” and is the “the property of the State.”⁵ The late 2019 constitutional amendment changes this to “state common property.” As the owner of the country's natural resources, the government collects royalties (and, in the petroleum subsector,

⁵ Constitution of Mongolia, Articles 6.1 and 6.2.

signature bonuses at the start of a project). Land and water usage is taxed, and exploration and mining companies pay license fees to the government.

Tax collector. The government imposes and collects taxes from all businesses regardless of the sector. Companies in the extractive industry pay value-added tax (VAT); customs duty; and corporate income tax, including withholding tax.

Investor. The government acts as a shareholder in state-owned enterprises and joint ventures that own mines. As owner and shareholder, the government is entitled to dividends when these operations are profitable.

3.2 Fiscal Resource Revenue

This section examines the fiscal instruments that the government uses to collect resource revenue. Figure 3.8 shows them in simplified form.⁶

⁶ The government was in the process of amending tax laws. Because the legislation has not been finalized, it is not described here.

Mineral royalties

Mineral royalties are the most significant source of revenue for the government. In mining, Mongolia has two types of ad valorem royalties: a basic royalty and an additional royalty. The rates of both are set in the Minerals Law. The basis for levying mining royalties is sales value—benchmark international prices for exports and, in the case of domestic sales, domestic market prices. If these benchmark prices do not exist, the license holder's declared sales revenue is used as the basis. The basic royalty rate is 5% of the sales value of minerals. The exceptions are coal sold domestically and gold sold to the BOM; the rate for these exceptions is 2.5%.

To benefit from windfalls from high commodity prices, the government introduced the additional royalty in 2010. Its rate depends on commodity-price levels and the level that commodities are processed (Table 3.5).

The higher the market prices, the higher is the additional royalty rate. The additional royalty is also designed to promote processing: ore and concentrates are levied at higher rates, while processed commodities are either exempt or have lower rates. While market prices can be observed, the classification of commodities in terms of the level of processing is subjective and may be a source of disputes. The additional royalty for most mining products ranges from zero to 5%, subject to market price bands. The tax base is the same as the basic royalty. For most of the products, the additional royalty rate increases incrementally by 1 percentage point as prices move from one price band to another. Gold is exempted from the additional royalty if it is sold to the BOM.

Corporate Income Tax

Corporate income tax is the second most important source of resource revenue. In contrast to royalties, this tax is not unique to the mining sector and applies to all businesses in Mongolia. Because the economic role of corporate income tax is to tax the return to invested capital from all sectors of the economy, the tax burden is the same on all types of investments. In other words, the tax is “neutral” in that it does not distort investment decisions. Because of the high initial investment required to set up a mining operation and other sector-specific factors, corporate income tax can come quite late in production, because it often takes many years for investors to recover their initial investment.

Table 3.5: Additional Royalty Rates for Mineral Products

Mineral	Unit of Measurement	Market Price Level (%)	Additional Rate Imposed on the Base Rate Depending on the Level of Product Processing (%)		
			Ore	Concentrate	Product
Copper	Ton	0–5,000	0.00	0.00	0.00
		5,000–6,000	22.0	11.0	1.00
		6,000–7,000	24.0	12.0	2.00
		7,000–8,000	26.0	13.0	3.00
		8,000–9,000	28.0	14.0	4.00
		9,000 and higher	30.0	15.0	5.00
Gold	Ounce	0–900			0.00
		900–1,000			1.00
		1,000–1,100			2.00
		1,100–1,200			3.00
		1,200–1,300			4.00
		1,300 and higher			5.00
Unprocessed coal	Ton	0–25	0.00		
		25–50	1.00		
		50–75	2.00		
		75–100	3.00		
		100–125	4.00		
		125 and higher	5.00		
Enriched coal (technologically processed by dry or wet methods)	Ton	0–100		0.00	
		100–130		1.00	
		130–160		1.50	
		160–190		2.00	
		190–210		2.50	
		210 and higher		3.00	
Coal, final product	Ton	0–160			0.00
		160–190			0.50
		190–210			1.00
		210–240			1.50
		240–270			2.00
		270 and higher			2.50

Source: Government of Mongolia. Mineral Law 2006. www.legalinfo.mn

As with any other tax, corporate income tax has two core elements: the rate and the base for imposing the tax. Mongolia's corporate income tax is two tiered, with rates of 10% on taxable income up to MNT3 billion (\$1.1 million) and 25% above this amount. For calculating the base, the basic rule is to deduct costs from revenue. Corporate income tax law has many provisions on what is deductible from revenue, and in general this tax is complicated to administer

because of the many deductions and allowances. Mongolia is no exception to this. Among its many allowable deductions are the cost of the goods sold; social and health insurance contributions; wages and salaries; plant, property, and equipment depreciation; interest costs; and exchange rate losses.⁷

Mongolia's corporate income tax law allows for losses being carried forward to deduct against future taxable income. For the mining sector, losses may be carried forward in full for 4–8 consecutive years, the exact duration of which depends on the length of the investment period. Under certain circumstances, Mongolia gives an investment tax credit of 10% of qualifying investments that is deducted from corporate income tax. This applies to the Oyu Tolgoi project (Box 3.1), and it will significantly affect the revenue that the government will receive from the corporate income tax paid by the mine when the initial investment is recovered.

Government equity and dividends

Dividends from the profits of state-owned enterprises are an important source of government revenue (Box 3.2). Mongolia has traditionally maintained its control of several key mines through their whole or partial ownership by state-owned enterprises. Examples of this are Erdenet Mining Corporation LLC. (copper), Erdenes Tavan Tolgoi JSC., (coal), and Oyu Tolgoi LLC. in which the government holds a 34% minority stake (Box 3.1). Dividends are not paid to the state on the government's shareholdings in mining companies until the companies are profitable, and dividends are paid after the government receives royalty and corporate income tax revenue. So, investing in mining can be a risky undertaking for the government, especially if a project requires significant investment and time to develop before making a profit.

For Mongolia's 16 strategically important mineral deposits, the government is entitled to hold up to a 34% stake in companies holding the licenses to mine these deposits if a private company made the initial discovery, and up to 50% if the discovery was funded by the state (and the government decides to involve a private sector partner). This is not free equity because the government has to fund its share of investments in developing the mineral deposits either through carried interest or fully paid arrangements. Mining investment can create large commitments for the government and may require the government to borrow to fund its share.

⁷ Fixed assets are depreciated using the straight-line method over 3–40 years, depending on the classification of assets. For buildings and facilities, the period is 40 years; for machinery, vehicles, and equipment, 10 years; for computers and software, 3 years; for mineral exploration and mining licenses, the duration of the valid term of the license; and for other assets, 10 years.

Import duties, value-added tax, and excise duties

Mongolia levies up to 40% duty and 10% VAT on the imports of businesses. This particularly affects the costs of mining companies during construction stages, when they buy a lot of imported equipment and other supplies. The VAT provides the government with revenue at the early stages of a project and before production and sales have started. This revenue can be considerable for a large mining project, as in the case of Oyu Tolgoi.

Most imports are taxed at 5%, including Oyu Tolgoi's. Import tariffs are set by Parliament. Exports are usually not taxed and no VAT is paid on them, which has a bearing on export-oriented mining companies. This is because they do not get reimbursed for the VAT on supplies, which affects the cost at which commodities are exported. Mongolia also levies excise taxes on vehicles and fuel, which can be a significant cost to mining companies.

Withholding and other taxes

Some types of revenue from businesses are other taxes. For example, dividend payments to shareholders are taxed at 10% if they are resident in Mongolia and at 20% if they are not. Rights and title payments are taxed at 10%; interest income is taxed at 10% for residents and 20% for nonresidents, including guarantee fees; sale of rights, including licenses, are taxed at 30%; the management fees of nonresidents at 20%; other income sourced to Mongolia that is repatriated to nonresidents at 20%; and immovable property sales at 2%. Most of these taxes are withheld by the paying company rather than revenue recipients. Taxes withheld from payments going to nonresidents are often subject to other rates: for example, double tax and bilateral treaties with other countries.

Withholding taxes are an important source of revenue when a project generates significant profits for its shareholders, especially if the shareholders are nonresidents. Dividend withholding taxes can also play a role equivalent to the government's dividend from its equity investments but without the government actually having to invest public funds in the project, as the base from which the tax and dividend is calculated is often the same. Withholding tax on interest income can generate revenue for the government independent of production and revenue, but could also increase interest rates that banks and lenders demand from the project.

Box 3.1: Oyu Tolgoi's Fiscal Arrangements

Oyu Tolgoi is Mongolia's largest copper and gold project and has attracted more than \$10 billion in investments since 2009. Oyu Tolgoi illustrates the complexities and challenges that the governments of resource-rich developing countries face in collecting taxes from big natural resource projects.

The mine, incorporated as Oyu Tolgoi LLC. in Mongolia, is owned by Turquoise Hill Resources Ltd. and the Government of Mongolia. Turquoise Hill holds 66% and the government 34%. Turquoise Hill is registered in Canada and listed on the Toronto and New York stock exchanges and is majority owned by Rio Tinto PLC., the project's sole manager.

Turquoise Hill—and, later, Canadian mining company Ivanhoe Mines Ltd.—discovered Oyu Tolgoi's copper and gold deposits in the early 2000s. Large amounts of foreign direct investment flowed into the project after an investment and shareholder agreement were signed in 2009 between the government and investors.

The project is progressing in two stages. In the first, open pit mining began production in 2013. In the second, the underground pit from which an estimated 80% of the project's revenue is expected to be derived is under construction. The underground project is being financed by a \$4.4 billion loan to Oyu Tolgoi from multilateral and commercial banks agreed in 2015. In 2019, it was reported that project costs would increase by up to \$1.9 billion due to difficult ground conditions. Production is expected to start between May 2022 and June 2023, a delay of 16–30 months compared with initial expectations.

For the fiscal arrangements, the standard regime outlined in Figure 3.8 does not apply to Oyu Tolgoi. The tax arrangements are instead laid out in the investment agreement. Here, the tax composition changes with different stages of the mine's development, which stabilizes the major taxes in a “one way” fashion. This means that investors can benefit from favorable changes in tax laws, but not vice versa. Because of this arrangement, the government will have to carefully consider the effects any amendments to the tax law will have on the tax revenue it receives from Oyu Tolgoi. In 2017 Oyu Tolgoi was the second-largest taxpayer in Mongolia. When the underground mine commences production, it is expected to become the largest taxpayer. Since 2010 it has paid about \$1.5 billion in taxes, 22% of the government's total mining fiscal revenue.

Continued next page

Box 3.1 continued

Before production started on the open pit mine in 2013, Oyu Tolgoi predominantly paid customs duties on imports, value-added tax (VAT) on inputs, and withholding tax on interest paid on loans from foreign sources. The remaining fiscal revenue accrued from license fees, land- and water-use fees, and other payments. This totaled \$530.3 million during 2010–2012, 44% of total VAT payments. Since 2013, Oyu Tolgoi's royalty payments comprised 27.3% of total company payments to the government in the period, corporate income tax 18%, and VAT payments 14%.

From the government's perspective, the advantage of royalties is that they are relatively easy to administer and flow as soon as production starts. The negative side is that they can deter new investments, because, unlike corporate income tax and dividend payments, which are only received after investments are recovered, they are levied on the sales revenue. Because of the uncertainty over when Oyu Tolgoi will recover its initial investments, the overreliance on corporate income tax and dividend payments is a risk. Given Oyu Tolgoi's high investment cost and recent cost increases, the recovery of investments may be postponed.

The government has agreed to several tax and financing incentives for Oyu Tolgoi, which will push back corporate income tax and dividend payments. This is because the taxable income shrinks by accelerated depreciation and loss carry-forward provisions. These provisions allow Rio Tinto to deduct initial investments (losses) in full for up to 8 years. The government has also granted a 10% investment tax credit, meaning taxable income will be reduced by 10% of the total qualifying investment value.

Although the government's 34% equity stake entitles it to proportionate dividends, the "carried interest" arrangement to finance this participating interest means the government will receive the payments only when the carry is repaid. This is estimated to be in 2041—a long time after Oyu Tolgoi turns profitable. Perhaps because of this backload in payments, calls are being made for renegotiating terms and increasing the benefits for the government from the project. Most recently, in November 2019, the Parliament of Mongolia adopted a resolution mandating the government to study and possibly renegotiate several aspects of the agreement, including the possibility to engage in a swap of the government equity with an additional production sharing agreement or revisions to royalty fees.

Because of Oyu Tolgoi's size, complexity and specific tax arrangements, the government needs to strengthen its tax administration capacity to be able to better monitor the mine's production, sales, costs, and tax incentives. To do this, the project must be transparent in its procurement processes and contracts.

Source: Authors.

Box 3.2: Mongolia's State-Owned Mining Companies

Mongolia uses state-owned enterprises (SOEs) to manage key mining assets and has been doing so increasingly in recent years. The latest Extractive Industries Transparency Initiative (EITI) reconciliation reports for Mongolia show 19 mining SOEs, including three owned by local governments. Other mining entities are either subsidiaries of SOEs (notably holding company Erdenes Mongol LLC.) or joint ventures with the private sector, such as Erdenes Gold Resources, Erdenes Steel, MonAtom, and Oyu Tolgoi.

In terms of fiscal revenue, SOEs pay taxes like other companies and get no preferential treatment. SOEs, however, have two distinct revenue flows for the government that can influence government revenue from mining and how they are managed. First, they can generate significant profits, and, in principle, SOE dividends paid to the state can be a significant source of fiscal revenue, especially during commodity price booms. Second, SOEs may themselves require significant financial transfers from the state budget to meet investment and operational expense needs. Both dividends and transfers pose challenges to the government.

Mongolia does not have a clear dividend policy for SOEs. The case of Erdenes Tavan Tolgoi JSC., a major coal exporter in which the government holds an 85.0% stake, put this in the spotlight. In 2012, the company distributed 14.5% of its equity to Mongolian citizens, who each received 1,072 shares. The company announced significant profits of MNT461 billion (\$188.9 million) in 2017 and MNT807 billion (\$326.5 million) in 2018, when coal prices were high and exports to the People's Republic of China were strong. But citizen groups protested when, in 2019, the company announced that it would not pay a dividend but would invest in a railway from the mine to boost exports.

The decision to retain profits and spend them on infrastructure was problematic in three ways. First, the decision to invest in the railway is an implicit industrial policy of the government, and such a significant investment took away funds that could have been spent on education, health-care, and non-mining-specific public infrastructure. Second, the process did not go through the normal parliamentary and government budget and investment planning processes (and other scrutiny), as the decision to retain profits was made by the company, and the Parliament was only involved at the standing committee level. Therefore, the investment in the railway could be considered off-budget spending, which may have lacked the needed transparency and oversight. And third, while the company was able to invest funds in projects during profitable years, it may not be able to do so in years when sales and prices are low or costs are high.

Continued next page

Box 3.2 continued

A major SOE challenge for the government is that most state firms are unprofitable, which is adversely affecting the budget. This is especially the case for the Baganuur and Shivee-Ovoo coal mines because of the fixed price for the coal sold to domestic power plants. These companies have accumulated high levels of liabilities and may need government support to renew equipment or expand their operations.

Note: The box reflects information available as of January 2020.

Source: Authors

Fiscal resource revenue

Data coverage has improved significantly in recent years, and a detailed analysis of government resource revenue can now be made on several dimensions, helping to overcome a long-standing problem of data limitations on resource revenue. This section documents the government's resource revenue, which is disaggregated by various sources, including corporate income tax and mining companies. The section estimates Mongolia's government take and compares it with that of other countries. Three data sources are used: IMF Article IV consultations compiled by the International Centre for Tax and Development, the Extractive Industries Transparency Initiative (EITI), and the Ministry of Finance. The IMF has the longest time series (2002–2016) for this data. EITI's starts in 2006 and the ministry's in 2011, but both sources seem to be more comprehensive than the IMF's in capturing payments to the government. Of the three, EITI's data are the most detailed.

Figure 3.9 shows substantial differences in resource revenue from the three data sources. The reason for the IMF's being significantly lower than the other two appears to be because the IMF only includes fiscal revenue directly related to the extraction of natural resources as corporate income tax and royalties. EITI also reports indirect payments, customs duties, and land-use fees.⁸ Despite the discrepancies, all three data sources move in the same direction and show similar patterns. Resource revenue has increased substantially since the early 2000s, a reflection of the resource sector's rapid expansion (Figure 3.10) and rising commodity prices.

⁸ There is no breakdown of the IMF numbers, as compiled by the International Centre for Tax and Development, but disaggregated EITI data by tax payment point to the correctness of this conjecture.

In EITI’s data, revenue rose from MNT492 billion (\$417.1 million) in 2006 to MNT2.21 trillion (\$905.5 million) in 2017, a 4.5-fold increase in togrog terms. The Oyu Tolgoi investment agreement in 2009 (Figure 3.9) gave a substantial boost to government resource revenue streams, although they declined during 2014–2016 because of the fall in global commodity prices.

Figure 3.9: Government Resource Revenue, 2002–2017

EITI = Extractive Industries Transparency Initiative, IMF = International Monetary Fund, MNT = Mongolian togrog, MOF = Ministry of Finance.
Sources: IMF Article IV Consultations as compiled by the International Centre for Tax and Development Government Revenue Dataset. <https://www.ictd.ac/dataset/grd/>; Ministry of Finance. Executive Budget Proposal for 2019. <http://www.iltod.gov.mn/?p=4501>; and EITI. Reconciliation Report for 2017. Annexes. www.eitimongolia.mn/mn/reconciliation-report; (all accessed March 2019).

Figure 3.10: Real Resource Gross Domestic Product, 2000–2016

MNT = Mongolian togrog.
Sources: From National Statistics Office of Mongolia. National Accounts. 1212.mn (accessed June 2019).

Figure 3.11 shows the largest share of mining revenue comes from copper concentrate, although coal's share is also sizable. Resource revenue accounts for more than 20% of total fiscal revenue, which further underlines the importance of the resource sector to the government (mining revenue in 2016, however, was unusually low). In 2020, the government projected that it would receive MNT3.2 trillion (\$1.2 billion) from mining—47% from coal, 36% from copper, and only 5.2% from gold. Given that 511 active gold mining licenses comprise 33% of all mining licenses, gold tax revenue appears to be relatively low.

Figure 3.11: Mining Revenue By Commodity as Share of Total Fiscal Revenue, 2011–2017

LHS = left-hand scale, MNT = Mongolian togrog, RHS = right-hand scale.

Sources: Authors' calculations based on Ministry of Finance budget proposals for 2018 and 2019. <http://www.iltod.gov.mn/?p=4501> and <http://www.iltod.gov.mn/?cat=159>; for government revenue: National Statistics Office of Mongolia. Mongolian Statistical Information Service. http://1212.mn/Stat.aspx?LIST_ID=976_Lo5&type=tables (both accessed March 2019).

EITI's 2017 annual report shows revenue streams to the government from 32 companies in the extractive industry at the national level and 13 at the subnational level (Table 3.6). Of the 32, 7 are from mining and 12 from petroleum; companies working in both sectors have to report on 13 revenue streams. At the subnational level, 11 were from both sectors. In Mongolia, taxes are subcategorized into taxes, payments, and fees. Mining companies therefore have to report on 15 types of national taxes and eight subnational ones.

Table 3.6: Number of Extractive Industry Revenue Flows to the Government

Item	National Level	Subnational Level	Total
Both Levels	13	11	24
Tax	6	2	8
Payment	1	5	6
Fee	1		1
Other	5	4	9
Minerals	7	1	8
Payment	7	1	8
Petroleum	12	1	13
Fee	3		3
Payment	9	1	10
Total	32	13	45

Source: EITI (2017).

The EITI collected receipts of 2,068 companies in 2017 (from 2,225 companies holding extractive licenses) totaling MNT2,240,581 million (\$918.0 million). Of these, 230 companies (11% of companies holding licenses) were selected based on their significance to the mining sector. Their total payments were MNT2.1 trillion (\$875.3 million), accounting for 97.1% of total reported payments (Table 3.7). If only tax payments are included, 220 mining companies contributed MNT1.8 trillion (\$737.5 million), whereas 11 petroleum companies reported MNT257 billion (\$105.3 million).

Table 3.7: Tax Payments of Extractive Companies, 2017

Sector/Budget	Number of Companies	Total Payments (MNT million)	Share of Payments (%)
Mining	220	1,878,747.9	87.9
National		1,767,166.4	82.7
Subnational		111,581.6	5.2
Petroleum	11	257,565.4	12.1
National		253,897.9	11.9
Subnational		3,667.5	0.2
Total	230^a	2,136,313.4	100.0

^a One company, Mongolyn Alt MAK, operates in mining and petroleum.

Source: EITI (2019).

Despite a large number of companies operating in the extractive industry, 15 accounted for 90% of total resource revenue in 2017 (Table 3.8). The top five—Erdenet Mining, Oyu Tolgoi, Petrochina Daqing Tamsag LLC., Erdenes Tavan Tolgoi, and Tavan Tolgoi JSC. account for 72% of revenue, with the first two accounting for close to a combined MNT1 trillion (\$409.7 million). To put

this number into perspective, it surpasses the government's total resource revenue before the signing of Oyu Tolgoi's investment agreement. The main point is that inequality in tax payments seems to be high in the resource sector, given that more than 200 companies reported to the EITI in 2017.

Table 3.8: Top Tax Paying Companies, 2017

Rank	Company	Payments (MNT million)	Share (%)	Cumulative Share (%)
1	Erdenet Mining Corporation LLC.	563,691.67	25.5	25.5
2	Oyu Tolgoi LLC.	414,788.30	18.8	44.3
3	Petrochina Daqing Tamsag LLC.	235,873.44	10.7	55.0
4	Erdenes Tavan Tolgoi JSC.	229,531.71	10.4	65.4
5	Tavan Tolgoi JSC.	146,494.46	6.6	72.1
6	Mongolyn Alt MAK LLC.	108,946.64	4.9	77.0
7	Energy Resources LLC.	78,176.47	3.5	80.5
8	Tsairt Mineral LLC.	67,729.18	3.1	83.6
9	SouthGobi Sands LLC.	47,749.02	2.2	85.8
10	C.O.A.L LLC.	23,977.85	1.1	86.9
11	Shin Shin LLC.	20,539.66	0.9	87.8
12	Boldtumur Eruu Gol LLC.	15,546.89	0.7	88.5
13	Mongolroostvetmet LLC.	14,353.62	0.7	89.1
14	Chinhua MAK Nariinsukhait LLC.	13,250.11	0.6	89.7
15	Usukh Zoos LLC.	13,176.11	0.6	90.3

Source: EITI (2019).

Figure 3.12 shows royalty payments were by far the main fiscal instrument for collecting revenue from the mining sector, followed by corporate income tax and VAT. The three instruments contributed 77% of all mining tax payments; 16 other revenue flows contribute the rest.

Figure 3.12: Sources of Mining Tax Revenue, 2017

MNT = Mongolian togrog.
Source: EITI (2019).

Estimates of government take

An important issue is whether the government, as the constitutional owner of the country's natural resources, receives a “fair share” from their extraction. A simple measure of government take is constructed that defines it as the ratio of total resource revenue to resource GDP.⁹ For comparison purposes, IMF, Ministry of Finance, and EITI data are used. Figure 3.13 shows estimates of the government take from 2002 to 2017. As before, government take shows similar patterns across the data sources. It is highest in the EITI data, but it fluctuates widely, from 22% to 85% of resource GDP.¹⁰

The fluctuations are somewhat lower in the Ministry of Finance data (19%–58%) and lowest using the IMF data (12%–44%). The striking feature is that these large fluctuations seem predominantly driven by commodity price cycles. The correlation coefficient between the IMF's Commodity Price Index and the government take is well above 0.80.

Figure 3.13: Government Take Estimates, 2002–2017

EITI = Extractive Industries Transparency Initiative, GDP = gross domestic product, IMF = International Monetary Fund, MOF = Ministry of Finance.

Sources: IMF Article IV Consultations as compiled by the International Centre for Tax and Development Government Revenue Dataset. <https://www.ictd.ac/dataset/grd/>; Ministry of Finance. Executive Budget Proposal for 2019. <http://www.iltod.gov.mn/?p=4501>; EITI Reconciliation Report for 2017, Annexes. www.eitimongolia.mn/mn/reconciliation-report; and National Statistics Office of Mongolia. Mongolian Statistical Information Service. http://1212.mn/Stat.aspx?LIST_ID=976_Lo5&type=tables (all accessed March 2019).

The estimated semi-elasticity between the two variables ranges from 0.22 and 0.51, depending on the data source. These numbers suggest that a 10% increase in the Commodity Price Index boosts government take from 2.2 to 5.1 percentage points (Table 3.9).

⁹ Ideally, the measure would be adjusted for costs, but these are unobserved.

¹⁰ The unusually high 85% share in 2011 was due to one-off payments associated with Oyu Tolgoi.

Table 3.9: Relationship between Government Take and the Commodity Price Index

Item	IMF Data	MOF Data	EITI Data
Correlation coefficient	0.86	0.83	0.83
Semi-elasticity	0.22***	0.37**	0.51***

EITI = Extractive Industries Transparency Initiative, IMF = International Monetary Fund, MOF = Ministry of Finance.

Notes: Commodity Price Index is measured in logs. Sample period is 2002–2016.

***, **, * denote the level of statistical significance at 1%, 5%, and 10%, respectively.

Source: Authors.

The main point is that not only is fiscal revenue procyclical for commodity prices but so is the government take. The latter implies that the fiscal regime is progressive. Corporate income tax and some other revenue flows are naturally progressive, but whether this is so for royalties depends on their design. The additional royalties introduced in 2010 led to a more pronounced procyclical government take, but this was less so for royalties collected on an ad valorem basis. Dividend payments are progressive.

There are also other determinants of government take. New resource projects are typically not profitable, which means no corporate income tax flows. When there are many new resource projects, or one very large one, the government's fiscal take declines. This also happens when the fiscal take is backloaded because of concessional schemes, such as accelerated depreciation, investment tax credits, or loss carry forward. These schemes are very common for mining projects involving foreign equity participation to reduce their risks, among other things. The decline in government take since 2010 is therefore not just a story of declining commodity prices but also of Oyu Tolgoi coming online. This involved tax incentives, including a 10% investment tax credit. The government's decision to finance its 34% equity share in Oyu Tolgoi through a carried interest arrangement meant an additional backload in fiscal take from the mine.

The rest of the section analyzes government take in 2017 at the firm level—the ratio of taxes paid to sales revenue—using data in EITI (2017).¹¹ Here, the government take varies significantly across companies, from 7.7% for one of the largest coal exporters, Energy Resources LLC., to over 34% for oil exporter Petrochina and coal exporter Tavan Tolgoi JSC. (Table 3.10).

¹¹ The measure of government take in this section is based on resource GDP, which is the sum of final sales and changes in inventories, and therefore different from the one used at the firm level. In practice the difference is nonmaterial as changes in inventories are typically small.

The variation in part reflects the different stages of production for these mines: some have already recovered their initial capital expenditure while others are still doing so.

Table 3.10: Top 10 Extractive Company Tax Payers and Government Take, 2017

Company	Tax Paid (MNT million)	Sales Revenue (MNT million)	Government Take (%)
Erdenet Mining Corporation LLC.	563,691.7	1,883,257.5	29.9
Oyu Tolgoi LLC.	414,788.3	2,295,568.4	18.1
Petrochina Daqing Tamsag LLC.	235,873.4	678,937.5 ^a	34.7
Erdenes Tavan Tolgoi JSC.	229,531.7	1,182,363.5	19.4
Tavan Tolgoi JSC.	146,494.5	426,133.1	34.4
Mongolyn Alt MAK LLC.	108,946.6	501,396.4 ^b	21.7
Energy Resources LLC.	78,176.5	1,015,952.8	7.7
Tsairt Mineral LLC.	67,729.2	225,886.2	30.0
SouthGobi Sands LLC.	47,749.0	258,002.4	18.5
C.O.A.L LLC.	23,977.8	172,650.8	13.9
Total/average for top 10	1,681,085.3	7,961,211.2	21.1

^a Estimated based on production volume and average monthly prices from the Mineral Resources and Petroleum Authority of Mongolia.

^b Estimated based on production volume and the realized price for a similar producer (Tavan Tolgoi).

Source: EITI (2019).

Figure 3.14 shows a strong positive association between the two variables—sales and tax payments. The figure also highlights the importance of the two largest mines—Oyu Tolgoi and Erdenet Mining—for fiscal revenue, as both produce copper concentrates.

Figure 3.14: Top 10 Extractive Companies Sales and Tax Payments, 2017

MAK = Mongolyn Alt MAK, MNT = Mongolian togrog.

Source: EITI (2019).

Government take: International comparison

This section compares Mongolia's government take to that of Botswana, Indonesia, and the Lao People's Democratic Republic (Lao PDR) from 2002 to 2016. Indonesia and the Lao PDR were chosen on the basis of data availability and being in Asia; Botswana, like Mongolia, is rich in natural resources (mostly diamonds), landlocked, and very sparsely populated.¹² Figure 3.15 shows that Mongolia's government take is neither particularly high or low relative to the other countries. Botswana's is the highest, fluctuating from 60% to 80%. The government takes of Indonesia, the Lao PDR, and Mongolia also vary within a band of 20 percentage points, although they seem to comove in opposite directions. Indeed, the correlation coefficient and semi-elasticity between government take and commodity prices are negative in these countries (Table 3.11).

Figure 3.15: Government Take Estimates in Selected Countries, 2002–2017

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic.

Sources: International Monetary Fund Article IV Consultations as compiled by the International Centre for Tax and Development Database; ADB. Key Indicators for Asia and the Pacific Database. <https://www.ictd.ac/dataset/grd/>; Statistics Botswana. <http://www.statsbots.org.bw/>; National Statistics Office of Mongolia. General Statistics Database. 1212.mn (all accessed April 2019).

Table 3.11: Government Price and Commodity Price Index in Botswana, Indonesia, and the Lao People's Democratic Republic

Item	Botswana	Indonesia	Lao PDR
Correlation coefficient	-0.53	-0.29	-0.26
Semi-elasticity	-0.13**	-0.10*	-0.07

Lao PDR = Lao People's Democratic Republic.

Notes: Commodity price index measured in logs. Sample period is 2002–2016.

***, **, * denote the level of statistical significance at 1%, 5%, and 10%, respectively.

Source: Authors.

¹² The data on resource revenue are sourced from the IMF Article IV Consultations as compiled by the International Centre for Tax and Development Government Revenue Dataset, <https://www.ictd.ac/dataset/grd> (accessed March 2019). Resource GDP for Indonesia and the Lao PDR are from the Asian Development Bank's Key Indicators for Asia and the Pacific Database: <https://kidb.adb.org/kidb/sdbsCountryView> (accessed March 2019).

The findings in Table 3.11 suggest the fiscal regime for the mining sector is less procyclical and progressive in the three comparator countries than in Mongolia. This has important implications for fiscal revenue management. An important caveat of this analysis is that only raw government take is compared, which does not account for the type of natural resources extracted, costs, or other country-specific characteristics, such as institutional quality (McMillan and Waxman 2007). Making such a comparison is outside the scope of this chapter, but an interesting avenue for future research.

3.3 Revenue Management

Many resource-rich developing countries are struggling to overcome the difficulties of managing mining revenue because of its special characteristics. The most important is that commodity prices are volatile and hard to predict. In resource-rich developing countries, this often leads to a procyclical fiscal policy that may jeopardize fiscal sustainability.¹³ Both are key challenges for the government. Figure 3.16 shows the strong correlation between expenditure and revenue growth during 2001–2017 that implies procyclical spending patterns. Indeed, among the Asian Development Bank's developing member countries, Mongolia ranked second in terms of fiscal procyclicality (Aizenman et al. 2019). These fiscal spending patterns create macroeconomic instabilities that lower a country's long-term economic growth potential, and are among the chief reasons for the resource curse in resource-rich developing countries. Fiscal procyclicality highlights the importance of sound revenue management (Frankel 2010).

Figure 3.16: Government Revenue and Expenditure Growth, 2000–2017

Source: National Statistics Office of Mongolia. www.1212.mn (accessed March 2019).

¹³ Fiscal sustainability refers to a government's ability to sustain current spending and revenue policies for the long term without defaulting on its public debt.

The authorities often tend to treat an increase in mineral revenue during mining booms as permanent, which makes it hard for the bureaucracy to adjust spending during downturns. As a result, resource-rich developing countries often end up with excessive debt during bust cycles. This issue is especially pronounced in Mongolia, which has accumulated significant debt since 2010 (Figure 3.17).

A particular problem is that expenditure growth at times significantly exceeds revenue growth, suggesting that revenue is spent even before it is realized (Figure 3.16). An example is the cash handout to all citizens, first from the Fund for Development of Mongolia and then from the Human Development Fund. Although the program first started in 2004 on a small scale, it grew into a large one that was supposed to be funded by mineral revenue. However, the revenue was not sufficient to cover the increased handouts, which contributed to the government's heavy borrowing.

Figure 3.17: Government External Debt, 2012–2018

Source: Bank of Mongolia, Foreign Debt Statistics, www.mongolbank.mn.

Another characteristic of mining revenue is that it is based on minerals that cannot be replenished. Policy makers are therefore faced with the challenge of making good use of the proceeds from minerals extracted today for the benefit of future generations, when natural resources will be depleted. The solution is to build assets, either financial or infrastructure, that will generate benefits well into the future.

Two issues resource-rich countries face are rent-seeking behavior and what to do with substantial revenue from finite resource extraction. Mineral revenue attracts rent-seeking behavior by political groups in resource-rich developing countries, especially where control of corruption is weak. In such countries,

mining revenue is substantial and typically constitutes a large proportion of total fiscal revenue (Figure 3.11). In addition, the substantial revenue presents an opportunity for countries to invest in public services and infrastructure, particularly during commodity booms, but this requires selecting good projects. In Mongolia, the poor selection of public investment projects, such as the universal cash handout and white elephant projects, can waste this revenue and lead to inflation.

To tackle these challenges, the government has tried to use a combination of fiscal rules, medium-term fiscal frameworks, and the Fiscal Stability Fund to ensure fiscal sustainability, while also delinking expenditure from volatile revenue. As discussed in Chapter 2, the Fiscal Stability Law introduced the following four fiscal rules:

- **Balanced budget rule.** The fiscal deficit may not exceed 2% of GDP. This was meant to start in 2013, but was postponed three times; the start is now 2023. Under this rule, the fiscal deficit target is reviewed every 4 years.
- **Debt ceiling rule.** The net present value of public debt may not exceed 60% of GDP. This target was originally 40% of GDP and was meant to start in 2013. The target was changed to 60% and is set to start in 2021. For this rule, the definition of the net present value of public debt does not include government loans for mining, energy, and rail projects. It also does not include the debt of the BOM or state-owned enterprises unless there is an explicit government guarantee.
- **Expenditure rule.** Expenditure growth in any one year is limited to the greater of nonmineral GDP growth rate of the year or of nonmineral GDP growth over the preceding 12-year period. The rule was meant to take effect in 2013, but started to be implemented only from 2017.
- **Revenue rule.** Fiscal revenue projections are estimated using “structured procedures.” This rule requires savings in the Budget Stabilization Fund when there is a windfall in mineral revenue. When revenue from a single mineral exceeds 3% of fiscal revenue, the windfall (calculated using a long-term average price) is saved in the Fiscal Stability Fund. A shortfall triggers a transfer from stabilization fund under the Law on Government Special Funds of 2006. The Fiscal Stability Fund allows for exceptions during recessions, natural disasters, and national emergencies.

In practice, poor implementation and sometimes ignorance of the fiscal rules have prevented the four rules from achieving their objectives. The government has also circumvented these rules through various channels. For example, it

used off-budget and quasi-fiscal expenditure extensively during 2012–2016, putting a considerable strain on the budget and ballooning government debt. As a result, in 2017, Mongolia was forced to use the IMF's Extended Fund Facility to avoid sovereign default. The main avenues for this expenditure include the Development Bank of Mongolia, which has used government guaranteed loans to finance a variety of projects, and the price-stabilization programs financed by the BOM. The four rules have also been circumvented through amendments to legislation. The Law on Fiscal Stability has been amended for this purpose 12 times since it was passed in 2010.

To help tackle fiscal policy challenges, the government set up the Future Heritage Fund in 2016 to “park” a portion of mining revenue for the benefit of future generations. Under the law governing the fund, the following revenue flows can be deposited into the fund: 50% of additional, new mining revenue; 20% of mineral revenue windfalls (not including state dividends or royalties); 65% of royalties from mineral projects, after distribution to the Fiscal Stability Fund; and state dividends for developing mineral projects.

Assuming all mineral revenue streams will continue to constitute about 25% of fiscal revenue, and if a number of assumptions are made on future royalties, state dividends, and tax revenue, an estimated 25%–50% of mineral revenue (excluding oil) could be deposited into the Future Heritage Fund in an average year. In other words, under the current rules, 25%–50% of mineral revenue would be saved until 2030, after which 10% of the fund's net investment income, or about 0.2%–0.5% of the value of the fund's assets, could be withdrawn annually (Natural Resource Governance Institute 2015).

3.4 Foreign Direct Investment and Job Creation

This section analyzes the link between FDI to Mongolia and job creation. The important role FDI plays in the development process was emphasized several decades ago by Hirschman (1958). It is often argued that this type of capital inflow benefits host countries through technology transfers, the introduction of new processes, and employee training. This section focuses on the link between FDI and employment creation, because jobs deliver the largest development impacts in communities. Alfaro (2003) and Alfaro and Charlton (2007) find the positive economic effects of FDI are more pronounced in nonprimary sectors. Thus, a distinction is made in this analysis between resource and nonresource FDI.

The analysis focuses on the period after the Oyu Tolgoi investment agreement in 2009. Figure 3.18 shows aggregate FDI inflows to Mongolia from 1992 to 2017. Until the mid-2000s, the inflows were limited, rarely exceeding \$100 million annually. Inflows increased from \$373 million in 2007 to \$845 million in 2008, before levelling off to \$624 million in 2009, presumably because of the global financial crisis. After the Oyu Tolgoi investment agreement, Mongolia experienced an FDI bonanza. In 2010 FDI exceeded \$1 billion for the first time and then rallied to over \$4 billion in 2011 and 2012. Once Oyu Tolgoi commenced open pit production, FDI inflows levelled off and even stalled in 2015 because of, among others, the fall in commodity prices and a tax dispute between the government and shareholder Rio Tinto. After the dispute was resolved and the \$5.3 billion Oyu Tolgoi underground project went ahead, FDI picked up and was at \$1.5 billion in 2017.

Figure 3.18: Aggregate Foreign Direct Investment Inflows, 1992–2017

Note: The large negative number in 2016 does not represent actual outflows but is the result of Oyu Tolgoi investors refinancing debt.

Source: International Monetary Fund. International Financial Statistics. <https://data.imf.org> (accessed May 2019).

Figure 3.19 shows that most FDI went to the mining sector from 2011 to 2017. The perception that resource-rich developing countries attract large amounts of FDI to the resource sector during a mining boom thus also holds true for Mongolia. But despite the proportion of the nonmining FDI being small, these inflows, as the figure shows, were substantial in terms of dollar amounts, especially compared with total FDI inflows before Oyu Tolgoi started operations. This pattern is consistent with Toews and Vezina (2018), who find evidence of a 58% increase in nonresource FDI after the discovery of a new natural resource deposit. They also find that this effect is stronger in poor countries with weak governance.

Figure 3.19: Share of Resource and Nonresource Foreign Direct Investment Inflows, 2011–2017.

FDI = foreign direct investment.

Note: Disaggregated FDI data by sector are only available from 2011.

Source: Bank of Mongolia. Foreign Debt Statistics, www.mongolbank.mn (accessed March 2019).

The employment situation brightened after the Oyu Tolgoi investment agreement (Figure 3.20), with employment rising an average annual 2.5% from 2009—a rate of growth that is higher than the 2.0% growth in the economically active population (ages 15 and over). Because of this, the unemployment rate decreased substantially, from 11.6% in 2009 to 7.8% in 2018 (Figure 3.21). Robust job growth during resource booms should not be taken for granted. Employment growth in Uzbekistan, a resource-rich developing country, remained sluggish during its commodity price boom, which resulted in significant outward migration.

Figure 3.20: Employment, 2009–2018

Source: National Statistics Office of Mongolia. Labor Force Data. http://1212.mn/stat.aspx?LIST_ID=976_Lo4, Labor Force Data (accessed March 2019).

Figure 3.21: Unemployment Rate 2009–2018

Source: National Statistics Office of Mongolia. Labor Force Data. http://1212.mn/stat.aspx?LIST_ID=976_Lo4, Labor Force Data (accessed March 2019).

The largest number of jobs were added in retail, processing, and construction after 2009, but agriculture, the largest sector, continued to shrink (Table 3.12). The fastest-growing business activities were finance and insurance, administrative services, and energy (electricity and gas), which all experienced yearly growth rates of over 6%. Mining, often considered to be highly capital intensive and a small contributor to job growth, added a sizable 20,000 jobs during 2009–2018. However, this should not be seen as an indication of a labor-intensive mining sector, but rather it reflects the huge size of the Oyu Tolgoi project relative to the Mongolian economy.

An interesting issue to investigate is how many of the jobs newly created since 2009 can be attributed to the wave of FDI inflows following the Oyu Tolgoi's investment agreement. Empirical research on whether FDI generates additional employment in developing countries has produced mixed results and seems to be sector dependent. Such job creation seems to be more pronounced in manufacturing than services (Karlsson et al. 2007; Basker 2005; Atkin, Faber, and Gonzalez-Navarro 2018). Toews and Vezina (2018) found that nonresource FDI inflows increased substantially in the 2 years after a large offshore gas discovery in Mozambique in 2009, with each nonresource job generated by this FDI creating an additional 4.4–6.5 jobs.

Although the FDI associated with the Oyu Tolgoi project likely boosted employment in mining, *a priori* it is not clear whether this generated jobs in other sectors. To analyze to what extent nonresource FDI was job-creating, Sayour and Schröder (2020) estimate the FDI job multiplier in Mongolia by focusing

Table 3.12: Employment By Sector, 2009 and 2018

Divisions	2009	2018	Difference	Annual growth (%)
Total	1,006,285	1,253,023	246,738	2.5
Agriculture, forestry, fishing, and hunting	348,805	334,100	-14,705	-0.5
Mining and quarrying	34,798	57,688	22,890	5.8
Processing industries	62,729	100,802	38,073	5.4
Electricity, gas, steam, and air conditioning supply	9,537	16,305	6,768	6.1
Water supply; sewerage, waste management	6,098	6,866	768	1.3
Construction	49,590	76,595	27,005	4.9
Wholesale and retail trade	160,312	211,188	50,876	3.1
Transportation and storage	68,651	73,566	4,915	0.8
Accommodation and food service activities	23,306	37,489	14,183	5.4
Information and communication	10,140	14,090	3,950	3.7
Financial and insurance activities	12,260	25,688	13,428	8.6
Professional, scientific, and technical activities	10,849	14,608	3,759	3.4
Administrative and support service activities	8,849	18,184	9,335	8.3
Public administration	56,134	76,196	20,062	3.5
Education services	74,903	98,739	23,836	3.1
Other	69,324	90,919	21,595	3.0

Source: Compiled from National Statistics Office of Mongolia. Labor Force Data. http://1212.mn/stat.aspx?LIST_ID=976_L04 (accessed March 2019).

on the period after the Oyu Tolgoi investment agreement (Box 3.3). Unlike in Mozambique, job-multiplier effects are negative in Mongolia. The reasons for this are not clear. Some FDI jobs may have displaced local ones, which might outweigh the positive effects of an initial increase in local incomes. Another possibility is a lack of multinational enterprises' forward and backward linkages to the local economy. A negative FDI job multiplier, however, does not mean that inflows from nonresource FDI are not benefiting Mongolia's economy overall. In addition to the jobs being created in the FDI projects themselves, there could have been efficiency gains and other positive spillovers, although these have been difficult to measure empirically (Eichengreen 2008; Schröder 2017). That FDI into the resource sector is accompanied by flows that create jobs in other economic sectors is in itself novel insight. The finding of a negative FDI job multiplier should not discourage Mongolia's government from taking further measures to attract this foreign investment.

Box 3.3: Nonresource Foreign Direct Investment and Job Creation

Sayour and Schröder (2020) estimate the job multiplier stemming from foreign direct investment (FDI) flows into the nonresource sector in Mongolia. To do this so they used greenfield FDI project data that gave information on the total dollar amount invested, the number of jobs created, the destination *aimag* (province),^a and the sector of the business activity.

They then matched this data to the total number of jobs per industry, *aimag*, and year, as reported by the National Statistics Office of Mongolia. Their sample period was 2009–2018, which captures the investment boom—marked by a surge in FDI inflows—that followed the investment agreement on the Oyu Tolgoi copper and gold mine. During this period there were 52 nonmining greenfield projects, which amounted to \$3.1 billion and created over 6,000 jobs.

To estimate the multiplier effect of nonextractive FDI inflows on local jobs, the authors estimated the following triple-difference regression

$$Y_{ijt} = \alpha_{ij} + \beta_{it} + \gamma_{jt} + \theta FDI_{ijt} + \varepsilon_{ijt},$$

where Y_{ijt} measures the number of local jobs in industry i , *aimag* j at time t , which is calculated as the difference between total jobs and the number of FDI jobs created through the FDI projects. The term α_{ij} captures industry-city fixed effects that control for geographic effects affecting specific industries, while β_{it} are industry-year fixed effects controlling for time trends in specific industries. *Aimag*-year fixed, γ_{jt} , capture the time trends in *aimags*. The remaining variation is absorbed through ε_{ijt} , the error term. To deal with the issue of serial correlation, errors are clustered on the industry-city level, as suggested in Bertrand, Duflo, and Mullainathan (2004).

The coefficient of interest is θ , whose value represents the multiplier effect of FDI jobs on local jobs. The estimated multiplier effect was found to be negative and statistically significant. This suggests that there were negative spillover effects from FDI to the local economy in terms of jobs. This result is robust to a number of other specifications—for example measuring FDI_{ijt} through the dollar value of projects undertaken in industry i , *aimag* j at time t .

^a Provincial administrative unit in Mongolia.

Sources: Authors; Bertrand, Duflo, and Mullainathan (2004); Sayour and Schröder (2020).

3.5 Policy Recommendations and Conclusions

The following policy recommendations are offered to help Mongolia convert its natural resources into economic development.

Consider avoiding backloading fiscal resource revenue for future projects. Mongolia, as a developing country, has a significantly higher discount factor than developed countries. This means the authorities should have a strong preference for immediate rather than future resource revenue flows—a preference that should be reinforced given the high government debt. Although backloading fiscal resources is necessarily more pronounced in mining than in other sectors due to typically large upfront investment spending, aspects of the fiscal regime are inconsistent with this notion.

Related to this is a large variation in government take across mining companies (Table 3.10). While there could be valid reasons for this, such as some mining projects being more profitable than others or being at different production stages, the government should nevertheless examine the reasons for the variation and factor the reasons into its design of the fiscal regime in the future.

The government should consider alternative options to equity participation through debt financing in future large mining projects. Debt finance lowers net present value and delays the flow of future dividend payments. In the resource taxation literature, it is well known that governments can also capture dividend payments through corporate income tax and other tax instruments (Boadway and Keen 2010; Daniel 1995). This may be a better path to take than the equity one.

Use the revenue-side fiscal regime for mining to smooth expenditure. Mongolia has struggled with implementing countercyclical fiscal policies—and not least because of difficulties adhering to the Fiscal Stability Law, which culminated in a government debt crisis. Instead of exclusively focusing on the expenditure side, the government should also aim for more stable resource revenue flows to tackle these issues. Resource revenues in Mongolia fluctuate more strongly with commodity prices compared with other resources-dependent countries, which also contributes to procyclical fiscal spending patterns. Increasing reliance on more stable payments, such as royalties, instead of ones that covary positively with commodity prices, such as corporate income tax, is advisable. The upside of this approach is that, unlike fiscal rules, it does not need repeated government commitment once the changes are made.

Improve revenue projections. The government has many competing spending priorities, including reducing public debt, and improving infrastructure, education, and health-care. Budgeting for these priorities requires realistic projections of mining revenue. The projections have been too optimistic, leading to excessive spending and a lack of fiscal discipline (Figure 3.22).¹⁴

The government should carefully analyze the mining sector's prospects in terms of demand for key commodities, and prospects for new and existing mining projects, and then plan the fiscal policy accordingly.

Figure 3.22: Revenue Projections versus Actual Outturn, 2012–2016

MNT = Mongolian togrog.

Source: Adapted from Natural Resource Governance Institute (2017).

Mongolia needs to invest in capacity to improve its mining revenue projections, and to resist political pressures to overestimate them. Better coordination of revenue estimates is needed among the Ministry of Finance, BOM, Ministry of Mining and Heavy Industry, National Development Agency, Parliament, and Fiscal Stability Council. Where revenue falls short of projections, fiscal expenditure should be reduced instead of resorting to deficit spending.

The following two recommendations are aimed at improving the administration of tax policy, and geological surveying and licensing.

¹⁴ An important example is the revenue projections for the large mining projects, notably Oyu Tolgoi's copper and gold deposits, and Tavan Tolgoi's coal deposits, which have proved to be overoptimistic. Similarly, coal exports to the People's Republic of China have been grossly overestimated. These unwarranted expectations have contributed to government's overspending.

Improve the handling of double tax treaties, transfer pricing, and ring fencing. Mongolia has double tax treaties with 26 tax jurisdictions, which have priority over domestic legislation. This could create significant risks to government revenue because most of these treaties have tax-related concessions. While treaties can be important for attracting investments, the government should ensure they are not abused through “treaty shopping.”

Similarly, transfer pricing is a common problem for tax administrations around the world. Because many multinationals operate in mining, there is also a cross-border dimension to this issue, which makes the collection of corporate income taxes particularly complicated.

In light of these challenges, Mongolia’s recent joining of the Base Erosion and Profit Shifting Project of the Organisation for Economic Co-operation and Development and the G20 is an important step in the right direction.¹⁵ The government, however, needs to increase its commitment to projects by ensuring that tax laws are clarified in relation to transfer pricing. The government also needs to strengthen the capacity of tax authorities to deal with complex tax issues.

Increase funding for geological surveying and improve the licensing system. The government needs to provide more resources and funding to geological surveying. The resulting information should be shared with potential investors in exploration. As discussed, Mongolia is undersurveyed and government funding for geological surveying is inadequate. The government needs to ensure that the licensing system is improved in a way that tackles corruption risks (for example, risks identified by Transparency International in 2018 for Mongolia) and increases transparency and openness. For example, information on the beneficial owners of applicants could be required as part of the application process.

¹⁵ The Base Erosion and Profit Shifting Project is a collaboration of 125 countries that aim to stop tax avoidance strategies.

CHAPTER 4

Economic Diversification Beyond Mining

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Mongolia has been one of the world's fastest growing economies since 2010. The rate of gross domestic product (GDP) growth hit its highest level in 2011 at 17%. The economy—which is highly dependent on mining and commodity prices—has found it increasingly difficult to sustain this momentum since then, with growth at 7.2% in 2018 and 5.1 in 2019. The most recent global economic slowdown as a consequence of the coronavirus disease (COVID-19) pandemic will result in a further slowdown and an expected growth rate of 2.1 in 2020 (ADB 2020). Mongolia's inherently volatile economy is a source of great uncertainty for businesses, investors, and policy makers. One way to overcome this is to diversify the economy to make it less susceptible to commodity price fluctuations and negative shocks in the mining sector. A more diversified economy also helps to provide more opportunities for people to find new jobs as some sectors might contract while others expand. In general a more diversified economy translates into more broad-based growth. Diversification is thus a means not an end.

Diversification can happen along two dimensions: domestically and internationally. Domestic diversification means that the economy produces an ever greater variety of goods and services. It is important to highlight the role of services, as many studies only consider the product space of an economy in terms of goods. In the majority of advanced economies, services account for over three-quarters of the economic activity.

International diversification describes the process of expanding the number of trading partners as well as goods and services exported. Domestic and international diversification are obviously interlinked and both help to make the economy more resilient against shocks.

Diversification is a process that takes time and major changes can be observed over decades, rather than years. The Mongolian economy has undergone significant structural change since 2000, transitioning from being dominated by agriculture to having a large mining industry and mining-related sectors. Figure 4.1 shows the growth and decline by sector since 2000, with rates of GDP growth more than trebling amid these changes.

**Figure 4.1: Gross Domestic Product by Sector, 2000–2018
in Real 2010 Prices**

MNT = Mongolian togrog.

Source: National Statistics Office of Mongolia. Gross Domestic Product. http://1212.mn/tables.aspx?TBL_ID=DT_NSO_0500_001V1 (accessed August 2019).

Mining accounted for 20% of GDP in 2018, compared with 12% in the early 2000s. Agriculture and its related sectors are growing, but at a slower pace. In 2010 agriculture accounted for 20% of GDP, but this had declined to 11% in 2018. Services have become the largest sector, accounting for 40% of GDP. Resource-rich developing countries typically experience an expanding services sector, because it partly represents the nontradables sector and is reflective of the Dutch disease effect. Figure 4.2 shows that Mongolia's services predominantly comprise nontradable services.

Resource-rich countries find it difficult to diversify their economies because the real exchange rate tends to appreciate, making them prone to Dutch disease effects. Proceeds from mining raise the relative prices of goods and services in the home country so that domestic producers find supplying the local market more attractive than exporting. As the economy expands, led

Figure 4.2: Services Sector Composition, 2018

Source: National Statistics Office of Mongolia. Industrial Composition of Gross Domestic Product. http://1212.mn/tables.aspx?TBL_ID=DT_NSO_0500_002V1 (accessed August 2019).

by mining, domestic demand for products and services rises, promoting the expansion of domestic nonmining sectors, which in turn boosts demand for imported goods and services, causing further structural change in the economy.

Mongolia's economy is showing signs of Dutch disease. But structural changes in the economy have not been caused only by mining. Because Mongolia's endowment of real production factors such as labor and capital are limited, the country has traditionally produced few nonmining products, making it more difficult to diversify away from mining. Indeed, Mongolia's nonmining exports show little diversification, with their share of total exports falling from about 45% in the early 2000s to 13.6% in 2018 (Figure 4.3, panel a).

One way of looking at how Mongolia's exports influence the economy and its structure is to look at their expansion over the long term (Figure 4.3, panel b). From 2002 to 2018, total exports grew by an average of 16% a year, a significant level of sustained growth. In this period, however, nonmining exports grew only by 6% per year.

Mongolia's nonmining export products are also not well differentiated (Figure 4.4). Mongolia has made little progress since 2000 in exporting a wider mix of products. As of 2018, the value added of differentiated products made up only 7.0% of total exports. In comparison, the share of differentiated products was 21.7% in Latin American developing countries (excluding Mexico) and was 62.3% in developed countries (Martincus and Carballo 2012).

Figure 4.3: Composition of Exports, 2000–2018

Sources: National Statistics Office of Mongolia. Exports. http://1212.mn/tables.aspx?TBL_ID=DT_NSO_1400_005V1 and Mongolian Customs General Administration. Trade Statistics. <http://www.customs.gov.mn/en/services/trade> (both accessed August 2019).

Figure 4.4: Shares of “Homogeneous” and “Differentiated” Products in Nonmining Exports, 2008–2018

Sources: National Statistics Office of Mongolia. Exports. http://1212.mn/tables.aspx?TBL_ID=DT_NSO_1400_005V1 and Mongolian Customs General Administration. Trade Statistics. <http://www.customs.gov.mn/en/services/trade> (both accessed August 2019).

The composition of Mongolia’s exports has not changed much over the years: about 50% of nonmining exports continue to be textiles, mainly wool, cashmere, and woven fabrics (Figure 4.5).

Since 2017, livestock has become an increasingly important export product, due to Mongolia exporting meat to the People’s Republic of China (PRC).

Figure 4.5: Nonmining Exports, 2000–2018

Sources: National Statistics Office of Mongolia. Exports. http://1212.mn/tables.aspx?TBL_ID=DT_NSO_1400_005V1 and Mongolian Customs General Administration. Trade Statistics. <http://www.customs.gov.mn/en/services/trade> (both accessed August 2019).

These exports rose almost ninefold from 2015 to 2017, when they totalled \$38 million and accounted for 70% of total meat exports.

Exports of machinery and equipment and of basic metals are highly dependent on mining. When mining contracts, exports of machinery and equipment increase as companies move out of the country. When mining expands, exports of machinery and equipment decrease.

4.1 Diversifying the Economy and Expanding Exports

The government has long recognized the need to diversify the economy, and this has been at the forefront of economic policy making for many years. Numerous government programs aimed at creating a multipillar economy have been approved. In 2008, the Parliament adopted the Comprehensive National Development Policy, which was based on the Millennium Development Goals. The policy acknowledged that, because the economy was highly dependent on mining, the country should take full advantage of the sector's development in the short term. In the medium-to-long term, however, the policy envisioned a diversified, private-sector-led economy using advanced technology with a highly developed manufacturing sector and low dependence on mining. The policy envisaged this being achieved through industrial, infrastructure, and

regional development. The policy set timelines for achieving these goals, but it lacked financing arrangements and policy enforcement mechanisms.

In 2018, the Parliament adopted the Mongolia Sustainable Development Vision 2030 in which the goal of sustainable economic development would be attained through diversification. The policy identified the energy and infrastructure sectors for development at the outset and prioritized agriculture; light industry; food; construction materials; copper refining; coal, petrochemical, and iron production; tourism; and mining. For the policy to be successful, however, it needs the support of not only the central government but also of lower-level government. It also needs to be implemented through step-by-step sector-specific programs. Tuvshintugs and Delgermaa (2018) and other studies note a lack of sector-specific programs, which will make it difficult for the government to realize the policy's objectives by 2030. The policy also has to be consistent with the Government Action Plan, 2016–2020.

These missing elements are to some extent addressed in the government's 2018 Three Pillar Development Policy Program, which is consistent with both the Sustainable Development Goals and the Government Action Plan. Under the program, there are three pillars of development: economic diversification, promotion of accountable and disciplined governance, and human-centric social policy. The program sets out specific goals to achieve diversification by promoting three broadly defined sectors: food, agriculture, and light industry; mining and heavy industry; and trade, tourism, and infrastructure. The government acknowledges the need for diversification for sustainable development and prioritizes certain sectors to achieve this goal. For example, the Public Investment Program, 2018–2020, which is based on the Three Pillar Development Policy Program, demonstrates the government's intention to pursue comprehensive and implementable diversification policies. But because of a lack of financing, the government is finding it difficult to implement these policies.

To achieve its diversification objectives, the government is supporting small and medium-sized enterprises (SMEs) and promoting exports. During 2011–2015, this effort concentrated on financial support to businesses by providing subsidies to certain sectors, including cashmere and meat. But that financial support was stopped in 2016 because of a lack of funding.

In addition to the government, several multilateral organizations finance trade-related projects to support Mongolia. These include the Asian Development Bank's Agriculture and Rural Development Project, which is aimed at

improving the standards of agriculture products with export potential, and the World Bank's Export Development Project to support small businesses by strengthening their export capabilities. Bilateral organizations, including the German development agency GIZ,¹ the Japan International Cooperation Agency, and USAID² also support SME development in Mongolia. GIZ has financed training programs, provided technical assistance, and helped businesses in certain sectors, including the meat sector, to participate in trade fairs. The Japan International Cooperation Agency has a loan project to support SMEs through Mongolian commercial banks. USAID funded the Economic Policy Reform and Competitiveness Project that promotes competition in and the growth of Mongolia's cashmere, tourism, meat, and leather industries (ERI 2018).

Overall, multilateral and bilateral organizations have provided SMEs in Mongolia with access to crucial financial and technical assistance. But a drawback of these interventions has been that most projects are focused on specific sectors with a narrow reach and are ad hoc in nature, thereby limiting their overall effectiveness.

Causes of the lack of diversification

Many factors explain why economies lack diversification. As just discussed, resource-rich countries inherently struggle to diversify their economies. Botswana is an example of a country that struggles to diversify its economy despite its good institutional quality (Kegomoditswe and Adachi 2015). Unlike Botswana, Mongolia's institutional quality is weak, making economic diversification even more difficult. Many business surveys show that Mongolia's institutional quality is low and its business climate poor. The World Bank's 2019 Doing Business project ranks Mongolia 74th of 194 countries for ease of doing business, down from 62nd in 2018. Mongolia's Doing Business score improved slightly for enforcement of contracts, which was made easier by a reduction in fees advanced by plaintiffs. Mongolia ranked 126th of 183 countries in the Heritage Foundation's Economic Freedom Index. Both surveys show that Mongolia's rule of law and regulatory efficiency are not improving and continue to lag behind many countries.

Corruption is a major factor in Mongolia's low institutional quality and poor business climate. Mongolia ranked 93rd out of 180 countries in Transparency International's 2018 Corruption Perception Index, a small improvement from

¹ GIZ = Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH

² USAID = United States Agency for International Development.

2017. Despite recent government efforts to combat corruption, it is still a deep-rooted and widespread problem. In 2017, a new criminal code came into force that imposed stricter penalties for corruption and corruption-related offenses for government officials and their immediate families. The law has not been effectively implemented, however, and corruption remains pervasive.

Mongolia's weak institutions and poor business climate impede investment. The Frazier Institute ranks Mongolia 81st of 104 countries in terms of investment attractiveness. Figure 4.6 shows domestic and foreign investment from 2000 to 2017.

Foreign direct investment has been volatile, experiencing a drastic drop during 2012–2015 and a rebound in 2016–2017. Although many factors led to this dramatic volatility (such as a significant decrease in the country's terms of trade), even with much improved terms of trade the country's investment is not much higher than the 2012 levels. Moreover, about 75% of foreign direct investment goes into mining (ERI 2017).

Poor infrastructure is another major factor for Mongolia's lack of diversification, and expensive transport is one of the largest impediments businesses face. Mongolia has a comparative advantage in many products, especially in agriculture, but these are underdeveloped and not being exported. The World Bank (2019a) attributes this to a diluted comparative advantage due to Mongolia's weak transport network with the PRC and the Russian Federation. In particular, the World Bank identifies high delivery costs, logistics

inefficiencies, the gap between domestic and international product standards, poor infrastructure, and Mongolia's weak trade facilitation regime as the main reasons for the country's lackluster performance in producing and exporting goods internationally.

This finding is backed by Mongolia's scores on the World Bank's Logistics Performance Index, where it ranked 129th of 167 countries based on its weighted aggregated scores in 2012, 2014, 2016, and 2018.³ In the index's six categories (where 2.00 = low and 5.00 = high), Mongolia scored best on timeliness (3.07) and worst on infrastructure quality (2.12). The index's infrastructure category includes the quality of types of transport; of ports, airports, warehousing, and transloading; and of information and communication technology. Mongolia's low score reflects its unreliable road and rail system, and bottlenecks at border ports (World Bank 2019a).

The level of Mongolia's export diversification and its production of nonmining products depend largely on inputs to supply chains. Because of poor infrastructure and the seasonality of many inputs, establishing a reliable supply chain is a challenge that all producers must overcome. This is especially true for agriculture, which is considered to be the most promising sector to promote economic and export diversification (World Bank 2019c). The literature is extensive on the analysis of supply chains associated with promising products, including cashmere, meat, and vegetables and other food products.

Mongolia's cashmere industry and its supply chain has been growing steadily along with global demand for cashmere (Mongolia International Capital Corporation 2017). Large exporting companies (such as Gobi Corporation LLC., the country's largest cashmere company) have vertically integrated their supply chains, investing heavily in the normally unpredictable process of raw cashmere procurement. This has reduced the susceptibility of such companies to shocks in the cashmere supply chain. Most smaller cashmere producers, however, buy their raw inputs directly from herders. Because of weak connections with these herders, the smaller producers experience difficulties with assuring that their raw inputs are of good quality. In contrast, large cashmere companies in the PRC have strong connections with local herders, making it even harder for Mongolian companies to cultivate new suppliers. Environmental changes and the rapid growth of Mongolia's goat population pose further difficulties for sustaining the quality of cashmere, forcing producers to go to great lengths to ensure specific quality standards in their raw inputs.

³ The index ranks a country's logistics performance on the basis of the efficiency of its customs, quality of infrastructure, ease of arranging shipments, logistics competence, tracking and tracing, and timeliness of shipments.

Studies on the agriculture sector show a diverse set of difficulties. Vegetable cultivation is increasing in Mongolia, but lacks modern technology and uses inferior storage methods that make production at scale difficult. Coordination between growers is lacking, thereby increasing their dependence on intermediaries, which raises domestic vegetable prices (ERI 2019). A shortage of advanced storage facilities and methods makes the consistent production of products that use vegetables as raw inputs difficult. Some companies need large supplies of vegetables for their products but must rely on intermediaries because no single farmer can supply the amounts needed.

In the livestock subsector, producers cite the lack of a specialized workforce, insufficient investment in the industry, and outdated equipment and production technologies as impediments to increasing meat production. Milk and dairy producers have to grapple with the seasonality of raw materials. Most producers of animal hides are small-scale herders who do not have set production volumes. They typically increase production periodically in the late summer and early winter to make extra money for household expenses and to decrease the amount of fodder needed for over-wintering (SECiM 2018). Moreover, exporters encounter customs and market entry problems. For the livestock subsector, the biggest problems are the prevalence of disease and lack of quality assurance. While efforts have been made to promote the issuance of certificates of origin, most herders cannot guarantee the source and quality of their products, making food safety a concern.

One way to overcome issues of quality in the livestock subsector is to use veterinary services and quality assurance systems. These include services such as laboratory testing and issuance of certificates of origin, which have the characteristics of a public good. Such services should be supplied by the government or by nongovernment public entities—chambers of commerce and industry associations, for example—to overcome the coordination failure among Mongolia's small businesses and dispersed suppliers of agricultural raw materials. However, these institutions are either not yet in place or not functioning well.

Labor productivity and structural transformation

The success of a country's structural transformation toward economic diversification can be determined from a breakdown of the contribution of sectors to GDP, employment structure, and labor productivity. This section evaluates Mongolia's sectoral contribution to GDP and employment from 2000 to 2017. A longer timeline was not possible because of data limitations

and Mongolia's transition from a planned economy during the Soviet era to a free market economy in the early 1990s. Moreover, macroeconomic indicators from this period are volatile and not representative of Mongolia's current economic circumstances. Three Asian countries with characteristics pertinent to Mongolia were chosen as benchmarks for comparing the breakdown of output and employment (Table 4.1): the PRC (successful transformation), Kazakhstan (landlocked, large mineral exporter, post-Communist), and the Republic of Korea (successful transformation).

The experience of numerous successful economies in Asia suggests that a key feature of structural transformation is a shift from the primary sectors, such as agriculture, to industry. This shift is evident in countries that have made the transformation, such as the PRC and the Republic of Korea. The data for Mongolia in Table 4.1 suggest a successful structural shift from agriculture to industry (including mining). However, the shift was predominantly due to increased mining output, with mining's share of GDP almost doubling from 2000 to 2017. As mining is a primary sector that is mainly concerned with raw materials, Mongolia's seemingly positive industrial growth should not be considered as a structural transformation in its true sense.

As an economy undergoes structural transformation, its labor structure changes from primarily agriculture-oriented into one in which services employs a large share of the workforce, as has happened in Kazakhstan. Mongolia's share of the workforce in agriculture has fallen sharply, from 48.6% in 2000 to 28.8% in 2017. The decline has been offset by an increase in employment in services. Interestingly, because of the capital-intensive nature of mining, it accounted for only 4.2% of total employment in 2017, despite its growing output as a share of GDP.

Labor productivity is another key indicator of structural transformation in which increased labor productivity is associated with a successful transformation. The PRC, the Republic of Korea, and Malaysia are among the many Asian countries that have successfully transformed their economies from predominantly low-productivity sectors to high-productivity ones. Mongolia's labor productivity growth averaged only 3% a year between 1991 and 2018, indicating its lack of transformation and hence lack of diversification (Figure 4.7). However, while this growth is slow compared with that of some other regional countries, notably the PRC, it is nevertheless in line with that of other post-Communist countries, including Kazakhstan and Tajikistan.

Table 4.1 Output and Employment Structure, 2000–2017

Sector	Mongolia			PRC			Korea, Rep. of			Kazakhstan		
	2000	2010	2017	2000	2010	2017	2000	2010	2017	2000	2010	2017
Output structure (% of GDP)												
Agriculture	30.5	12.9	11.8	14.9	9.8	8.2	4.4	2.5	2.2	8.6	4.6	4.7
Mining	12.0	23.8	23.9	...	...	...	0.3	0.2	0.2	13.8	20.1	14.1
Industry (without mining)	12.7	12.8	15.7	45.7	46.6	40.6	37.8	38.1	39.4	26.1	21.8	19.8
Services	43.6	49.4	47.7	39.4	43.6	51.2	57.5	59.3	58.3	51.1	53.2	61.0
Employment structure (% of total employment)												
Agriculture	48.6	33.5	28.8	50.0	36.7	27.7 ^a	10.7	6.6	4.8	31.4	28.3	15.4
Mining	2.3	3.3	4.2	...	...	...	0.1	0.1	0.1	3.3	2.4	3.3
Industry (without mining)	11.8	12.9	15.0	22.5	28.7	28.8 ^a	20.3	24.9	25.2	14.9	16.3	16.5
Services	37.2	50.2	52.0	27.5	34.6	43.5 ^a	68.9	68.4	69.9	50.5	53	64.8

... = not available, GDP = gross domestic product.

^a 2016 data (2017 data were not available).

Sources: Asian Development Bank (2017b, 2018c).

Figure 4.7: Average Labor Productivity in Selected Economies, 1991–2018

PPP = purchasing power parity, PRC = People’s Republic of China.
Source: World Bank. World Development Indicators Database. <https://databank.worldbank.org/source/world-development-indicators> (accessed August 2019).

Differences in Mongolia’s labor productivity across sectors are not significant, with labor productivity in agriculture, industry, and services increasing annually by 2%–3% on average between 1991 and 2017 (Figure 4.8). Employment growth was similar for industry and services, at about 3% annually during this period, while that of agriculture was low, at 0.6%.

Figure 4.8: Average Annual Growth in Value-Added, Employment, and Labor Productivity, 1991–2017
(constant 2010 \$)

Source: World Bank. World Development Indicators Database. <https://databank.worldbank.org/source/world-development-indicators> (accessed August 2019).

Thus, compared with similar and exemplar countries, Mongolia made a quick transition from an agriculture-based economy to an industrial one; however, much of the transition was due to increased mining output. Mongolia's labor productivity, though still in the range of former Soviet Union countries, lags behind that of developed countries. While Mongolia has achieved significant structural changes, it has yet to successfully transition into a diversified economy. This highlights the need for further modernization and export diversification.

Export sophistication and growth

A country's export basket can reflect its ability to produce high-value-added products and the level of its structural transformation. The experiences of some countries suggest that producing and exporting more diversified and high-value-added products is a key element of a successful transformation. By analyzing export data, it is possible to determine a country's current economic situation and its potential for economic growth and structural transformation.

Studies show that export or production structures that favor relatively sophisticated exports are one of the main economic characteristics that predict sustained growth (Berg et al. 2012). Hausmann, Hwang, and Rodrik (2007) find a positive relationship between a country's export sophistication and its GDP per capita, suggesting that a country's economic well-being depends on the type of products it exports (Figure 4.9).

Figure 4.9: Export Sophistication and Gross Domestic Product per Capita, 2016

EXPY = export sophistication index, GDP = gross domestic product.

Sources: Estimates based on data from World Bank. World Development Indicators Database. <https://databank.worldbank.org/source/world-development-indicators> and Growth Lab at Harvard University, Atlas of Economic Complexity. <https://atlas.cid.harvard.edu/> (both accessed August 2019).

To measure the sophistication of a country's export basket, the PRODY index of each product can be used. The PRODY index shows the world income level associated with a product. The index is the weighted average of GDP per capita of all countries that export that product. The weights used in the calculation are Balassa's index of revealed comparative advantage in that product (Balassa 1965). This calculation assumes that richer countries export more high-value-added products, meaning that the income level or productivity associated with a product (PRODY index) will be higher if it is exported by countries with a high GDP per capita.⁴

Using the PRODY index, a country's export sophistication index (EXPY), proposed by Hausmann et al. (2007), can be calculated. This is done by finding the PRODY index's average for all products in a country's export basket, weighted by the export share of these products. If a country exports products that have a high PRODY index with comparative advantage, its EXPY index will also be higher.

Figure 4.10 shows Mongolia's exports are less sophisticated than those of the PRC and the Republic of Korea, two successful economies, and those of resource-rich Kazakhstan. This suggests that Mongolia exports comparatively lower value-added products, which highlights the need for structural transformation to diversify the economy. As the figure shows, Mongolia's

⁴ PRODY is a product technological sophistication index.

export sophistication stagnated from 2000 to 2006 but increased significantly from 2006 to 2012, mainly because the share of mineral products in exports increased. In 2010, for example, the share rose by 15 percentage points year-on-year. Compared with 2009, coal exports tripled in 2010, when major mining projects started and global mineral prices were favorable.

Another way to look at export sophistication is to use the PRODY index of all 1,242 exported products in the world. These can be divided into five categories: the top 20% are classified as very-high-income products; subsequent 20% increments are classified as high, average, low, and very-low income. As Table 4.2 shows, the PRODY index classification of Mongolia's main exports are in below-average income classifications. This is because the country's exports are heavily concentrated in a few mineral products.

The table also shows the need for Mongolia to diversify its export basket. From 1995 to 2005, about 85% of exports were in the very-low-income classification, which consists of products with the lowest income levels. This shifted in 2010, with the low-income category rapidly growing from 12% of total exports in 2005 to 49% in 2010 as coal exports, classified in the low-income category, expanded dramatically. More sophisticated products, including machinery, mechanical appliances, and electrical equipment, which are classified as high income, have started appearing in Mongolia's export basket in recent years (Figure 4.11). The share of products in the high-income classification grew by 2.5 percentage points from 2010 to 2016.

Table 4.2: Export Share by PRODY Classification
(%)

PRODY Classification	1995	2000	2005	2010	2016
Very high (top 20%)	0.14	0.25	0.24	0.07	0.68
High	2.41	2.03	1.72	0.63	3.13
Average	0.63	3.60	0.91	0.20	0.51
Low	11.72	8.82	12.26	49.15	34.35
Very low (lowest 20%)	85.10	85.30	84.86	49.95	61.32
Total	100	100	100	100	100

Sources: Estimates based on data from World Bank. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators> and Growth Lab at Harvard University, Atlas of Economic Complexity. <https://atlas.cid.harvard.edu/> (both accessed August 2019).

These high-income products have led to the increase of Mongolia's EXPY index since 2010. Even so, the quantity of these products that Mongolia exports is low. The high concentration of and reliance on mineral products in the low-income PRODY classification indicate a lack of diversity of products

Figure 4.11: Products with a Comparative Advantage by Sector, 1995–2016

Note: Out of a total 1,242 products.

Sources: Estimates based on data from World Bank. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators> and Growth Lab at Harvard University. Atlas of Economic Complexity. <https://atlas.cid.harvard.edu/> (both accessed August 2019).

made in Mongolia. In fact, the number of nonmineral products where Mongolia has a comparative advantage has fallen since 2005, when mineral product exports surged.

The share of agricultural products, including animal hair (HS code 5102),⁵ wool (5101), and horsemeat (0205), in total exports has steadily decreased since about 2000, whereas the share of mineral products, including iron ore (2601) and zinc ore (2608), have increased dramatically (Table 4.3).

Table 4.3 shows that copper ore (2603)⁶ averaged 36% of total exports between 1995 and 2016. Because of rising coal prices and the start of major mining projects by Energy Resources and Erdenes Tavan Tolgoi, coal (2701) became a major export product in 2010.⁷ With the start of Oyu Tolgoi's open-pit mining operations in 2009, copper ore again became Mongolia's main export product.⁸

⁵ HS = Harmonized Commodity Description and Coding System.

⁶ Product code of the harmonized classification system with four digits (1,242 products); this classification is used in all estimations.

⁷ Tavan Tolgoi is a large coking and thermal coal deposit in Umnugobi Province. Energy Resources LLC. operates the Ukhuaa Khudag deposit of Tavan Tolgoi, and began mining in 2009. Erdenes Tavan Tolgoi operates in the East Tsankhi section of Tavan Tolgoi. As of 2016, the Tavan Tolgoi deposit was calculated to have a reserve of 6 billion tons of high-grade coal.

⁸ Oyu Tolgoi is a large copper and gold mining project in Umnugobi Province. It is a joint venture between the government and Turquoise Hill Resources. Mining began in 2012.

Table 4.3: Top 20 Exports as a Share of Total Exports

HS Code	Commodity	PRODY	Export Share (%)				
			1995	2000	2005	2010	2016
2603	Copper ore	4,534	37.45	33.71	38.29	29.91	35.75
2701	Coal	15,213	...	...	3.83	34.33	21.53
7108	Gold	7,838	13.21	7.21	14.74	5.71	11.17
2709	Petroleum oils, crude	13,836	0.94	0.41	0.92	5.43	6.45
2601	Iron ores and concentrates	10,048	...	...	0.81	7.43	4.87
5102	Animal hair	1,661	9.28	9.16	4.30	2.84	3.84
7403	Refined copper and copper alloys	5,518	...	0.15	0.14	1.16	2.29
2608	Zinc ore	6,359	...	...	0.98	2.70	2.18
802	Other nuts	4,289	...	0.03	0.05	0.03	1.42
2529	Feldspar	8,471	...	4.17	3.59	2.65	1.36
2613	Molybdenum ore	6,330	5.55	1.25	5.52	2.23	0.75
8708	Parts of motor vehicles	21,577	...	0.01	0.08	0.01	0.64
8431	Parts for use with hoists and excavation machinery	20,578	...	0.14	0.07	0.00	0.52
2616	Precious metal ores	4,549	...	...	...	0.00	0.45
5101	Wool	23,556	2.18	0.69	0.68	0.25	0.43
2607	Lead ore	7,748	...	...	...	0.35	0.40
205	Horsemeat	11,689	...	...	0.55	0.70	0.35
1205	Rape (colza) seed	22,606	...	...	0.01	0.01	0.34
2611	Tungsten ore	4,387	0.10	0.04	0.04	0.10	0.27
6110	Sweaters, pullovers, sweatshirts etc., knit	6,864	2.24	7.34	4.89	0.62	0.26
	Total		71.0	64.3	79.5	96.5	95.3

... = the commodity was not exported.

Sources: Estimates based on data from World Bank. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators> and Growth Lab at Harvard University, Atlas of Economic Complexity. <https://atlas.cid.harvard.edu/> (both accessed August 2019).

4.2 Export Bottlenecks: Company Perspectives

Section 4.2 considers the experience of several companies in different sectors interviewed for this study that are trying to break into export markets or already have a presence in international markets. It looks at their market penetration strategies and how they deal with international standards and regulations, cost and risk sharing, transport and logistics bottlenecks, supply chain and labor market issues, coordination failures, public goods, and the role of government.

To identify companies that export their products, sectors in which Mongolia has a comparative advantage are first identified (Table 4.4). Using Béla Balassa's revealed comparative advantage index (Balassa 1965), Table 4.4

shows Mongolia's most important nonmining exports. A number above 1 suggests an advantage compared with the global average.

Table 4.4: Revealed Comparative Advantage by Priority Export Sector

Product	2009	2010	2011	2012	2013	2014	2015	2016	2017
Textiles	2.25	1.77	1.20	1.32	1.57	1.33	1.38	1.29	0.92
Leather and leather products	2.73	1.89	1.76	1.13	1.24	0.93	1.03	0.91	0.34
Basic metals	0.13	0.10	0.07	0.07	0.08	0.12	0.23	0.28	0.28
Machinery and equipment	0.04	0.02	0.01	0.02	0.05	0.05	0.04	0.08	0.01
Plant-attributed products	0.11	0.01	0.04	0.04	0.08	0.15	0.29	0.39	0.81
Livestock	1.24	1.33	0.46	0.31	0.30	0.14	0.29	0.29	0.55
Food products	0.09	0.07	0.06	0.07	0.11	0.06	0.10	0.07	0.06
Rubber and plastic products	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.03	0.02

Source: Authors' estimates.

Eight companies (mostly small but also some large ones) in emerging sectors that produce higher-value-added products were chosen to examine the challenges such companies faced and how they have dealt with them. Traditional subsectors, such as textiles (cashmere), were not included because they are already well studied. Another traditional subsector, agricultural raw materials, such as animal skins, were also not included because they are not processed. The selected companies were in auto parts, pharmaceuticals, beverages, food and dairy, cosmetics, information technology, and financial services.

Senior managers of the companies were interviewed. Exports constituted a fairly small portion (5%–20%) of their output, except for the auto parts maker, which sold its total production to Japan. All of the companies drew attention to the limited capacity of the domestic market. Because of Mongolia's small population and low purchasing power, they saw export markets as a means to increase production and earn much-needed foreign exchange to import inputs for their products.

This pattern, however, is common to many SMEs globally. Muller et al. (2018), in their study on SME internationalization in the European Union, find that among the 28 member states, micro and small enterprises tend to be concentrated in industries with low export intensities, while the distribution of medium-sized enterprises across industries of different export intensities

tends to broadly mirror that of large enterprises, which have a greater level of internationalization. Mongolia's nonmining producers and exporters have a much lower level of internationalization than those in most other countries.

All the companies interviewed make high-quality products, and recognize that producing "exclusive" products is a requisite for being able to export successfully. For example, the cosmetics company uses natural, locally sourced animal and botanical ingredients. It produces in small batches on an order basis to ensure good quality and freshness. The pharmaceutical company makes herbal medicines and supplements, and has a large research and development unit. A selling point is its use of local ingredients, including rare medicinal herbs. Similarly, the sea buckthorn company uses locally harvested wild and cultured berries to produce essential oil and juice concentrate. The high-quality of sea buckthorn berries is due to Mongolia's climate.

The beverage company is a market leader in its sector and has modern facilities. Its products are diverse and adhere to international standards. The food and dairy producer, also a big company with large industrial facilities, is known for its dried milk product. It draws on local milk and grain sources to produce its high-quality products.

The financial services company developed a software product that takes advantage of a niche market by providing services to meet local needs and regulations in Mongolia. It has also expanded into three countries in Central Asia.

The information technology company is trying to export, but is hampered by a lack of local technological expertise and specialized products. It has, however, had some success with import substitution, where it is able to offer services and software at a lower cost.

The auto parts manufacturing company produces about 50 types of small specialized steel and aluminum parts. All its products are exported to its parent company in Japan and must meet the strict quality standards of car makers in Japan as well as other parts of the world.

A challenge common to these companies is that they are not producing mass products that can be sold in the international market. The way forward therefore seems to be to produce high-quality niche-market products, and (best of all) "exclusive" products—even for standard but differentiated products, such as liquor. Yet, even here their products need to be of the highest

quality, because a low-cost product will not be able to compete in international markets. The same logic applies to tourism (Box 4.1), where Mongolia should offer specific tourism routes and unique experiences instead of the mass tourism offered elsewhere. Overall, the problem does not seem to be a lack of good quality Mongolian products; the need is to get the products into the international market.

Box 4.1: Developing Tourism in Mongolia

Tourism is an emerging sector that can boost Mongolia's economic diversification efforts. Tourism accounted for MNT804.8 billion (\$330.5 million), equivalent to 3.1% of gross domestic product (GDP) in 2017 (WTTC 2018). This is expected to rise 4.5% a year to MNT1.3 trillion (\$527.6 million) by 2028.^a

The direct contribution of tourism—through accommodation, transport, and entertainment, for example—has accounted for only a fraction of the sector's net effect on the economy. The total contribution, including indirect and induced contributions, has provided a more comprehensive picture. In terms of total contribution, tourism accounted for 11.8% of GDP and 11% of total employment in 2018 (WTTC 2019).

Visitor exports, defined as spending for business and leisure in Mongolia by international tourists, made up the bulk of the sector's direct contribution to GDP in 2017, generating MNT1.1 trillion (\$459.3 million). By 2028, visitor exports are forecast to generate MNT1.7 trillion (\$694.8 million) (WTTC 2018). Moreover, tourism attracted MNT1.7 trillion (\$694,800,000), or 26.4% of total investment, in 2017 (WTTC 2018). This is expected to rise by an average of 4.6% a year to reach MNT2.6 trillion (\$1.07 billion) by 2028.

Mongolia has been pursuing policies to develop tourism as a priority sector. The National Tourism Development Program, approved in 2015, is focused on improving the international competitiveness of the sector as a whole. It consists of two phases until 2025 and includes provisions to improve infrastructure, develop tourism products and services based on local communities and protected areas, create a tourist information system, and strengthen the sector's workforce.

Several general national policy documents also include provisions to develop tourism. The Government Action Plan, 2016–2020 aimed to expand the number of tourists that visit Mongolia, and it includes provisions to establish historical and specialized tourism centers in seven distinct areas of the country. Increasing tourism is contained in the Sustainable Development Goals, which calls for the development of tourism as an international destination for nomadic culture, with a goal of attracting 2 million tourists a year.

Continued next page

Box 4.1 continued

Rather than focusing on expanding tourism and increasing the number of tourists, it would be more beneficial to develop Mongolia as a niche tourist destination (Economic Research Institute 2019). Mongolia's advantages lie in its rich nomadic history coupled with its abundance of wildlife, which attracts tourists interested in culture, archaeology, paleontology, animal and bird watching, and nature tourism.

Because of Mongolia's remote location, extreme weather, and weak infrastructure, government policies could focus most effectively on specific action plans to further develop Mongolia's unique advantages rather than broad policies to increase overall competitiveness.

^a Mongolia's tourism sector is likely to start experiencing the effects of the COVID-19 pandemic in the summer of 2020 given that winter and spring are not tourism season. Projections of the impact are not yet available.

Sources: World Travel and Tourism Council (2018, 2019); Economic Research Institute (2019).

Market penetration strategies

Of the companies in the case study, the beverage company was the only one that was able to spend a substantial amount on traditional marketing strategies, which was necessary because its differentiated products (beer, liquor, and soft drinks) each need to be heavily promoted. The company's marketing includes advertising in export markets, and buying and commissioning market research on prospective markets. Because the sector is highly competitive, the company frequently uses consulting companies to learn from the experiences of other businesses when trying to enter new beverage markets. It has successfully exported liquor and beer to the PRC and the Russian Federation since 2012.

The other companies do not spend much on marketing. Their strategy is to contract a distributor or dealer with its own distribution channels and to rely on the quality and reputation of their products to sell themselves. Some of the companies' business connections are made through informal channels, such as word-of-mouth from consumers. The natural cosmetics company targets niche markets that are receptive to the type of products it makes. It has private distributors in Hong Kong, China; Thailand; Taipei, China; Australia; India; and the Republic of Korea. The decision to export to these markets resulted from consumers who saw promise in the products and became distributors. Some of the company's products are sold on amazon.com to improve reach. Companies in Mongolia indicated a reluctance to sell their products through PRC online platforms for fear of counterfeiting.

The food and dairy producer was able to make the transition from using small traders to distribute its products in neighboring markets to formal distribution channels. The company's "organic dried milk from the grasslands of Mongolia"—as described by a senior manager—is sold in the PRC, Kazakhstan, and the Russian Federation. The transition was started through small-scale sales, which introduced their products to these markets. The success with small traders set the ground for scaling up sales by tapping into more formal distribution channels. A culture of drinking milk tea in the three countries helped. The company's products are also selling in the United States as ingredients for bakeries, and it is seeking to expand into other markets. The sea buckthorn company entered several Asian markets and Germany through fairs and exhibitions, where they met formal distributors. Currently, the company is not seeking to expand further, preferring instead to focus on the quality of their products and a reliable supply.

The financial services company used its networks and connections with businesses in other Central Asian countries, which share cultural and historical similarities, to expand into their markets. The company surveyed financial markets in Kazakhstan, the Kyrgyz Republic, and Uzbekistan, and interviewed local players in bank and nonbanking financial institutions. Their research revealed a gap between the needs of mostly smaller entrepreneurs in the three countries and the financial services available to them. The gap could not be closed by local financial institutions, thus creating a niche for the Mongolian company. To get into this market, it set up a subsidiary supported by local partners that could offer financing services, initially in one country and later to the other two. On the financing side, the company draws its resources mostly from capital markets in Japan, but also Germany, New Zealand, and the United States. Its founders were able to access to cheap funding from these markets because of their experience working in domestic and international financial markets.

To sum up, without external support and coordination, giving part of their profit margin to intermediaries appears to be a less expensive way for small companies to penetrate foreign markets than attempting to market their products themselves, especially under their own brands. For more standard products, such as liquor and beer, penetration costs are high, because companies in these markets incur large fixed costs of setting up and running a distribution network. Some companies can successfully operate as subcontractors, with no marketing needs (e.g., the auto parts maker). Similarly, personal connections can be used to reach export markets without much cost.

International standards and regulations

Most of the products the surveyed companies export are sensitive products—food, beverages, pharmaceuticals, and cosmetics—that require adherence to strict domestic and international standards. The larger companies were able to adhere to International Organization for Standardization and Mongolian Agency for Standardization and Metrology standards, but some of the smaller companies had difficulty doing so. That said, the adherence does not appear to be a significant impediment as many of the companies in the study are already leaders in their sector in terms of the product quality and can easily meet domestic and international standards.

The main problem with exporting is complying with the standards of recipient countries, which may differ significantly from domestic ones. The cosmetics company noted that strict standards apply to its sector and that Mongolia's lack of internationally recognized standardization is a barrier to exporting. To export skincare products, proof of origin is required and numerous product safety standards must be met. The company wants to break into new markets, particularly Europe, but it is unlikely to do this in the near future because of the high cost of certification, at over €10,000 for a single cosmetics product. Thus, entering high-potential niche markets for cosmetics that use natural ingredients is still beyond the reach of small-scale Mongolian manufacturers with promising products.

International standards are even stricter for pharmaceutical products. The study's pharmaceutical company said that entering the European market would require completely different production and medical standards, which would raise the company's costs. Rather than overextend itself, the company plans to focus on shifting from exporting pharmaceuticals, which usually have the strictest requirements, to exporting supplements and health food. In the meantime, the company seeks to expand its joint business in the Russian Federation, where its local partner takes care of local standards. The company is also tapping into the new markets in the PRC.

The beverage company, with several decades of business experience, claims to meet Mongolian standards relatively easily; however, they are not recognized internationally, which means that further inspection and testing have to be carried out in destination countries. The company drew attention to the lack of internationally recognized high-tech laboratories and inspection centers to test food and beverage products in Mongolia. As a result, certification, standards, and inspection must be done by foreign facilities, with exporters

bearing the higher cost, as recently experienced by the beverage company. The international distributors of the sea buckthorn company's products carry the testing costs in the importing country, while the company bears the costs of domestic standards that are required by Mongolian regulations for export goods.

Thus, companies in the study exploit various arrangements to meet international standards and regulations. In most cases, the arrangements result in significant outlays that create a financial burden for exporters. In many cases the burden is prohibitively high, forcing smaller businesses to forgo the export market potential.

Cost and risk sharing

As mentioned by the case study companies, one way to export is to form a joint venture with a foreign partner. The auto parts maker is in a joint venture with a Japanese company, which takes advantage of Mongolia's low labor costs. Because there is practically no domestic market for auto parts, the venture was set up solely to export its products. The Japanese partner provides investment, technology, and market information, which significantly reduced the market entry risk for its Mongolian partner. The Mongolian partner does not attempt to independently find new markets, but focuses on producing high-quality parts.

The pharmaceutical company exports to East Asian countries and the Russian Federation. For the latter, it partners with a pharmaceutical company in St. Petersburg, which handles marketing and sales as well as shares the investment. The Mongolian company developed and owns the patent for and design of the products, sending only raw inputs to its St. Petersburg partner, where these are turned into pharmaceutical products. The Mongolian company uses its competitive advantage of having specific knowledge of a local ingredient and how to make it into an effective pharmaceutical product. A potential danger of this practice is that it may run the risk of unauthorized technology transfers, resulting in competitors that have not invested in research and development.

The Mongolian company deals with this by supplying a key ingredient that is not available elsewhere. In doing this it takes advantage of its tangible asset and intangible knowledge, and combines them with the production factors available in the host country, such as human and financial resources and local knowledge of government regulations. Joint ventures like this can attract foreign partners and reduce delays and monitoring costs associated with

contractual agreements with third parties. The company wants to expand into the PRC, and its chief executive said the same business model of finding a local partner who can shoulder investment and the associated risk will likely be used.

The financial services company, in its expansion into Central Asian markets, faced risks associated with weak local regulations and institutions, although these were to some extent mitigated by their local networks. Their local partners are not financially involved in the company, but act as consultants advising on dealing with government regulations and market conditions. The company transferred its loan and artificial intelligence software to its operations in the other countries to maintain its comparative advantage. But the absence of some critical pieces in the government's information system to which the software is connected, such as social security payments, can create a hurdle that is not present in the home market. The company expects to offset this increased risk by gathering further information on potential clients, thus incurring additional costs and charging significantly higher market interest rates on local loans.

Transport and logistics bottlenecks

High transport costs and logistics bottlenecks are major hurdles to increasing and diversifying Mongolia's exports—an issue that came across strongly in the company interviews. Because Mongolia is in the center of a massive continent, its private sector is bound to encounter difficulties with physically reaching international markets. The natural place to start exports is with Mongolia's two big neighbors, the PRC and the Russian Federation. Their proximity was a main reason for the food and dairy, beverage, and pharmaceutical companies entering these markets, as most of their products are bulky and produced in relatively large quantities.

All three companies cited customs, transport costs, and border controls as substantial burdens. Nearby markets, such as the PRC's Inner Mongolia Autonomous Region, are accessed by road; more distant destinations, by rail. The cosmetics and sea buckthorn companies face particularly high transport costs in their exports to the Americas, East Asia, and Europe, as air cargo is the most common delivery method for perishable goods. Another source of financial pressure for the cosmetics company is the cost of a few imported ingredients used in the production. For example, collagen and vitamin E must be bought in small batches to ensure their freshness. Because of the higher price of these ingredients, customs duties, and transport costs, the company's products become less competitive, resulting in lower profit margins.

The auto parts company generally transports its products by rail to ports in the PRC and then via sea freight to Japan. Sometimes the company has had to send parts by air cargo to meet delivery deadlines—a costly alternative.

Supply chain disruptions

Some of the companies cited supply chain disruptions as a main constraint to being able to take advantage of economies of scale and deliver a steady supply of their products. Companies that rely on agricultural raw materials face the same problem, whether they export or not. The main supply chain problem faced by the dairy company is the seasonality of milk production—an abundance in summer and a severe shortage in winter. The pastoral nature of animal husbandry also hinders an uninterrupted supply of raw milk. The technology in use does not allow storage of large quantities of milk for a long time. These factors undermine the sustainability of production and hinder exportability.

The beverage company has no problem getting inputs for its main export products (liquor and beer), but, as a major dairy producer for the domestic market, it faces severe disruptions in its milk production. To counter this and secure a more reliable supply of milk, the company made a contractual arrangement with a large farm that has a herd of several hundred cows. The contractual arrangement includes fixed prices (prices usually fluctuate severely due to seasonality) and loans for farmers to invest in improved shelter and cooling tanks. The initiative is small-scale so far and contributes only marginally to the company's supply needs. To more sustainably produce dairy products, Mongolia needs to use a better breed of dairy cattle, secure a reliable source of animal feed during the winter, improve cattle shelters, and improve the management of pastoral grassland to avoid overgrazing of public pastures. Traditional animal husbandry needs to be more commercialized, and this is also the case for agricultural raw materials that are turned into products.

The pharmaceutical company has difficulties securing the quantity of herbs it needs. The sustainability of the supply of wild plants native to Mongolia is an important supply chain concern for this company, as the wild plants grow in restricted geographical areas and cannot be harvested on a mass scale. The company holds training programs for its pickers to protect rare plant species and ensure a sustainable supply. The company is studying domesticating and growing its own plant inputs to boost supplies. The domestication of the wild-grown herbs, however, takes several years and cannot be done on a large scale.

As a result, the considerable potential for expanding the production and sale of health supplements to the Russian Federation is not being fully realized, and the growth in both is slow. Supply chain problems were less pronounced in the cosmetics company, because it is a small producer.

Labor market difficulties

Most of the companies used in the study find it hard to hire and maintain workers with the needed educational attainment and skills. Labor market regulations are not strict in Mongolia, and unions and similar organizations play a marginal role in labor issues. Minimum wages are regulated, but their impact on the labor market has not been studied. That said, minimum wages do not seem to be an issue with employers, who are more concerned with the low level of knowledge and skills in the workforce. Most of the companies in the study hire recent graduates of higher education institutions and then train them in the basic skills that are required in their business.

On-the-job staff training at the dairy company lasts about 2 years. But retention is a problem because, once trained, staff often move to higher paying jobs elsewhere in the industry. The pharmaceutical company has its own specialized higher education institution, which successfully competes with the public medical university in training pharmacists. This helps to resolve its human resource issues. The information technology sector has a brain-drain problem that forces up salaries, as companies in the sector compete to hire well-qualified specialists. The issue is aggravated by trained specialists finding better-paid jobs abroad, for example, in Japan.

Mongolia faces, in essence, two labor-market problems. The first is that its higher education system is failing to produce graduates with the knowledge and skills needed in the labor market. In other words, there is a supply–demand mismatch. The mismatch is not only due to the failure to train students in the needed professions but also in the quality of higher education and university curricula. The latter should be more focused on important learning outcomes, such as skills, instead of focusing on theories. This could be addressed by government intervention to ensure stricter accreditation for education institutions and regulations to increase the quality of courses.

Second, businesses, especially smaller ones, need to revamp their human resource practices. Many smaller businesses in Mongolia lack good human resource practices, including clear job descriptions, responsibilities and expectations on both sides, and an organizational culture. The auto parts

company benefited from adopting the culture of *kaisen* (incremental but consistent improvement) from its Japanese partner, and it sets regular working hours. The company does not have a problem retaining employees, which seems to be an important constraint for most other companies in the study.

Coordination failures, public goods, property rights, and the role of government

As is widely acknowledged, one of Mongolia's advantages is its natural and agricultural resources from which companies are able to produce high-quality products. Many of the country's export products play on the theme of being exclusive, natural, and organic. These include organic cashmere and wool; herbal and natural skincare products; and organic food and beverages, such as raw honey, berry juices, and preserves. Promoting this theme globally can help Mongolian companies export. Because of the "public good" nature of this type of promotion, it should be undertaken by the government or nongovernment public entities, such as chambers of commerce and industry associations. The scattered efforts by individual companies, especially small firms, to advertise themselves as exclusive are both unlikely to be effective and constitute a coordination failure. An "umbrella" type of promotion with government support will help smaller businesses, which are often excluded from fairs and other promotional events on cost grounds.

Similarly, individual exporters who use foreign laboratories to test their products incur onerous costs. Larger companies, such as the beverage company, can afford the costs, but the high costs of testing and meeting international standards still make their products less competitive. Smaller companies generally cannot afford such costs and so miss out on global market opportunities. Therefore, Mongolia needs to build modern, internationally recognized testing and standards facilities. Some laboratories in the region have questionable reputations and there is a market for reliable testing services to be provided not only for Mongolian producers but also for other producers in Central Asia. This could be an opportunity for the government to modernize its aging testing and certification facilities and become a regional presence in such facilities.

Another coordination failure is related to building and maintaining distribution channels in export markets. Many businesses in Mongolia, especially SMEs, find it difficult to enter international markets and build successful distribution channels. Some give up a substantial portion of their profits to do this, such as the dairy and sea buckthorn companies. Others pay large fixed costs to sell

their products abroad, such as the beverage company. The company studies indicated that distribution channels could be built jointly for businesses with similar products. For example, with cost-sharing arrangements, smaller businesses can use distribution channels that have been built by larger businesses but are underutilized. The dairy producer approached other food producers to jointly utilize their distribution network in the PRC's Inner Mongolia Autonomous Region and Kazakhstan, but found their outreach to be limited. Like laboratory testing and certification, this coordination failure should be tackled by the government or nongovernment public entities; for example industry associations.

The general manager of the natural cosmetics company noted that Mongolia's lack of adequate intellectual property protection makes innovation and research costly and risky. The company developed and patented several new products that were later used by former employees and subcontractors, leading to losses in the domestic market, although it did not affect exports. The pharmaceutical company, which has a large research and development unit, cited the lack of opportunity for Mongolian companies to profit from its research and new products on the domestic market using its intellectual property rights. The company has to manufacture the products in order to gain from its development work. Working with foreign partners created the manufacturing opportunity. Thus, the government should more strictly enforce intellectual property regulations, which will ultimately support research and development efforts and innovation in the private sector.

To summarize, the barriers Mongolian companies face to exporting can be internal (related to the business itself, such as insufficient resources, lack of experience, and inability to access market information) and external (institutional and coordination problems, lack of government incentives, market and property rights protection, and effective trade organizations). The company studies showed that businesses that are exporting successfully were able to at least partly overcome the internal barriers and that the external barriers can be significant impediments.

Promoting exports

Mongolia's nonmining resources, especially those in the natural environment, put the country in a good position to produce and export high-quality goods and services. With Mongolia's high trade costs and limited production capacity, targeting niche markets is the most promising route, which an increasing number of companies are doing to sell their products abroad. Global consumer

trends, especially in high-income countries, and with rising incomes in the PRC, are creating favorable conditions for niche markets. Because of difficulties with competitively pricing Mongolian products, due to few economies of scale, the country's export focus should be on quality and exclusivity.

Mongolian producers will have to meet the expectations of niche customers by producing high-quality products that can be sold at higher prices. While some of the study companies are doing this, much needs to be done before such expectations can be met on a larger scale. As a first step, the products need to be rigorously promoted to break into export markets.

Promoting exports is a fairly new and still small-scale policy orientation for the government. Generally speaking, this support can be divided into the more traditional financial methods and nonfinancial measures. The government's focus so far has been on providing financial support for nonmining exports. The budget for this was ample during 2011–2015, when the prices of mineral commodities were high. At that time, the government made concessional loans and provided subsidies and tax breaks for domestic producers and exporters. But that level of support was unsustainable, and only had a limited effect on promoting exports, mainly because of institutional weaknesses. For example, the Small and Medium-Sized Enterprise Fund scandal in 2018 exposed the direct influence of lawmakers and high-level officials in dispersing low-interest loans without due diligence. Some even managed to take substantial loans for their family businesses. Political involvement in financing decisions leads to picking the “wrong” winners, a phenomenon prevalent in most countries with institutional weaknesses.

Some of the companies in the study pointed out the need for cheaper and more accessible financing as a tool for promoting exports. Indeed, financing for export promotion is vitally important for smaller businesses to sustain their production, especially at the earlier stages of development. Experience has shown, however, that financial support needs to be provided very carefully. Better governance in how this funding is dispersed needs to be in place before publicly financed export programs using these instruments are resumed. The Japan International Cooperation Agency loans to support SMEs fared significantly better than the government's loans, pointing to the importance of sound institutions in loan management (JICA 2018).

It is important that nonfinancial measures are used to support and promote nonmining businesses, a point made in almost all interviews with the companies used in the study. A greatly enhanced government role is vital for overcoming

the coordination failures that are so prevalent among small businesses. The economic and trade functions of embassies must become more active in promoting the country's trade interests, especially in the PRC and the Russian Federation. Some larger companies, including Gobi Cashmere, have offices abroad, but this is beyond the reach of most companies. The government needs to step in to coordinate the efforts of smaller businesses to sell their products abroad by organizing trade fairs and providing market information, liaison, and consulting services. Chambers of commerce, industry associations, and the private sector also need to be more active in promoting exports by providing, among other services, insurance, certifications of origin, training, and market information.

Government support is needed to help exporting companies comply with international food and other safety standards, including the organic certification of products. A World Bank export development project cofinanced some such costs borne by small exporters in a matching grants program. But for small concerns to continue shouldering these costs may not be sustainable in the long run and the government does not provide this type of cofinancing. Facilities need to be built to reliably provide such services, financed by the government or by international financial institutions. Efforts are currently under way to resolve the food safety issue with the support of the Asian Development Bank. In 2015, it approved a \$15 million loan to support Mongolia's efforts to continue strengthening food safety and animal and plant health standards to realize the country's vast potential by increasing agrifood exports to neighboring countries. The project targets improvements in laboratories in three *aimags* (provinces) that link border crossing points critical to the movement of agricultural and food products between the Russian Federation and East Asia.

Another critical area that needs prompt government action is to implement the Organic Food Law, passed in 2016. The act aims to identify the organic nature of production process and provide proper certification, registration, and labelling. However, the implementation of the law was met with difficulties as government agencies were initially unsure how to test products for organic certification. Many Mongolian products are likely to be organic (or can relatively easily qualify as organic), but proof is needed for them to capitalize on this and be able to sell such products abroad at higher prices. Correct implementation of the law should also protect customer rights by preventing wrongful claims by producers.

4.3 Policy Recommendations and Conclusions

Strong economic growth since about 2000 shows that, prior to the COVID-19 pandemic, the economy was undergoing a significant transition from an agriculture-based economy to one dominated by mining. Not only was the share of agriculture in GDP contracting and mining expanding, mining was dominating the economic structure. In this transition, Mongolia is finding it difficult to diversify the export economy away from mining, and experiencing further growth in services sectors, underpinned by mining-led economic growth.

The economy's lack of diversification is reflected in the product mix of its exports. Although exports have increased significantly since 2000, the share of nonmining exports has declined significantly. Textiles and livestock are still prominent exports, but no new export sector has emerged. Mongolia's export basket lacks sophistication, and little progress has been made since 2000 toward exporting more value-added products. Many factors lie behind the lack of diversification; the two most important ones are poor conditions for doing business and weak institutions (and the pervasiveness of corruption caused by weak institutions). Because of this, the private sector's opportunity to innovate and diversify has been hampered. The problem is exacerbated by a lack of infrastructure and the underuse of existing transport capabilities.

The government recognizes the need to diversify the economy and has adopted several long-term policies aimed at achieving it. But new policies are adopted without previous ones covering similar areas being fully implemented or evaluated. Policies, once drawn up and approved, are not supported by subsequent policy actions, such as step-by-step programs, public investment plans, and budgets. Diversification is hard for resource-rich countries, but in Mongolia, it is being held back by the aforementioned impediments.

Mining will dominate the Mongolian economy in the medium-to-long term. It is therefore important that the diversification strategy is well coordinated with the strategy for the mining sector. For example, the mining sector can provide technological spillovers to services, such as engineering or financial services, which then can develop into self-reliant and competitive sectors.

The companies used in the study are all in emerging export sectors and produce high-quality products. They recognize the need for their products to be "exclusive" in order to be successful in international markets. Most of the companies had difficulty breaking into export markets because of the many

impediments that affect companies producing on a small scale. Logistics and transport bottlenecks were commonly experienced by the companies. Coordination failures mean that Mongolian companies lack the ability or opportunity for collaborative cost-sharing to reach export markets, and the companies do not have access to reliable supply chains or internationally recognized certification laboratories.

The companies interviewed pointed to a lack of government support for their export efforts. They did not, in the main, expect government financial resources, although many small businesses lack access to affordable credit. They did, however, want government to improve the business climate by easing tax and customs compliance and facilitating cross-border trade, among other things.

The findings in this chapter on small businesses are consistent with those of the Bank of Mongolia, which conducts annual surveys on SMEs to gain a better understanding of the business climate and the challenges SMEs face. SME owners are surveyed on their perceptions of the business climate, macroeconomic indicators, access to financing, the legal and regulatory system, and infrastructure development. The survey also covers revenue, costs, and income. The 2018 survey results indicated that government efforts to strengthen the sector were perceived to focus on access to finance, holding workshops, and advisory services. Survey respondents wanted government to cut red tape and the cost of basic government services, ease tax pressures, and combat corruption.

Most importantly, a public entity (for example, the government or an industry association) should play a key role in overcoming the coordination failure, which is common in all industries. The role could include support for building more reliable agricultural supply chains, information sharing, and common platforms or forums for existing and potential exporters. This is especially important if SMEs are to develop and contribute to economic diversification, even for import substitution. The government should also provide support to larger companies, as these have the greatest potential to export. It can do this by providing public goods such as transport, storage, and logistical facilities, and affordable and internationally recognized quality assurance and certification services.

The poor quality of higher education has shifted the burden for skills training to the private sector. Even common skills acquired by new graduates, such as accounting, are not adequate to meet the needs of the workplace. The

situation is worse for technical professions, such as engineers, information technology specialists, and researchers and developers. The country's public universities have minimal government support and are financed largely by tuition and other fees, while private institutions rely solely on student tuition fees. The problems could be tackled by providing public funding to universities and research institutions, and simultaneously imposing higher standards on curricula, teaching faculties, and education laboratories and facilities. Higher education in Mongolia is expanding rapidly and this would be a good opportunity to start improving its quality and make it more relevant to the needs of the job market. That said, this is not an easy process to achieve nor one that can be done quickly. In the meantime, the government and international financial institutions should provide support to businesses for training their employees. The support for this by multilateral and bilateral organizations has had a limited effect, and projects and programs need to be better calibrated to the needs of Mongolia's businesses.

The impression left by the companies interviewed was one of enthusiasm and ingenuity for breaking into export markets. And many of them are succeeding despite the difficult conditions. However, the political situation and inconsistent policies are undermining Mongolia's export potential. Interventionist policies, as have been used by some countries in the region, are not the solution to diversifying the economy and increasing exports. These policies, especially large public investments without the participation of the private sector, could lead to inefficiencies and waste, particularly given the country's weak public institutions. The government should rather use policy to create a more favorable business climate and tackle coordination failures—and for the latter, chambers of commerce and industry associations can play an important role.

CHAPTER 5

International Dimensions of National Development: Trade, Foreign Direct Investment, and Labor Migration

Prema-chandra Athukorala and Matthias Helble

Mongolia's economic performance in its transition from a planned to a market economy since the early 1990s has been respectable, if not impressive, given the massive contraction it experienced following the sudden break from the Soviet Union; the country's geographical constraints; and, perhaps most importantly, the policy compromises involved in managing an economy in a fledgling democracy.¹ Even so, concerns are growing in policy circles that the economy has not yet undergone the structural transformation that is needed for self-sustained growth and prosperity.

The main concerns are over the external dimensions of the economy's performance. The increased concentration of exports in minerals makes the economy vulnerable to the vagaries of world commodity markets. Initial hopes of attracting foreign direct investment (FDI) to nonmining sectors as a vehicle for faster and broader-based growth through global economic integration, in addition to providing capital account relief, have yet to materialize. The debt-service ratio (debt repayments and interest payments as a percentage of total export earnings) is alarmingly high—and because of the fragile external payments position, the country has had to seek IMF support six times during the past two and a half decades, as noted in Chapter 1.

The purpose of this chapter is to examine the economy's transition and integration into the global economy, focusing on the role of trade, FDI, foreign aid, and labor migration. The analysis focuses on changes in the economy under the market system and opportunities for reducing the economy's dependence on mineral exports, with an emphasis on the country's resource endowments

¹ In the early 1990s, Mongolia's gross domestic product contracted 62%, a much bigger output contraction than that experienced by Eastern European transitional economies (Boone et al. 1997).

and trade costs resulting from it being landlocked and its distance to markets. A theme running through the chapter is the challenges involved in navigating relations with its two large neighbors, the People's Republic of China (PRC) and the Russian Federation.

The rest of the chapter is ordered as follows: the following section examines the reform process and the incentive structure, emphasizing an incomplete reform agenda. This is followed by an overview of the external payments situation to provide the context for the chapter's core that examines the outcomes of reforms taken, and of the priorities for further reforms, for exports, FDI, and labor migration in the process of the country's economic transition. The chapter concludes with a summary of findings and policy inferences.

5.1 Policy Context: From Plan to Market

Mongolia adopted a Soviet-type development strategy during 7 decades of communism. Because Mongolia is a landlocked country, the government fully aligned its political and economic system with that of the Soviet Union. The economy was therefore intricately linked with the Soviet Union and Council for Mutual Economic Assistance (COMECON) Soviet-bloc countries. Over 90% of Mongolia's trade was with this bloc, 75% of it with the Soviet Union (Boone 1994, Table 3).

The policy emphasis of the development strategy was on heavy industry using capital-intensive technology and turnkey plants imported from the Soviet Union and other COMECON countries. The manufacturing sector was almost entirely state-owned. The share of manufacturing in national product was much larger (about 30%) than in other developing countries at a similar level of income per capita (Boone 1994).

By the late 1950s, the government managed to bring agriculture, the mainstay of the economy, under central planning, although after stiff resistance by herders. This involved consolidating cereal production under large state firms and collectivizing pastoral livestock cultivation under agricultural cooperatives (*negdels*). Herders, who previously owned and managed livestock farming, which accounted for over a third of national output, became workers with stipends provided by state firms and *negdels*. There were five large slaughterhouses, which handled meat production for state orders, and five mechanized dairies and one large dairy processing factory, producing for the domestic and Soviet market (Boone et al. 1997; Rossabi 2005).

State trading companies conducted both domestic and foreign trade based on a state order system. Over 95% of trade was with Soviet Union and other COMECON countries. During the second half of 1980s, Mongolia's trade deficit averaged over half of the country's total exports or nearly 30% of gross domestic product (GDP); the deficit was financed mostly by grants and loans from COMECON countries, of which over 80% were from the Soviet Union (Lhagva 2002).

Following former Soviet leader Mikhail Gorbachev's program of *Perestroika* in the late 1980s, the Mongolian government officially embraced a policy of openness centered on improving relations with noncommunist countries. The government began to take some price liberalization measures starting in 1986 to give enterprises and localities the flexibility to increase production. But a decisive policy shift from a planned to a market economy occurred only after COMECON was abolished in 1991. Like the Russian Federation and many former COMECON countries, Mongolia followed a "big bang" or "shock therapy" reform strategy (Lee 1993; Nixon and Walters 2000). The essence of this strategy was the transformation of property by privatizing state enterprises, a process begun in 1991, accompanied by dismantling administrative controls (price liberalization). By 1993, all small state enterprises had been sold, most large enterprises and state-owned agricultural firms converted into joint stock companies, and the *negdels* abolished.

The government maintained substantial, though reduced, controls on foreign trade during the first phase of reforms (1991–1995). Most exports remained under foreign exchange surrender requirements. And there was strong pressure during this period to use trade controls to protect domestic industries. A second wave of reforms started in 1996 that fully liberalized the trade regime, dismantled state trading companies, removed import quotas and licensing, abolished the foreign exchange surrender requirement, and introduced nearly uniform, low tariff rates.

By the late 1990s, the big bang approach to reform was under severe criticism and deeply unpopular because of the economic downturn and the country's rising debt dependence (Rossabi 2005; Tomlinson 1998). The discontent led to stop-gap populist fiscal measures being adopted and it stalled the privatization process. The reforms taken, however, were left intact.

The collapse of the Soviet Union and its economic system meant that Mongolia had to reorient its economic ties. Mongolia became a member of the World Trade Organization (WTO) in 1997, its 131st member. Trade liberalization and

currency convertibility made the country eligible for the Article IV status of the International Monetary Fund (IMF) in 1999. By that time there was de facto convertibility of the currency for capital account transactions subject only to disclosure requirements. In June 2016, Mongolia signed a preferential trade agreement with Japan, and is currently considering signing preferential trade agreements with the PRC and the Republic of Korea.

Setting up border free-trade zones to facilitate economic integration with the PRC and the Russian Federation has been on the policy agenda since the late 1990s, but not much progress has been made. In recent years there has been a renewed emphasis on setting up a border free-trade zone in Zamyn Uud, which is close to Mongolia's busiest border crossing to the PRC.

Structure of protection

Mongolia now has the most open trade regime among Central Asia's transition economies. There are no non-ad-valorem tariffs, tariff rate quotas, or specific trade safeguards. As of 2017, the trade-weighted average most-favored-nation tariff rate was 6.2% for agricultural products and 5.0% for all tariff lines of nonagricultural products (Table 5.1). Over 90% of imports have a uniform tariff rate of 5.5%. Above-average most-favored-nation tariffs are applied only to liquor (including beer), at 25%, 35%, and 40%, depending on alcohol content; unmanufactured tobacco and cigars (30%); wood products and cement (20%); live animals and yarns of wool (15%); and eggs and wheat flour (15%). The personal belongings of Mongolian nationals returning from the PRC have free reentry at border crossings.² This, coupled with the relatively low uniform tariff, presumably means there is little smuggling.

No tariff escalation or tariff peaks apply because of the almost uniform most-favored-nation applied tariff rate of 5%. There are no tariff-rate quotas (WTO 2014). Import-weighted average tariff rates for agricultural and nonagricultural products are not different from the simple averages because of the highly uniform tariff rates. This near uniform tariff structure also implies that the effective rate of protection for most domestic production is approximately equal to the nominal rate of protection, assuming, of course, distance-related transport costs are broadly uniform across all industries (Corden 1966).

² The PRC permits Mongolian nationals to enter without a visa. Over 1,000 passenger vehicles a day from Mongolia cross the PRC at Zamyn Uud (on-site observation).

Table 5.1: Import Tariffs, 2017

Tariffs on Agricultural Products	Final Bound 2017	MFN Applied 2017	Share of Imports 2016 (%)
0	0.9	0.8	0.1
0<5	0.9	89.3	91.1
5<10	0.9	0.1	0.3
10<15	23.8	6.8	5.1
15<25	71.8	2.6	3.0
25<50	1.5	0.4	0.4
50<100	0.3	0.0	0.0
>100	0.3	0.0	0.0
Tariffs on Nonagricultural Products	Final Bound 2017	MFN Applied 2017	Imports 2016 (%)
	1.7	0.9	2.8
0< 5	0.1	98.5	95.7
5<10	19.8	0.2	0.1
10<15	0.0	0.0	0.0
15<25	74.7	0.4	1.6
25<50	3.7	0.0	0.0
Memo Items	Total Imports	Agriculture	Nonagriculture
Simple average bound tariff	17.5	18.8	17.3
Simple average MFN applied (2017)	5.2	6.2	5.0
Trade weighted average (2016)	5.2	6.2	5.0
Import composition (2016) (%)	100.0	14.7	85.3

MFN = most favored nation.

Source: World Trade Organization. <http://tariffdata.wto.org> (accessed June 2019).

Modest tariffs are imposed on agricultural exports from time to time to support domestic downstream industries (such as unprocessed cashmere, camel wool, cowhides). But export duties as a percentage of total exports have declined over time (Table 5.2). Live animals (sheep, goats, horses, camels, and male cattle) are on the customs schedule of prohibited exports and imports, while the “breeding category” of these animals is subject to non-automatic licensing (WTO 2014). The purpose of these requirements is to protect human, animal, and plant health. According to the Customs Law, exporting and importing these animals (and other products on the customs schedule) requires the authorization of Parliament (WTO 2014).³ Export duties as a percentage of total exports have declined over time (Table 3.2). There is no foreign exchange surrender requirement for exporters.

³ These are drugs and narcotics (and the raw materials and equipment that can produce them), and certain dangerous and poisons chemicals.

Table 5.2: Export Tax Revenue as a Percentage of Nonmineral Exports

2000	2005	2010	2015	2016
12.51	5.85	0.18	0.20	0.05

Source: Compiled from National Statistics Office of Mongolia (2018).

On joining the WTO, Mongolia adopted a relatively liberal trade regime for services. Table 5.3 shows the commitments by mode of supply and services sector.⁴ Six of 11 sectors are very open, including business, communication, and financial services. Mongolia has also made full commitments under the WTO's General Agreement on Trade in Services on tourism and travel services. There are no restrictions on foreigners providing tourism services, other than guide-interpreters, who must be Mongolian citizens and meet certain training and grading requirements (WTO 2014). Like many other WTO members, Mongolia has not made commitments for the education and health sectors.

Table 5.3: General Agreement on Trade in Services Commitments

Modes of supply	Business services and professional services	Communication services	Construction and related services	Distribution services	Education services	Energy services	Financial services	Health and social services	Tourism services	Recreational, cultural and sporting services	Transport Services
1	None	None	U	None	X	X	None	X	None	X	X
2	None	None	None	None	X	X	None	X	None	X	X
3	None	None	None	None	X	X	None	X	None	X	X
4	U	U	U	U	X	X	U	X	U	X	X

X = no commitments, none = no restrictions, U = unbound.

Note: Horizontal commitment: unbound except for measures affecting the entry and temporary stay of natural persons with managerial and technical skills, which are in short supply in Mongolia, and fall within the following categories: business visitors, intracorporate transferees, and professionals under a service contract.

Source: World Trade Organization. <https://i-tip.wto.org/services/default.aspx> (accessed June 2019).

Foreign direct investment policy

Opening to FDI was an integral element of Mongolia's commitment to a market-oriented economy. In 1993, the Foreign Investment and Foreign Trade Agency was set up to approve and monitor FDI under the newly promulgated

⁴ The WTO's General Agreement on Trade in Services defines four ways in which international services transactions can be delivered: cross-border supply without the physical movement of services providers across borders (mode 1), consumption of services abroad (mode 2), commercial presence (mode 3), and the temporary movement of services providers (mode 4). Because of the advance in information and communication technologies, more services can be sold under mode 1 without the need for the consumer or service providers to move across borders.

Foreign Investment Law. It frames the general statutory and regulatory environment for all investors in Mongolia. Under the law, foreign investors have access to the same investment opportunities as domestic investors, and receive the same protection. There are no restrictions on borrowing foreign exchange, investment transfers, and profit repatriation. To promote a stable business environment, the government signs stability agreements with large foreign investors for projects of \$20 million or more at the request of the investor. There are no specific requirements for foreign-invested enterprises to transfer technology or sell their shares to Mongolian nationals. Investment approvals in mining and petroleum require foreign companies to incorporate locally. And investments by foreign and local companies in oil extraction require production sharing contracts with the government. The minimum investment requirement for foreign-invested enterprises, originally set at \$10,000, was raised to \$100,000 in 2008.

The Mongolian labor law requires foreign investors to employ Mongolian workers if the skills are available locally. This only applies to unskilled labor categories and not to areas where a high degree of technical expertise is required but is not available in Mongolia. Foreigners residing in Mongolia come under two visa categories: Type T (residence) and Type HG (work permit). Type T visas are for business owners and managers. These are valid for up to 1 year and can be renewed annually. Those with high professional skills come under Type HG. Work permits are initially granted for 1 year, subject to extension based on a written request from the employer. There are limits, ranging from 5% to 70%, on the percentage of foreign nationals in total employment in a given year, depending on the economic sectors and the size of the hiring organization. The quotas are updated and approved on an annual basis. Under a 2010 amendment to the Law of Legal Status of Foreign Nationals, the total number of foreign nationals and nationals from a given country residing in Mongolia for employment may not exceed 3% and 1%, respectively, of the total population of the country.

Mongolia joined the Washington Convention on the Settlement of Investment Disputes between the United States (US) and other nations in 1996 and the Seoul Convention on Investment Insurance in 1999, and it became a full member of the Multilateral Investment Guarantee Agency of the World Bank Group in 1999. The country has also signed agreements on the mutual promotion and protection of investment with 19 countries, and agreements on exemption from double taxation with 26 countries.⁵

⁵ UNCTAD. International Investment Agreement Navigator. <https://investmentpolicy.unctad.org/international-investment-agreements> (accessed 20 September 2019).

Mongolia's ranking on UNCTAD's Inward FDI Performance Index improved from 63rd of 140 countries in 2000 to 3rd by 2010 (UNCTAD 2005; UNCTAD 2011). In recent years, however, the investment community has been increasingly concerned about the lack of transparency and consistency of Mongolia's FDI policy (UNCTAD 2013; US Embassy in Mongolia 2018). According to media reports, investor concerns include favoritism in awarding mining rights to Mongolian nationals, frequent changes in royalty payments by mining companies, and the cancellation of licenses for small-mining companies (with effect from 2016). Two main concerns relate to the government's failure to honor the promised national treatment for foreign investors. First, foreign investors are given land-use rights only for a specific number of years subject to stringent requirements for renewal unless they form joint ventures with local partners. Second, foreign investors object to the regulatory requirement that they invest a minimum of \$100,000 to set up a business in Mongolia. Investors are also concerned that officials not only have too much discretion in interpreting statutes and regulations, but they impose rules that are not within the legal code. The long-drawn-out process of renegotiating the investment agreements of Tavan Tolgoi's coking coal mine and Oyu Tolgoi's copper and gold mine also seem to have contributed to investor concerns about Mongolia's ability to provide a business-enabling environment.

The Law on the Regulation of Foreign Investment in Entities Operating in Strategic Sectors, passed in 2012 and amended in 2013, defined the strategic sectors—mining, media and information, and banking—for which parliamentary approval is needed if the foreign share of investment exceeds 49%. Parliamentary approval is also required if the parent company is partly or fully owned by a foreign government, regardless of the foreign ownership share. So far, no investment applications have been rejected on the basis of the screening requirement. But as UNCTAD (2013) emphasized, that the authorities could filter investment projects and terminate an approved investment project at any time on the basis of criteria that are not clearly defined sends a negative signal on the investment climate.

When the Foreign Investment and Foreign Trade Agency was set up in 1993—and later renamed Invest Mongolia Agency—the original plan was to set up a “one-stop shop” within the agency to combine investment approvals with helping foreign-invested enterprises set up their operations. This was never implemented because of unsurmountable difficulties in coordinating tasks among the line ministries involved in the approval process. In 2016 Invest Mongolia Agency was closed and the role of investment approvals and facilitation went to the National Development Agency which offers a one-stop

shop for foreign investors. Additional institutional mechanisms and procedures to support and facilitate investment approvals are planned. Investors often complain of unanticipated and costly delays in investment approvals and that projects that have been approved are delayed because of unclear lines of authority and differences in the practices and interpretation of rules and regulations at different levels of government (US Embassy in Mongolia 2018).

In 2017 the government set up the Investment Promotion Council to assist investors in settling disputes with government agencies; this was done with the support of the International Finance Corporation, the US Embassy in Mongolia, and business associations. The government has yet to provide the council with a regulatory and statutory basis for its actions and more resources to carry out its mandate. The Battulga administration, which came to power in 2017, has expressed its commitment to implement the US–Mongolia Agreement on Transparency in Matters Related to International Trade and Investment. The agreement requires clear processes for drafting and commenting on new legislation and regulations for laws involving trade and investment. Officially, the agreement came into force in March 2017, but it has yet to be fully implemented (US Embassy in Mongolia 2018).

Incentive structure

The impact of trade liberalization (and other measures to unshackle the private sector) on growth and structural change in an economy crucially depends on accompanying macroeconomic policies that shape its international competitiveness. In the long term, the major effect of trade liberalization should be increasing exports by shifting resources away from activities that were previously highly protected toward those with low protection. There also has to be a net shift of resources between the nontradable and tradable goods sectors, but the process of adjustment could be thwarted if the macroeconomic policy regime fails to maintain an economy's international competitiveness (Mussa 1987; Michaely, Papageorgiou, and Choksi 1991, Chapter 14).

The standard indicator of a country's international competitiveness is the real effective exchange rate (REER), which captures both changes in the nominal exchange rate and the rate of inflation in the home country and its trading partners. Figure 5.1 shows Mongolia's REER index, together with its two components (trade-weighted indexes of the nominal exchange rate index and the relative price) from January 2000 to July 2018. The figure clearly illustrates that the prerequisite of supplementing trade opening

with maintaining international competitiveness was not met in this period. Notwithstanding sporadic aberrations, the economy's degree of international competitiveness continued to deteriorate during this period, compared with levels in early 2000. Data are not available to extend the data series back to the early 1990s. But there is evidence that high domestic inflation, which was double-digit in most years, coupled with massive aid inflows that tilted the nominal exchange rate in the wrong direction, resulting in a significant overvaluation of the REER throughout that decade (Griffin 1995; IMF 2008).

Figure 5.1: Real Effective Exchange Rate, Nominal Effective Exchange Rate, and Relative Price, January 2000–July 2018

REER = real effective exchange rate, NEER = nominal effective exchange rate, RP = relative price.
 Note: $REER = NEER \times RP$. An increase in the REER indicates real depreciation (improvement in international competitiveness) and vice versa.
 Source: Data compiled from Bank of Mongolia, Monthly Statistical Bulletin database (accessed June 2019).

The prime source for the REER's appreciation was domestic inflation running at a rate over three times that of the country's trading partners. From January 2000 to July 2018, the nominal exchange rate depreciated at an annual rate of 3.2%, but this was more than counterbalanced by an increase in relative price (the inflation rate differential between Mongolia and its trading partners) by 6.9%. Consequently, the REER appreciated at an annual rate of 3.7%. Viewed in this context, the Bank of Mongolia's current inflation target of 8% does not seem consistent with the national goal of integrating the Mongolian economy into the global economy. In a highly import-dependent economy like Mongolia's, a depreciation in the nominal exchange rate has limited capacity to counterbalance the impact of domestic inflation and maintain the economy's international competitiveness (measured by the REER) given the presumably

high exchange rate pass-through into domestic prices of tradables. There is ample evidence that in a trade-dependent economy, domestic macroeconomic stability is much more important than nominal exchange rate adjustment in averting REER misalignment (Little et al. 1993, Chapter 6; Corden 2002).

From about the second half of 2016 Mongolia's international competitiveness (REER depreciation) improved remarkably because of macroeconomic reforms under the IMF Extended Fund Facility program (Figure 5.1). In 2017, the REER depreciated by about 12% compared with the average level during the previous 5 years. However, from about the third quarter of 2017, the rate has been virtually stable because the nominal exchange rate strengthened, reflecting the impact of the IMF program-related aid inflows and substantial reserve accumulation.

The REER index is the standard indicator of an economy's overall international competitiveness (Figure 5.1). But to broaden the understanding of the resource-allocation effect of liberalization reforms, it is important to look at the behavior of sectoral relative prices, in particular the relative prices of tradables to nontradables. This is because domestic tradable prices could be partly isolated from world prices and exchange rate changes for various reasons, including bottlenecks in domestic trade channels, remaining quantitative restrictions on trade, and the economy's dualistic structure. This dualism is particularly relevant to Mongolia given the distinct structural features of a nomadic pastoral agriculture sector compared with the largely urban-based manufacturing and formal services sectors of the economy. Given the structural dualism, coupled with the urban bias of the reform process (Boone 1994; Lee 1993), the relative incentives faced by agriculture to behave differently compared with the rest of the economy can be hypothesized.

Figure 5.2 compares prices of manufacturing, agriculture, and total tradable production (manufacturing plus agriculture) with the prices of nontradables during 1980–2017. Interestingly, the time pattern of the relative price of total tradables to nontradables is broadly similar to that of the REER (Figure 5.1). This comparison suggests the REER is indeed a good proxy of the relative price of tradable to nontradables—the theoretical “REER” or “Salter ratio” (Little et al. 1993). Prices of manufacturing and agriculture relative to nontradables have behaved quite differently, however. The comparison also suggests that the incentive structure in the reform era has been characterized by a distinct bias against agriculture not only compared with nondurables but also manufacturing (Figure 5.3).

Figure 5.2: Domestic Prices of Tradables, Manufacturing, and Agriculture Relative to Nontradable Prices, 1980–2017

Note: Tradables: agriculture, mining, and manufacturing. Nontradables: construction; wholesale and retail trade, transport, storage and communications; other services (mostly government services and utilities).
Source: Data compiled from United Nations. Yearbook of National Accounts Statistics. <https://unstats.un.org/unsd/snaama/Downloads> (accessed June 2019).

Figure 5.3: Agriculture Prices Relative to Manufacturing and Nontradable Prices, 1990–2017

Note: Nontradables: construction; wholesale and retail trade, transport, storage and communications; other services (mostly government services and utilities).
Source: Data compiled from United Nations. Yearbook of National Accounts Statistics. <https://unstats.un.org/unsd/snaama/Downloads> (accessed June 2019).

In the first half of the 1990s, agriculture prices increased relative to both nontradables and manufacturing, reflecting the combined effect of price liberalization and even higher world cashmere prices, the main agricultural export. Since then the relative price has changed against agriculture, except during 1999–2001, when a massive collapse in livestock and crop production was caused by a disastrous winter. Several factors, which are not directly captured in the standard economy-wide REER, seem to have contributed to this anti-agricultural bias in the incentive stature.

Dismantling the *negdels* and lifting limits on the size of private herds without introducing new institutional procedures to regulate herders' rights to grazing land set the stage for record increases in livestock numbers (World Bank 2019c). Even when excess supply began to put downward pressure on prices, herders still considered increasing livestock numbers as the principal avenue of asset accumulation as insurance against unpredictable economic and climatic conditions since the regular income (wages) and social protection provided by the *negdels* had disappeared. Massive increases in livestock numbers occurred at a time when demand for Mongolian meat and dairy products from the Russian Federation and former COMECON countries, the principal markets for these products, had collapsed. The Russian Federation also imposed tariffs and food safety standards on imports from Mongolia.

The big bang approach to reforms also had serious side effects that contributed to excess supply and falling prices. Under the collective system, herders had ready access to veterinary services, and the state was responsible for processing and marketing meat, wool, and other animal products. Reforms privatized herds without taking into account how to organize these services in a market system. Following the abolition of the *negdels*, herders had to bear the cost of veterinarian services. To make matters worse, the number of veterinarians (mostly trained in the Russian Federation) dropped and were located mostly in urban centers. Many herders therefore faced difficulties meeting the food safety standards required for exporting. Following the abolition of the centralized procurement and transport facilities, herders in remote areas often have to sell to intermediaries (mostly from the PRC's Inner Mongolia Autonomous Region) at the low prices forced on them (Rossabi 2005).⁶

⁶ See in particular Chapter 8, which is based on interviews with Tserendash Namkhainyambuu, the only herder so far elected to Parliament and his book *Khonini Khishing (Bounty from the Sheep)*.

Ge and Kinnucan (2017), in their econometric analysis of the Dutch disease effect of the mining boom on agriculture in Mongolia, conclude that while FDI inflows contributed to strengthening the togrog, as predicted by the Dutch disease model, it did not have a significant negative effect on agriculture. This chapter's analytical narrative of the sectoral incentive structure helps unravel the "Dutch disease puzzle." Even if the togrog's appreciation had some impact on the relative profitability of agriculture, as predicted by the Dutch disease model, that impact could have been overshadowed by many other influences originating in the structural adjustment process following the reforms.

It is also important to note that the relative price effect (switching effect) is only one of the two channels of the adverse resource-inflow (or booming sector) effect postulated by the Dutch disease model. The other channel is the "resource full effect"—that is, the shifting of resources from the lagging sector, in this case agriculture, to the booming sector, mining (Corden 1984). It can be safely assumed that the resource-pull effect of the expansion of mining on agriculture would have been negligible given the dualistic structure of the economy, which is manifested primarily in the coexistence of modern mining with the traditional nomadic pastoral agriculture. Mining is highly capital intensive and employs only a small number of workers (including expatriates) relative to its massive investment, and it does not rely on local financing or other resources for its operations.

Geographic disadvantage and trade costs

Landlocked countries are at a disadvantage in world trade in terms of trade costs compared with coastal and island economies. Landlocked countries, on average, export less than one-half of the per capita amount of exports of their neighbors (Faye et al. 2004, Table 4). The distance to port is of course a major determinant of trade costs. But geographic disadvantage alone does not explain why landlocked countries are at a relative disadvantage in world trade. Trade costs faced by landlocked countries also include costs resulting from a dependence on passage through the transit country—transit dependence (Arvis, Marteau, and Raballand 2010; Faye et al. 2004; Limao and Venables 2001; Marteau, Raballand, and Arvis 2007).

The cost of transit is determined by the quality of the transit country's infrastructure, cross-border political relations with that country, its political stability, and its administrative practices for transit trade. The economic dynamism of neighboring countries also matters. Dynamic neighbors can help a landlocked country to reduce its heavy reliance on transoceanic trade if it can trade with these neighbors.

Viewed against these multidimensional facets of the trade costs faced by landlocked countries, Mongolia seems relatively better placed in world trade than many other landlocked developing countries (Table 5.4). For distance to the most widely used port (Tianjin in the PRC, which is the outlet for over 80% of shipments from Mongolia), Mongolia is in the top 10% of the world's most remote landlocked developing countries. But for trade costs (costs of trade by ocean transport) it is at the lower end (bottom 10%) of this ranking.

Table 5.4: Distance to Port and Transport Costs of Landlocked Developing Countries

Country	Distance to Port (km)	Transport Cost ^a
Afghanistan	1,960	0.56
Armenia	693	0.31
Azerbaijan	870	0.37
Bhutan	775	0.36
Bolivia	414	0.39
Botswana	905	0.43
Burkina Faso	1,154	0.52
Central African Republic	1,254	0.56
Chad	1,518	0.59
Ethiopia	1,669	0.58
Kazakhstan	781	0.31
Kyrgyz Republic	3,570	0.37
Lao PDR	3,600	0.36
Lesotho	620	0.58
Malawi	575	0.44
Mali	803	0.61
Moldova	170	0.24
Mongolia^b	1,693	0.37
Nepal	1,160	0.36
Niger	1,057	0.58
Paraguay	1,022	0.23
Rwanda	1,867	0.48
Swaziland	195	0.39
Tajikistan	3,100	0.36
Turkmenistan	1,700	0.38
Uganda	1,187	0.48
Uzbekistan	2,950	0.32
Zambia	1,975	0.48
Zimbabwe	464	0.57

km = kilometer, Lao PDR = Lao People's Democratic Republic.

^a Transport (including insurance) costs compared with the representative coastal economy. The value of 0.37 for Mongolia means that the transport cost is 37% for that country compared with the representative coastal country. Transport cost is measured by comparing reporter-country and partner-country values (cost, insurance, and freight and the free-on-board of bilateral trade flows).

^b Distance to Tianjin port.

Sources: UN-OHRLLS (2013) for transport costs; Faye et al. (2004) for distance.

Mongolia also has the advantage of trading with the PRC, the world's most dynamic trading nation, and the Russian Federation, a large high-income country. It also has regular flights to Japan and the Republic of Korea, with a flight time of only about 3 hours to both destinations.

Transit countries with weak transit infrastructure limit the return to investment in infrastructure in landlocked countries (Faye et al. 2004). Mongolia, however, does not face this disadvantage. Even so, the returns would be high for developing its own infrastructure because the PRC, the main transit economy, has high-quality trade infrastructure.

Behind border issues

During the market reforms from the early 1990s and well into the 2000s, Mongolia ranked well among transition economies in business perception surveys and indicators. But since about 2000, Mongolia has shown an increasingly mixed picture.

In the World Bank's 2019 Doing Business project, Mongolia ranked 117th among 183 countries for ease of trading across borders indicators. Among countries in the Central Asia Regional Economic Cooperation Program, Mongolia's performance is average and is lower than the average for East Asia and the Pacific, as Table 5.5 shows. The relatively low ranking appears to be mainly due to long delays in exporting goods, totaling 230 hours, the longest among Central Asia Regional Economic Cooperation Program countries except for Afghanistan. Mongolia's costs for trading across borders are relatively low, indicating that procedural requirements, not necessarily costs, make trading difficult.

The Doing Business results are confirmed by other sources. In the Organisation for Economic Co-operation and Development's 2018 Trade Facilitation Index, Mongolia does relatively better than its neighbors on the involvement of the trade community, fees and charges, and governance and impartiality.⁷ But there is room for improving procedures, including appeal procedures and documents.

In a survey of Mongolian companies, 98% of the respondents said the cost and time in transporting goods were the biggest problem they faced in trading across borders, and 56% said import duties greatly affected their business,

⁷ Organisation for Economic Co-operation and Development, OECD Trade Facilitation Indicators Simulator. <http://www.oecd.org/trade/topics/trade-facilitation/> (accessed 16 August 2019).

Table 5.5: Trading Across Borders in the Doing Business Index, 2019

Economy ^a	Trading Across Borders (rank)	Time to Export (hours) ^b	Time to Import (hours) ^b	Cost to Export (\$) ^c	Cost to Import (\$) ^c
Region					
East Asia and Pacific	101	112.3	126.2	491.6	525.3
CAREC					
Afghanistan	177	276.0	420.0	797.0	1,650
Azerbaijan	84	50.0	47.0	464.0	500.0
PRC	65	34.5	72.0	387.6	448.3
Georgia	43	8.0	17.0	112.0	585.0
Kazakhstan	102	233.0	8.0	670.0	0.0
Kyrgyz Republic	70	26.0	108.0	120.0	712.0
Mongolia	117	230.0	163.0	255.0	293.0
Pakistan	142	130.0	263.0	474	725.7
Tajikistan	148	117.0	233.0	643	483.0
Uzbekistan	165	208.0	285.0	570	570.0

CAREC = Central Asia Regional Economic Cooperation, PRC = People's Republic of China.

^a The Doing Business Index records, among various other dimensions, the time and cost associated with the logistical process of exporting and importing goods. The index measures the time and cost (excluding tariffs) associated with three sets of procedures—documentary compliance, border compliance, and domestic transport—with the overall process of exporting or importing a shipment of goods.

^b Includes border and documentary compliance. Time is measured in hours.

^c Insurance costs and informal payments for which no receipt is issued are excluded from the costs recorded. Costs are reported in dollars.

Source: World Bank, Doing Business, Trading Across Borders. <https://www.doingbusiness.org/en/data/exploretopics/trading-across-borders> (accessed June 2019).

despite Mongolia having among the lowest import duties in the region (Nyamdaa, Batsukh, and Mandshir 2018). One reason for this is that import duties for over 100 products, as varied as meat products and trolleybuses, were drastically raised to the World Trade Organization's bound level in 2015 and 2016. About half of survey respondents reported difficulties in getting the required import/export documents—even after the government reduced the number of documentary requirements. The additional costs incurred by waiting time at customs and borders was “extremely high” or “high” for over half of respondents.

UNESCAP (2018), in a study on the cashmere trade between Mongolia and the PRC, found that too many steps were required to export, too many regulatory agencies were involved, and documentary requirements were redundant (Lim 2018). The study noted there was no single-window mechanism for cross-border trade and no mechanism for exchanging electronic information.

Many exporters that took part in a USDA (2018) survey complained that the government impedes rather than facilitates trade. They said inspectors

used standardized customs and import regulations procedures rather than risk-based assessments. And imports were sometimes tested by multiple agencies, such as by the customs laboratories at the port and then again by the General Agency for Specialized Inspection before goods were released.⁸ When food import standards and regulations were incorrect or worded vaguely, government officials routinely provided no recourse or grace period to facilitate the import of shipments affected by this.

5.2 Trade Orientation and Balance of Payments Position

The degree of the Mongolian economy's trade orientation, as measured by the standard trade-to-GDP ratio, increased from an average 40% in the prereform decade (1980s) to about 110% during 2010–2017. In most years the degree of trade orientation has been driven by imports, with periodic fluctuations mostly reflecting the level of mineral exports (Figure 5.4).

During the 1990s, both the trade account and the current account remained in balance. In subsequent years, other than during the commodity boom of 2004–2008, the current account deficit has been much larger than the trade

⁸ The General Agency for Specialized Inspection agency is responsible for inspecting imported food products and testing them for safety. Exporters should work with their agent or distributor and the agency to ensure they comply with all import policies and regulations. The Meat Inspection Act and the Animal Health Law, passed in 2017, are implemented by the agency.

deficit. The gap is due to the widening deficit in services transaction caused by increases in debt servicing commitments and profit remittances by foreign invested enterprises (Figure 5.5).

Figure 5.5: Trade Balance, Current Account Balance, and Balance of Payments Relative to Gross Domestic Product, 1990–2017

GDP = gross domestic product.

Source: Compiled from ADB (various years) Key Indicators for Asia and the Pacific.

During the early reform years and up to the early 2000s, the current account deficit was filled mostly with official development assistance (ODA) in the form of emergency assistance—food aid and other welfare assistance, and balance-of-payments support—and technical collaboration for the reform process (Rossabi 2005).⁹ Since then, large-scale grants (soft loans) for infrastructure development have featured prominently in ODA programs. From the early 2000s, the government has increasingly relied on foreign borrowing at commercial rates. The share of food and humanitarian aid, which together accounted over a third of aid flows, declined sharply and has virtually disappeared in recent years (Figure 5.6 and Table 5.6). The share of grants in total ODA has varied over the years: it was at 54.6%–79.5% during 1999–2012, but has shown a downward trend since then.

OECD Stats indicate that Japan has been the largest source of ODA to Mongolia, accounting for 46% of total ODA during 2000–2017, followed by the US (12.8%), Germany (11.4%), the Republic of Korea (8.2%), and Australia

⁹ US Foreign Secretary James Baker's visit to Mongolia in 1990 marked the beginning of bilateral and multilateral financial assistance for the process of economic transition. The first meeting of international donors, held in 1991 in Tokyo, was attended by the Asian Development Bank, IMF, and United Nations Development Programme, and representatives of Europe, Japan, and the US. The conference set the stage for donor meetings convened at intervals of 18 months to 2 years.

(2.4%).¹⁰ This dataset does not include aid from the PRC. There is anecdotal evidence that PRC loans and technical support increased significantly after both countries signed a comprehensive strategic partnership agreement in 2014 (Chen 2018).¹¹ As part of this agreement, President Xi Jinping initiated the China–Mongolia–Russia Economic Corridor as part of the Belt and Road Initiative. Notable corridor projects include the China–Mongolia Cross-Border Economic Cooperation Zone from Erenhot to Zamyn Uud, and the Northern Railway Corridor, which extends Mongolia's rail network to the PRC and the Russian Federation. PRC loans and technical support have also been used for hydroelectric and solar power generation and building hospitals, the World Trade Center Ulaanbaatar, and the East–West Millennial Road.

Figure 5.6: Overseas Development Assistance, 1999–2017

ODA = official development assistance.

Source: Compiled from OECD Stats <https://data.oecd.org/oda/> (accessed June 2019).

External debt as a percentage of gross national income increased from an average 63.4% in 1992–1999 to 122% in 2016. This reflects a shift in the composition of aid inflows from outright grants to soft loans and the later increase in government borrowing. The debt service ratio (debt repayments and interest payments as a percentage of total export earnings) averaged 28% during 2012–2016, compared with 10.2% in the 1990s. Total foreign exchange reserves as a ratio of total outstanding short-term debt reached the alarmingly low level of 50% in the year Mongolia entered into an Extended Fund Facility agreement with the IMF in 2016 (Table 5.7).

¹⁰ OECD Stats. <https://data.oecd.org/oda/>.

¹¹ Data on PRC loans and technical support are not available in publicly available government reports.

Table 5.6: Overseas Development Assistance Key Indicators, 1999–2017

Item	1999–2000 ^a	2004–2005 ^a	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ODA total gross disbursement (\$ million)	187.0	225.1	202.7	238.1	261.1	342.6	319.5	379.5	508.1	492.0	375.9	294.5	386.8	840.8
Grants	129.8	149.2	162.6	175.8	215.4	217.2	268.6	292.4	369.6	317.7	215.5	185.4	162.6	197.2
Loans	57.2	75.9	40.1	62.3	45.7	125.4	51.0	87.2	138.5	174.3	160.4	109.1	224.2	643.6
Debt repayment to official donors (\$ million)	5.9	17.7	20.3	26.0	30.5	35.9	32.8	42.0	61.2	59.8	58.8	57.6	60.7	76.3
Of which interest payment	5.0	9.0	8.6	8.5	9.3	9.8	10.2	12.5	19.1	19.7	18.3	16.2	16.3	194.9
ODA total (net) (\$ million) ^c	181.1	207.3	182.4	212.1	230.6	306.8	286.7	337.5	446.5	430.5	316.9	236.3	325.7	764.5
ODA loan (net) ^b	51.3	58.1	19.8	36.3	15.3	89.6	18.1	45.2	77.3	114.5	101.6	51.5	163.4	567.3
ODA total (net) as % GNI	16.5	9.5	5.4	5.1	4.2	7.0	4.3	3.5	3.9	3.6	2.8	2.2	3.1	7.7
ODA per capita (current price) (\$)	75.9	82.6	71.3	81.8	87.8	115.0	105.7	122.2	158.7	150.1	108.4	79.4	107.6	248.5
Loans as % of ODA gross disbursement	30.8	33.5	19.8	26.2	17.5	36.6	16.0	23.0	27.3	35.4	42.7	37.0	58.0	76.5
Debt repayment as % of ODA gross disbursement	3.1	7.9	10.0	10.9	11.7	10.5	10.3	11.1	12.0	12.2	15.6	19.6	15.7	9.1
Technical collaboration as % of total ODA (net)	34.8	38.5	43.6	38.1	32.6	25.6	33.3	29.4	20.4	20.4	26.5	35.3	26.0	10.9
Food aid as % of total ODA (net)	3.7	6.7	0.9	1.6	7.6	4.1	2.3	3.0	...	0.1	...	0.0	0.0	0.0
Humanitarian aid as % to total ODA (net)	3.1	2.1	0.7	0.5	0.3	0.4	2.2	0.5	0.4	3.1	0.9	0.4	0.9	0.6

GNI = gross national income, ODA = official development assistance.

^a Two-year averages.^b ODA gross disbursement—debt repayment.^c Including interest payments.Source: Compiled from OECD Stats <https://data.oecd.org/oda/> (accessed June 2019).

Table 5.7: External Indebtedness and International Reserves, 1992–2016

Item	1992–1999 ^a	2000–2004 ^a	2005–2009 ^a	2010	2011	2012	2013	2014	2015	2016
Total debt outstanding and disbursed (\$ million)	564	1,229.0	1,316.6	5,928.0	9,627.0	15,385.0	18,892.0	20,826.0	21,542	23,912
External debt as % of GNI	63.8	83.3	50.2	89.9	100.6.0	135.6.0	159.1.0	185.4.0	199.9	232.0
Long-term debt % of total debt	87.9	83.1	89.6	89.2	91.2	92.6	91.0	88.2	88.4	88.9
Debt service (%) ^b	9.4	11.8	3.1	7.0	5.4	26.8	30.9	20.9	33.8	28.5
Annual interest rate % on foreign loans	1.9	1.1	1.6	0.8	1.1	0.1	0.9	1.0	1.2	5.6
Debt maturity (years)	33.3	32.3	30.8	39.1	27.2	9.6	34.3	21.4	29.0	9.5
Grant element of debt (%)	65.6	71.4	69.0	79.5	63.1	54.6	70.9	60.9	61.0	23.2
International reserves (end of year), \$ million	119.1	218.0	807.0	2,288.0	2,451.0	4,126.0	2,248.0-	1,650.0	1,323	1,304
Import months equivalent (number of months) ^c	3.4	4.2	5.8	13.3	9.5	7.4	3.9	3.1	3.0	4.0
Reserve cover of short-term debt (%)	1,206.9	763.1	1,442.8	626.1.0	420.2.0	457.1.0	143.8	69.5	54.3	50.6

GNI = gross national income.

^a Period average.^b Debit repayment and interest payment as a percentage of exports of goods and services.^c Based on imports per month in the previous year.Source: Compiled from ADB (various years) *Key Indicators for Asia and the Pacific*.

5.3 Export Performance

Mineral exports

There was no policy emphasis on exploiting Mongolia's rich mineral resources during the first 4 decades of the Soviet era because the Soviet Union was itself rich in minerals. But from the early 1970s the Soviet Union and some Eastern European countries made some investments in copper mining and copper concentrate production in Mongolia. By the late 1990s, minerals (mostly copper concentrates) accounted for about 48% of Mongolia's exports (Chuluundorj and Danzanbalji 2014). Since then, mineral products have dominated the composition of exports, accounting for 85% of total merchandise exports by the mid-2010s (Figure 5.7).

Figure 5.7: Total Merchandise and Mineral Exports, 1995–2018

LHS = left-hand scale, RHS = right-hand scale.

Source: Data compiled from Mongolian Statistical Information Services. <http://www.1212.mn/en/> (accessed June 2019).

Mongolia is one of the few geological regions in the world with the best prospects for mining. It has a highly diversified mix of mineral resources (Table 5.8). Since about 2010, the heavy concentration of mineral exports in copper has changed with the increase in the share of coal. Copper is likely to regain dominance as the Oyu Tolgoi copper and gold mine, which is exploiting the world's largest known copper-gold deposit, reaches full operation.

It is important to note that the increased concentration of exports in mineral products has been driven by the faster growth in mineral exports, rather than as a result of a decline in nonmineral products. Nonmineral exports, too, grew at a steady rate of 11% during 1995–2018, versus 19% for mineral exports (Table 5.9).

Table 5.8: Composition of Mineral Exports
(%)

Product	1995–1996 ^a	2000–2001 ^a	2005–2006 ^a	2010–2011 ^a	2017–2018 ^a
Gold, unwrought or in semimanufactured forms	7.9	1.8	30.6	4.2	6.3
Copper ore and concentrate	77.1	81.9	48.9	25.4	30.8
Refined copper and copper alloys	0.0	0.9	1.3	0.6	1.5
Molybdenum ores and concentrate	5.6	3.0	4.8	1.4	0.7
Fluorspar ores and concentrate	7.0	10.5	3.1	2.3	2.3
Tungsten ores and concentrates	0.0	0.1	0.1	0.0	0.1
Iron ores	0.0	0.0	0.8	10.1	5.6
Iron scrap	2.4	0.9	0.2	0.0	0.0
Zinc concentrates	0.0	0.0	5.2	4.0	3.2
Coal	0.0	0.0	3.7	46.0	43.0
Crude petroleum oils	0.0	1.0	1.5	5.9	6.5
Mineral products	100	100	100	100	100
\$ million	307	188	984	3,430	5,895

^a Two-year averages.

Source: Data compiled from National Statistics Office of Mongolia database. <https://www.en.nso.mn> (accessed June 2019).

Table 5.9: Average Annual Growth Rates of Total Merchandise Exports, and Mineral and Other Merchandise Exports, 1995–2017

(%)

Period	Total merchandise exports	Mineral exports	Other merchandise exports
1995–2010	15.4	20.3	11.6
2011–2018	14.3	17.0	10.4
1995–2018	15.0	19.2	11.2

Source: Data compiled from Mongolian Statistical Information Services. <http://www.1212.mn/en/> (accessed June 2019).

Nonmineral exports

Primary products, mostly based on livestock farming, account for the bulk of Mongolia's nonmineral exports (Table 5.10). Such products accounted for 62% of total nonmineral exports in 2017–2018 compared with about 71% in the late 1990s. Meat and wool dominate the composition of primary products. Dairy products, a main export item during the Soviet era, have virtually disappeared as an export following the dismantling of agricultural cooperatives and collapse of exports to the Russian Federation.

Table 5.10: Composition of Nonmineral Exports
(%)

SITC Codes	Commodity Description	1996–1997 ^a	2000–2001 ^a	2006–2007 ^a	2016–2017 ^a
Primary Products		71.46	48.59	59.81	61.83
0	Food and live animals	5.82	6.82	7.50	14.16
19	Live animals	0.15	0.20	0.55	0.11
1111	Meat	4.71	6.24	4.74	5.83
02211 to 02499	Dairy products	0.01	0.00	0.01	0.11
0541 to 05996	Vegetables and fruit	0.04	0.23	0.94	6.72
1	Beverages and tobacco	0.48	0.20	0.10	0.77
2	Crude materials, except fuel	65.09	41.07	52.11	45.19
21111 to 21229	Hides and skins	13.29	10.27	1.31	0.54
26811 to 2721	Wool	39.32	28.42	48.25	40.83
4	Animal and vegetable oils and fats	0.07	0.01	0.01	0.08
Manufactured Goods		28.54	51.41	40.19	38.17
5	Chemicals and related products	1.10	0.84	0.58	0.44
6	Basic (resource based) manufactures	5.45	10.48	18.55	18.08
6113 to 61183	Leather	0.00	8.09	10.58	2.58
65112 to 65119	Yarn of wool or of fine animal hair	0.01	0.22	0.30	0.20
65921 to 65969	Carpets	0.23	0.41	0.56	0.30
68211 to 68272	Refined copper	1.80	0.63	5.39	12.33
7	Machinery and transport equipment	4.95	1.17	4.80	13.00
8	Miscellaneous manufactured articles	17.03	38.93	16.26	6.64
83111 to 83199	Travel goods	0.00	0.00	0.01	0.07
84	Wearing apparel	16.73	38.69	15.10	5.61
85	Footwear	0.02	0.00	0.05	0.22
9	Goods not classified elsewhere	0.00	0.48	0.08	1.63
	Total nonmineral exports	100	100	100	100
	\$ million	179	270	362	678
Memo item	Share of total exports	40.94	50.94	21.13	12.19

SITC = Standard International Trade Classification.

^a Two-year averages.

Source: Compiled from UN Comtrade database. <http://comtrade.un.org> (accessed June 2019),

The average annual growth rate of meat exports increased from about 8% in the 2000s to over 14% during 2010–2017. Meat accounted for 5.8% of nonmineral exports in 2016–2017, up from 4.7% in 2007. Over 60% of meat exports are to the PRC, but recent years have recorded notable increases to third countries, including France, Japan, and the Republic of Korea. Disaggregated data (not reported here) show that horsemeat exports to

France and Japan expanded at a faster rate (16% during 2000–2017) than other types of meat (12%). Horsemeat is apparently a relatively high-value-to-weight product compared with other products, and is thus suitable for air cargo. Horses are also immune to most animal diseases and so meeting food safety standards is not a binding constraint for expanding horsemeat exports.

The increase in meat exports, however, lags far behind the relative size of the livestock sector in the economy; the massive increase in livestock numbers in recent years; and growing world demand, particularly from the PRC. The livestock sector accounts for 84% of total agricultural output. Livestock numbers increased from about 25 million in the early 1990s to over 66.5 million by 2019. According to World Bank estimates, Mongolia's meat export potential is about 650,000 metric tons a month, but exports as of 2016 were only about 9,000 tons (World Bank 2019c).

The PRC's demand for beef is forecasted to increase rapidly in the coming years as African swine fever has removed as many as 200 million animals from its pig herd since August 2018 (equivalent to a 5% decline in global protein supply). Market analysts predict this will reshape the international trade in meat—not only pork—in the coming years (Meyer 2019). There are indications that the ongoing PRC–US trade dispute is bound to shift the PRC's import sources from the US, currently the world's largest meat exporting country and a major supplier to the PRC, to other potential meat-exporting countries. In May 2018, Tyson Foods Inc., the largest US meat packing and exporting company, decided to undertake a multibillion-dollar investment, with an initial investment of \$2 billion in Kazakhstan for producing beef in order to circumvent 25% retaliatory tariffs imposed by the PRC on meat imports from the US. Production is estimated at 5 million tons of meat a year. The Government of Kazakhstan successfully attracting this huge investment project by “selling itself as an agricultural powerhouse on China's border” (Foy, Kyng, and Meyer 2019:1).

No systematic analysis has been undertaken to broaden the understanding of supply-side issues relating to the lackluster export performance of Mongolia's livestock sector. But circumstantial evidence suggests that animal diseases, not enough modern abattoirs, and the absence of well-functioning supply networks to link herders to processing factories are major constraints. Currently, over 70% of animals are slaughtered by herders, and in the absence of marketing channels and the failure to meet food safety standards demanded by international buyers, the bulk of the meat produced is sold domestically, at falling prices (World Bank 2019c).

During the Soviet era, meat was processed at centralized factories, and cooperatives that supplied animals to the factories had an institutional set-up for providing farmers with veterinary and transport facilities. As discussed earlier, under the big bang reforms, collectives were dismantled and herds put under private ownership, resulting in a massive increase in livestock numbers. This was done without devising an alternative mechanism for providing farmers with veterinary services and a market-conforming institutional framework for procuring animals from herders, meat processing and marketing (Rossabi 2005; Boone et al. 1997; Cooper 1995; Fernandez-Gimenez 2001; Muller and Bold 1996).

Mongolia's manufacturing exports are predominantly agro-based. There are important links between agriculture and manufacturing exports, with agriculture providing inputs to many processing and manufacturing activities, including leather and shoe manufacturing and cashmere production.

In a notable departure from this general pattern, from about the mid-1990s to about 2005, garments (apparel) accounted for a significant share of merchandise exports from Mongolia. By the early 2000s, garments accounted for 38.6% of total nonmineral exports, increasing to 52.1% in 2004. The increase was because garment producers in the PRC set up assembly bases in Mongolia to circumvent quota restrictions imposed by the US and the European Union on exports from the PRC under the Multifiber Arrangement. During this period, the Multifiber Arrangement's quota rent was high enough to generate handsome profits for quota-hopping investors after allowing for relatively higher labor costs in Mongolia and transport costs.¹² The "garment boom" ended after the Multifiber Arrangement was abolished from 2005. The share of garments in total nonmineral exports declined from 52.1% in 2004 to 15.1% in 2006–2007 and then to 5.6% in 2016–2017. Perhaps the key lesson from this episode is that, as a remote landlocked country with relatively higher labor costs compared with the PRC (Inner Mongolia Autonomous Region), Mongolia does not have comparative advantage in standard labor-intensive manufacturing.

Disaggregated data show that during the post-Multifiber Arrangement era, Mongolia's garment exports are dominated by cashmere-based products (jackets, pullovers), which go to higher-end apparel markets in developed countries. These exports recorded an almost twofold increase, from \$23.5 million in 2010 to \$40.2 million in 2017.¹³

¹² The monthly average factory worker wage in Ulaanbaatar is about \$250 compared with about \$150 in the PRC (Inner Mongolia Autonomous Region), based on interviews.

¹³ These figures, based on customs records, do not cover significant purchases of cashmere by tourists, which are effectively exports.

Mongolia is the second-largest cashmere producer after the PRC, accounting for about 25% of total world production. Only about 20% of Mongolia's raw cashmere goes to the domestic processing industry; the rest is exported, mostly to the PRC in raw form. Compared with Chinese cashmere, Mongolian cashmere is noted for its better length, woolen plushness, and strength (Mead 1999; Delgertsogt 1998). Price differences based on quality seem to place Mongolian cashmere clothing at a competitive edge in world markets in spite of the relative labor-cost disadvantage compared with the PRC's Inner Mongolia Autonomous Region, which accounts for the bulk of the PRC's cashmere production.

A similar product line, with significant potential for growth through exports, is high-quality leather footwear and travel goods. Fashionable Mongolian winter shoes, and wool-felt indoor and outdoor shoes, are sold on Internet platforms such as Alibaba. These products, however, account for only a tiny share of Mongolia's nonmineral exports. Mongolia could promote these products globally under unique brand names through a consorted promotion endeavor and, more importantly, by attracting foreign investors to set up production bases in Mongolia. With the rapid increase in livestock numbers, the price of hides has dropped in recent years to almost zero.

Direction of trade

In the late 1980s, more than 90% of Mongolia's exports went to the Soviet Union, with the PRC accounting for less than 4% and the balance going to the other COMECON countries (Figure 5.8). This pattern of exports underwent a dramatic transformation in the following two decades. By the mid-2010s, the PRC accounted for 82% of total exports, with the Russian Federation's share at a mere 1%. Export shares to other countries have generally not increased notably, except for the United Kingdom, with its share rising from 8% during 1996–1997 to 13% during 2016–2017.¹⁴ Interestingly, Japan and the Republic of Korea still only account for a tiny share of Mongolia's total exports despite the growing economic relations between Mongolia and the two countries, as reflected in bilateral aid flows (Table 5.11).

Table 5.11 compares data on the composition of Mongolia's total merchandise exports and exports to the PRC, and the PRC's share of total exports disaggregated by product. The comparison clearly shows that the PRC's role as

¹⁴ Exports to the United Kingdom are dominated by gold.

Figure 5.8: Exports to the People's Republic of China and the Russian Federation, 1987–2017

PRC = People's Republic of China.

Note: Presumably the pre-1991 figures for the Soviet Union include exports to other COMECON countries.

Sources: Data compiled from Asian Development Bank, various years. *Key Indicators for Asia and the Pacific*; for the Soviet Union, including other COMECON countries, for 1987–1991, Rossabi (2005) and Boone (1994).

by far the dominant export destination is dictated by the nature of Mongolia's existing export composition. Copper ore, coal, and crude petroleum account for nearly 90% of total exports to the PRC.

These minerals are low value-to-weight and bulky products that are not suitable for exporting to third-country markets given the long distance to Tianjin port. In most other products listed in Table 5.11, Mongolia's dependence on the PRC is much smaller. Interestingly, even in meat—which is a relatively high value-to-weight product suitable for air cargo—about 38% of exports are to third-country markets. Data for disaggregated meat exports show that 80% of horsemeat exports—the most dynamic meat export for Mongolia—goes to France and Japan. The upshot of this comparison is that overwhelming dependence on the PRC to expand exports is not inevitable. Mongolia has pent-up potential to increase exports in relatively high value-to-weight products to economies other than the PRC. Table 5.12 shows how the PRC's share of Mongolia's total exports increased during the recent decades, while Mongolia's exports to the Russian Federation shrank fastest during the same time period.

Table 5.11: Composition of Total Merchandise Exports, Exports to the People's Republic of China, and the Share of the People's Republic of China in Total Exports, 2013–2017
(%)

Product	Total Exports	Exports to PRC	PRC's Share in Total Exports
Meat	0.38	0.28	62.23
Fruits	0.42	0.49	99.84
Hides and skins	0.06	0.07	98.90
Wool	5.37	5.28	83.03
Copper ore and concentrates	34.94	41.20	99.61
Lead ores and concentrates	0.27	0.32	100.00
Zinc ores and concentrates	2.56	3.03	100.00
Tin ores and concentrate	0.01	0.02	24.37
Molybdenum ores and concentrate	0.50	0.51	84.81
Coal	22.21	25.76	97.98
Crude petroleum	8.71	10.30	100.00
Leather and fur skins	0.50	0.03	5.58
Yarn of wool or fine animal hair	0.02	0.02	0.05
Refined copper	1.13	0.85	63.82
Wearing apparel	0.59	0.07	9.71
Footwear	0.02	0.01	31.37
Gold	9.64	0.00	0.00
Other	12.68	11.79	78.56
Total merchandise exports	100.00	100.00	84.48

PRC = People's Republic of China.

Source: Compiled from UN Comtrade database. <https://comtrade.un.org> (accessed June 2019).

Table 5.12: Destination of Exports, 1996–1997, 2006–2007, 2016–2017
(%)

Economy	1996-1997	2006-2007	2016-2017
People's Republic of China	35.44	71.33	82.33
United Kingdom	8.30	1.63	13.02
Russian Federation	39.99	2.99	1.11
Germany	0.75	0.57	0.50
Italy	1.29	2.81	0.69
Singapore	0.02	0.08	0.39
Japan	3.27	0.63	0.26
Hong Kong, China	0.70	0.26	0.20
United States	3.45	5.35	0.17
Republic of Korea	1.38	1.81	0.18
France	0.05	0.20	0.11
Saudi Arabia	0.05	0.05	0.04
Indonesia	0.00	0.00	0.06
Canada	0.05	10.20	0.05
United Arab Emirates	0.00	0.07	0.05
Viet Nam	0.00	0.00	0.04
Thailand	0.00	0.00	0.04
India	0.04	0.09	0.04
Malaysia	0.00	0.00	0.02
Netherlands	0.67	0.29	0.02
Other	4.54	1.64	0.67
Total	100.00	100.00	100.00
Total value (\$ million)	438	1,714	5,558

Note: The years are 2-year averages.

Source: Compiled from UN Comtrade database. <https://comtrade.un.org/> (accessed June 2019).

Services trade

The latest WTO data show the trend of Mongolia's total services trade has been positive since 2010, reaching \$4.47 billion in 2017 (Figure 5.9).¹⁵ Services imports increased rapidly from 2010 to 2012, but have stagnated since, and even fallen slightly. Services exports, by contrast, have increased continuously, and more than doubled in volume from 2010 to 2017.¹⁶

Figure 5.10 shows that the increase in services exports by sector between 2010–2011 and 2016–2017 was mainly driven by exports of business and distribution services, tourism and travel-related services, and transport services. For transport services, Mongolia appears to have sold mainly freight transport services that support the trade in goods and transshipments. The strong increase in business services is probably driven by services provided to multinational companies, as explained in Chapter 4. The increase in tourism services exports was due to sector growth. Figure 5.11 shows that in terms of mode of delivery, mode 1 (cross-border supply without the physical movement of services providers across borders); and mode 2 (consumption of services abroad) accounted for 88.5% of all exports in 2017.

¹⁵ Data on trade in services are less comprehensive than data on trade in goods. The WTO's new Trade in Services Data by Mode of Supply database provides for the first time an overall picture of international trade in services by the four modes of supply as defined in the General Agreement on Trade in Services.

¹⁶ Unfortunately, the WTO's Services Data by Mode of Supply database does not contain information on Mongolia's partner countries (both exports and imports). The US Trade Representative Office reported that the majority of Mongolia's services are traded with the PRC.

Figure 5.10: Services Exports by Sector, 2010–2011 and 2016–2017

Note: Two-year averages.

Source: WTO. Trade in Services by Mode of Supply Database. https://www.wto.org/english/res_e/status_e/trade_datasets_e.htm (accessed 2 August 2019).

Figure 5.11: Services Exports by Mode of Supply, 2010–2017

M1 = mode 1, cross-border supply without the physical movement of services providers across borders; M2 = mode 2, consumption of services abroad; M3 = mode 3, commercial presence; M4 = mode 4, temporary movement of services providers.

Source: WTO. Trade in Services by Mode of Supply Database. https://www.wto.org/english/res_e/status_e/trade_datasets_e.htm (accessed 2 August 2019).

The top three imports were business, financial, and transport services (Figure 5.12). The dominant modes of supply were mode 1 and mode 3 (commercial presence); the latter was due to the heavy investment of foreign companies in Mongolia's mining sector (Figure 5.13).

Figure 5.12: Services Imports by Sector, 2010–2011 and 2016–2017

Note: The years are 2-year averages.

Source: WTO, Trade in Services by Mode of Supply Database. https://www.wto.org/english/res_e/status_e/trade_datasets_e.htm (accessed 2 August 2019).

Figure 5.13: Services Imports by Mode of Supply, 2010–2017

M1 = mode 1, cross-border supply without the physical movement of services providers across borders; M2 = mode 2, consumption of services abroad; M3 = mode 3, commercial presence; M4 = mode 4: temporary movement of services providers.

Source: WTO, Trade in Services by Mode of Supply Database. https://www.wto.org/english/res_e/status_e/trade_datasets_e.htm (accessed 2 August 2019).

Overall, Mongolia's trade-in-services regime is relatively open and the country has started to benefit from international trade in services. Even so, its trade in services (similar to its trade in goods) is constrained by several factors, including the (i) size of the market—the economy is still relatively small and therefore of limited interest to foreign services providers for investing in the

country's services sectors; (ii) lack of competition—several sectors, including the airline industry, are still heavily regulated, preventing the entry of more domestic and foreign firms; (iii) lack of infrastructure to provide services—the network infrastructure for delivering services is insufficient and expensive to use, mainly due to the country's geography (and the high cost of delivering services might again preclude foreign entry); (iv) short season and high tourism costs—the potential for more tourism is limited due to the climate and the high cost of flying to and moving around in the country; and (v) supply constraints in human resources—exporting services often require skill-levels that are still scarce in Mongolia, and the rapid expansion of mining has absorbed many skilled workers to the detriment of the services sector.

As Mongolia urbanizes and the workforce shifts toward services, it is important to examine which services sectors have the biggest potential for international trade. Opening certain services to foreign competition can increase their quality and lower prices. But the government has to ensure healthy competition in the short and long term.

Preferential trade agreements

Mongolia is a latecomer to preferential trade agreements (PTAs). These have proliferated in East Asia and Southeast Asia since the late 1990s. PTAs give preferential market access to the signing parties and can therefore help boost trade. But they come with four main downsides. First, because they lower trade costs among PTA parties but not for third parties, they typically lead to trade diversion. Second, preferential market access can quickly be eroded if other countries sign similar agreements. Third, preferential market access provided under PTAs is often not used by firms for various reasons, including stringent rules of origins or a simple lack of knowledge among firms.¹⁷ And fourth, the actual trade outcome of a PTA depends on two key factors: “supply response” and “trade compatibility.” Supply response here refers to an economy's capacity to increase exports and achieve productivity gains by facing import competition under a PTA. Trade compatibility is the extent to which trade patterns of a country match those of its partner country; in other words, whether products exported by a partner country are the ones mostly imported by the other partner country and vice versa (Michael et al. 1991). Overall, when deciding on PTAs, governments need to carefully balance the pros and cons. PTAs can stimulate trade, but probably only in the short term,

¹⁷ According to WTO estimates, the share of world trade accounted for by member countries of PTAs increased from 28% in 1990 to over 55% by the end of the first decade of 2000s. But only 30% of world trade takes place on a preferential basis and this drops to 16% when trade within the European Union (which is a customs union) is excluded (WTO 2011).

and they always remain the second-best option compared with multilateral and unilateral trade opening.

The Japan–Mongolia Economic Partnership Agreement (JMEPA), signed on 10 February 2015 and entering into force in June 2016, was Mongolia's first PTA (Ministry of Foreign Affairs of Japan 2016). The JMEPA's overall objective is to liberalize and facilitate trade and investment flows, to create a regulatory framework for further cooperation, and to improve the business climate. Whereas Mongolia was interested in obtaining better access for its agricultural products into Japan, Japan saw the potential for increasing imports of coal and rare earth elements. The JMEPA consists of 11 chapters covering trade in goods and services, customs procedures and trade facilitation, electronic commerce, investment protection, movement of persons, competition, protection of intellectual property, dispute resolution, and improving the business climate. The following are the JMEPA's main features.

Trade in goods. The JMEPA removes or gradually decreases customs duties and taxes for certain goods and commodities. Mongolia has committed to lower tariffs on agricultural products, mining and textile machinery, and motor vehicles. Japan eliminated tariffs on meat from wild boar, lamb, horse, and goose, and on animal skins and fur. Japan has said it will consider eliminating customs duty on certain beef products when Mongolia is officially recognized by the International Office of Epizootics as being free from foot-and-mouth disease based on a risk assessment conducted by the Government of Japan. Japan has also eliminated tariffs on vodka and other alcoholic beverages, and tariffs on metal and petroleum oils have been eliminated or will be phased out.

Trade in services. Both countries made substantial improvements beyond their General Agreement on Trade in Services commitments. Japan made additional commitments on business services; communication services; educational services; environmental services; financial services; health-related and social services; tourism and travel-related services; recreational, cultural, and sporting services; and transport services. Mongolia made substantive GATS+ commitments in education services; environmental services; health-related and social services; transport services; and recreational, cultural, and sporting services.¹⁸

Other important provisions. Both countries committed not to impose tariffs on electronic commerce and not to discriminate against digital products. They undertook to take measures against anticompetitive behavior and to ensure

¹⁸ GATS = General Agreement on Trade and Services.

their economies are market-based. The JMEPA also has rules on protecting investments made by an investor from the other party.

It is too early to evaluate whether the JMEPA has had the expected effect of increasing trade between the two countries. Volatility was high in the trade-in-goods flows between them from 2005 to 2018, although data for 2017 and 2018 appear to show an upward trend (Figure 5.14). But whether this trend will be confirmed in the coming years remains to be seen. In 2018, Mongolia only sourced 1.0% of its imports from Japan and exported only 0.4% of its goods to Japan. But given the size of the Japanese economy and the proximity to Japan, the JMEPA, in the best-case scenario, will help boost trade between the two countries.

About 75% of Mongolian imports from Japan are vehicles and vehicle parts, including tires. The export basket toward Japan is more diversified (Table 5.13). Apart from natural resources (mainly copper, aluminum, and feldspar), Mongolia exports mainly garments and textiles to Japan. The tariffs that Japan applies to these products have been eliminated, thereby giving Mongolian exporters an edge in the Japanese market. For cashmere, Mongolia and the PRC are the two largest producers worldwide. Having better market access in Japan may help Mongolian firms to export more cashmere products. But this advantage will only continue until Japan lowers the tariffs on cashmere either on a bilateral basis or multilaterally toward other countries.

Mongolia still faces substantial tariffs when exporting textiles and garments to other markets. Table 5.14 compares the tariffs for the top 10 exported products to Japan with the tariffs applied by the European Union and the US, which for textile and garment products remain relatively high. Because competition in this sector is fierce, getting duty-free market access to these two large markets would certainly boost Mongolia's exports of these products. Online platforms can offer relatively easy access to these markets. Apart from textiles and garments, certain niche products in agriculture, including honey and cheese, could have substantial export potential if the European Union lowered its relatively high trade barriers. Mongolia's success in increasing exports to these markets depends on how well companies are able to tackle supply constraints. As explained in more detail in Chapter 4, companies need to produce consistent quality and constant quantity throughout the year. Furthermore, access to these markets depends on fulfilling stringent product standards, including sanitary and phytosanitary standards and technical regulations and standards.

Table 5.13: Top Mongolian Exports to Japan, 2018

Product (HS 4 digit)	HS Code	Value (\$)	Share to total exports to Japan (%)
Copper ores and concentrates	2603	7,211,753	22.3
Aluminum; articles nec in chapter 76	7616	4,168,941	12.9
Jerseys, pullovers, cardigans, waistcoats and similar articles; knitted or crocheted	6110	3,491,301	10.8
Shawls, scarves, mufflers, mantillas, veils and the like; not knitted or crocheted	6214	3,204,894	9.9
Feldspar, leucite, nepheline and nepheline syenite, fluorspar	2529	3,204,496	9.9
Engines and motors nec (e.g., reaction engines, hydraulic power engines, pneumatic power engines)	8412	2,145,650	6.6
Woven fabrics of carded wool or of carded fine animal hair	5111	1,398,140	4.3
Guts, bladders, and stomachs of animals (other than fish); whole and pieces thereof, fresh, chilled, frozen, salted, in brine, dried or smoked	0504	977,075	3.0
Yarn of fine animal hair (carded or combed), not put up for retail sale	5108	716,863	2.2

HS = Harmonized Commodity Description and Coding System, nec = not elsewhere classified.
Source: UN Comtrade (2019) using mirror statistics based on data reported by Japan Customs.

Table 5.14: Japan, United States, and European Union Tariff Rates for Mongolia's Top Export Products to Japan

Product (HS 4-digit)	Japan		US	EU
	WTO	JMEPA		
Copper ores and concentrates	0.0%	0.0%	1.7 cents/ kg on lead content	0.0%
Aluminum; articles nec in chapter 76	3.0%	0.0%	5.7%	6.00%
Jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted	10.9%	0.0%	4.0%–32.0%	10.5%– 12.0%
Shawls, scarves, mufflers, mantillas, veils and the like (not knitted or crocheted)	4.4%– 13.4%	0.0%	1.2%–11.3%	8.0%
Feldspar, leucite, nepheline and nepheline syenite, fluorspar	0.0%	0.0%	0.0%	0.0%
Engines and motors, nec (e.g. reaction engines, hydraulic power engines, pneumatic power engines)	0.0%	0.0%	0.0%	0.0%
Woven fabrics of carded wool or of carded fine animal hair	6.6%– 7.9%	0.0%	7.0%–25%	8.0%
Guts, bladders and stomachs of animals (other than fish); whole and pieces thereof, fresh, chilled, frozen, salted, in brine, dried or smoked	0.0%	0.0%	0.0%	0.0%
Yarn of fine animal hair (carded or combed), not put up for retail sale	2.4%	0.0%	4.0%	3.20%

EU = European Union, HS = Harmonized Commodity Description and Coding System, JMEPA = Japan–Mongolia Economic Partnership Agreement, nec = not elsewhere classified, US = United States, WTO = World Trade Organization.

Note: JMEPA tariffs as of 1 April 2019.

Sources: WTO. World Trade Organization most-favor-nation tariffs https://www.wto.org/english/tratop_e/tariffs_e/tariff_data_e.htm, as of 1 January 2015, Japan tariffs http://www.customs.go.jp/english/tariff/2015_1/index.htm; US tariffs <https://dataweb.usitc.gov/tariff/database/>; EU tariffs <https://madb.europa.eu/madb/euTariffs.htm> (all accessed August 2019).

5.4 Foreign Direct Investment

FDI inflows to Mongolia rose considerably from the early 2000s to about 2012, but with significant year-to-year fluctuations (Table 5.15). The share of FDI in total domestic fixed capital formation ranged from 9% to 14% in this period. The past few years have seen a notable reversal in FDI inflows, which deserves looking at because it coincided with a deterioration in the investment climate and the decline in world prices of copper, coal, and other mineral products.

Interestingly, the massive contraction in FDI inflows in 2016 (by \$4.2 billion, which amounted to 187% of total domestic investment in that year) was due to the government restructuring its investment position with Oyu Tolgoi's foreign partner. Rio Tinto substituted equity capital in Oyu Tolgoi with a loan (equity–debt swap) as part of its risk management strategy after resolving an ownership and profit-sharing dispute with the government. The asset restructuring did not involve a capital outflow from Mongolia, but it has implications for profit sharing with the government. This is because interest payments on the loan is part of Oyu Tolgoi's operating cost and the country's current account position (annual debt repayment and interest payment).

Table 5.15: Foreign Direct Investment, 1990–2017

Period	Foreign Direct Investment (\$ million)	Share of Domestic Fixed Capital Formation (%)
1990-94	5.7	1.3
1995-99	20.0	8.6
2000	53.7	9.2
2001	63.0	10.8
2002	77.8	11.6
2003	131.5	15.7
2004	92.9	17.5
2005	187.6	14.3
2006	245.5	18.9
2007	372.8	22
2008	844.7	22.5
2009	623.6	17.8
2010	1,691.4	15.6
2011	4,571.2	16.9
2012	4,272.5	14.4
2013	2,059.7	7.2
2014	337.1	4.0
2015	94.2	9.0
2016	-4,156.4	-187.4
2017	1,494.4	54.0

Source: UNCTAD. World Investment Report Database. <https://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Country-Fact-Sheets.aspx> (accessed August 2019).

FDI in Mongolia is dominated by investments in mining. Of total FDI approved during 1990–2012, 67% was in mining (UNCTAD 2013). Oyu Tolgoi's first-phase development was the main factor behind the 2011–2012 FDI peak and, as just discussed, the massive contraction in FDI in 2016 was due to Oyu Tolgoi investment restructuring. Non-mining FDI is largely concentrated in

telecommunication, hotel construction, and trading. Manufacturing accounts for 2% of total FDI. There was some FDI in agriculture and manufacturing (mostly quota-hopping investment in the garment industry) until the mid-2000s (Davaakhuu, Sharma, and Oczkowski 2014), but no evidence of new FDI in these sectors since then.

Data on projects and companies in UNCTAD (2013) show that no large multinationals are operating in Mongolia outside mining. By 2014 more than 5,000 PRC firms were registered in Mongolia. Other than large PRC state-owned firms (e.g., Qing Hua, Chalco) operating in mining and construction, most PRC-invested firms are small and medium-sized enterprises in wholesale and retail commerce. More than 2,000 Korean companies operate in Mongolia. Most of them are small and medium-sized enterprises in trading, travel services, and telecommunications; none are in mining. Companies from Canada, the Netherlands, and other developed countries are involved mostly in mining.

The PRC is the largest source of FDI, accounting for nearly half of total approved FDI during 1990–2012. The other main source countries are the Netherlands (9%), Canada (8%), the Republic of Korea (5%), and the United Kingdom (5%), including the British Virgin Islands (UNCTAD 2013). The Russian Federation was an important source of FDI, accounting for 15% of approved FDI in the first half of the 1990s (Chuluundorg and Danzanbaljir 2014), but there has been no evidence of FDI from this source in recent years.¹⁹

Foreign-invested enterprises in mining have contributed significantly to Mongolia's export earnings, but a significant involvement of foreign-invested enterprises in export-oriented manufacturing is not evident. The only notable cases are Mona, a Mongolian–Japanese joint venture, and Mongol Amical, a Mongolian–US joint venture that operates successfully in the export-oriented cashmere apparel industry.

The impact of FDI on employment is very small. This appears to be largely because of the heavy concentration of foreign firms in capital-intensive mining rather than in labor-intensive light manufacturing (Davaakhuu, Sharma, and Oczkowski 2015). Foreign-invested firms in mining and oil exploration account for 65% of FDI, but 3.3% of total employment in foreign-invested firms (Table 5.16).

¹⁹ Data on the nationality of FDI need to be treated with caution because they are recorded solely on the basis of the immediate investor, not the ultimate beneficiary or owner.

Table 5.16: Sectoral Distribution of Foreign Direct Investment and Employment, 1990–2010

Industry	FDI (\$ million)	Share (%)	Employment ('000)	Share (%)
Mining and oil exploration	3,160.2	65.1	34.1	3.3
Agriculture and livestock	15.2	0.3	346.6	33.5
Food production	22.1	0.5	–	–
Manufacturing	178.4	3.7	64.8	6.3
Construction and construction material	75.7	1.6	48.8	4.7
Energy	5.4	0.1	12.4	1.2
IT and telecommunication	36.0	0.7	14.5	1.4
Transportation	28.0	0.6	76.5	
Culture, education, science and technology	17.2	0.4	85.3	8.3
Services	108.1	22.3	251.3	24.3
Other	232.9	4.8	99.4	9.6
Total	4,852.5	100.0	1,033.4	100.0

– = zero or less than 0.05, FDI = foreign direct investment, IT = information technology.

Source: Davaakhuu, Sharma, and Oczkowski (2015), based on Mongolian Foreign Investment and Foreign Trade Agency records.

5.5 Labor Migration and Remittances

A paucity of data prevents a systematic analysis of the role of labor outmigration and migrant worker remittances in Mongolia. The limited data suggest that overseas employment plays a significant role as a safety valve for domestic unemployment and that migrant workers' remittances are substantial (and not fully reflected in balance-of-payments statistics).

According to a National Statistics Office of Mongolia census of Mongolians living abroad, 107,410 citizens (male–female ratio: 0.56 and 0.44) had lived or were living abroad in 2011 (the census year) for more than 6 months (Table 5.17). Some of them (particularly those living in the US) are presumably permanent residents, but most were contract migrant works. The Republic of Korea was the main host country, accounting for more than half. Of those living there in 2011, more than two-thirds had migrated for a period of less than 5 years. According to official records in the Republic of Korea (the Ministry of Justice's Yearbook of Labor Statistics), 42,000 Mongolians were working in the country in 2016—3% of the total foreign workforce of 1.4 million (Jeon 2019).²⁰ Racial,

²⁰ In addition to worker migration, marriage migration (migration of brides) from Mongolia to the Republic of Korea has increased since the mid-1990s (Tseden 2014).

linguistic, and religious connections between the two countries underpin the migration of Mongolians to the Republic of Korea (Tseden 2014). During the Communist era, the Soviet Union was by far the main destination of human resource flows (including migrant workers) from Mongolia (Akaha 2004). That connection seems to have significantly faded over the past 3 decades—in sharp contrast to the experience of the former Soviet Republics, particularly the Kyrgyz Republic, Tajikistan, and Uzbekistan, where labor migration to the Russian Federation and the remittances of these workers have remained an increasingly important influence on the home economy.

Table 5.17: Mongolians Living Abroad by Host Economy

Economy	Number as of 2010
Republic of Korea	29,534
United States	17,036
Czech Republic	7,274
People's Republic of China	7,273
Japan	5,401
Russian Federation	5,008
Total	71,526

Sources: Tseden (2014); World Bank, Global Financial Development database, <https://datacatalog.worldbank.org/dataset/global-financial-development>.

Balance-of-payments data show that remittances as a percentage of GDP averaged 3.7% during 2000–2017, with significant year-to-year fluctuations (Figure 5.15). The time patterns of remittance inflows seem anticyclical, with the remittance-to-GDP ratio increasing during times of slower economic growth with some time lag. The ratio peaked in 2004 in the aftermath of the disastrous winter and the macroeconomic crisis during 1999–2003.

Presumably, the balance-of-payments figures significantly understate actual flows, and there is anecdotal evidence that a significant share of remittances occurs through informal channels. Some unofficial estimates indicate that total remittances inflows could be as high as 10% of GDP (Rossabi 2005; Tseden 2014). A survey of 800 Mongolian migrants in six cities in the Republic of Korea conducted in 2011 and 2012 indicated that remittance-receiving households in Mongolia usually drew on remittances to cover basic living expenses, health, welfare, and education costs; remittances are rarely invested in housing or private businesses (Algaa 2013).

Figure 5.15: Remittance Inflows Relative to Gross Domestic Product, 1998–2017

GDP = gross domestic product.

Source: World Bank, Global Financial Development database.

<https://datacatalog.worldbank.org/dataset/global-financial-development> (accessed June 2019).

5.6 Policy Recommendations and Conclusions

Mongolia is one of most open economies in the former Soviet space because of the reforms it undertook in the early 1990s to transition from a planned to a market economy—and the reforms have been sustained since then. The legal reforms and a comprehensive privatization program contributed to greater autonomy of private enterprise. But the economy has not so far undergone the structural transformation needed for self-sustained growth and prosperity through global economic integration.

Rapid import penetration in the economy has not been matched by export expansion, resulting in the economy's increased dependence on external financing. The debt service burden of the economy is reaching alarming levels, and the composition of external financing has begun to shift from grants and concessionary loans toward borrowing at commercial rates. FDI is almost entirely concentrated in mining, and the increased concentration of mineral product exports, overwhelmingly to the PRC, leaves the economy vulnerable to vagaries of world commodity markets and the PRC's economic dynamism. FDI, which is expected to play a pivotal role in export-oriented production and structural adjustment in Mongolia's liberalized economy, in addition to its direct contribution to strengthening the external payments position, has so far accounted for only a small share of capital inflows.

Thus, many issues need to be tackled in the next phase of reforms to reap the gains from the significant opening of the economy to foreign trade and unshackling the private sector.

Mongolia's ranking in various comparative assessments of FDI regimes improved significantly during the first decade or so of policy reforms. But in recent years there have been growing concerns in the investment community over Mongolia's FDI policy. The concerns include the failure to honor promised national treatment for foreign investors, restrictions on land-use rights, the objections of foreign investors to the minimum \$100,000 investment requirement to set up business in Mongolia, lack of consistency in the interpretations of statutes and regulations, favoritism in awarding mining rights, frequent changes in royalty payments by mining companies, and the cancellation of the licenses of small mining companies (with effect from 2016). These concerns seem to have intensified following the closure, in 2016, of the Invest Mongolia Agency and transfer of investment approval and facilitation to the National Development Agency. The agency has not yet created well-functioning mechanisms and procedures for approving or promoting FDI, let alone implementing the proposed one-stop shop for facilitating operations of the foreign-invested enterprises by coordinating tasks among the line ministries involved.

The impact of trade liberalization and private sector reforms on growth and structural change in the economy depends crucially on accompanying macroeconomic policies that shape the economy's international competitiveness. Notwithstanding some sporadic improvements, the degree of the economy's international competitiveness deteriorated throughout the reform period. The main source of this has been the rate of domestic inflation that has been running at more than three times the rates of the country's trading partners. In a highly import-dependent economy like Mongolia's, nominal exchange rate depreciation presumably has limited capacity to counterbalance the impact of domestic inflation and maintain the economy's international competitiveness. Domestic macroeconomic stability is therefore much more important than nominal exchange rate adjustment for averting misalignment of the real effective exchange rate. The Bank of Mongolia's current inflation target (8%) does not seem consistent with the objective of effectively integrating the Mongolian economy into the global economy.

This chapter's disaggregated analysis of nonmineral products suggests a vast potential to redress the heavy dependence on mineral exports by achieving faster growth of meat products and animal-husbandry-based manufactured goods, in particular cashmere clothing and footwear.

Further research is needed to guide policy making to improve the livestock sector's export performance. Circumstantial evidence suggests that animal diseases, not enough modern abattoirs, and the absence of well-functioning supply networks to link herders to processing factories are major constraints. A prerequisite for promoting processed food exports is to set up an institutional mechanism to help producers and exporters meet international food safety standards. International development agencies can play an important role in this as part of the new emphasis on aid-for-trade initiatives.

The direct exports of live animals—as is now being done by the PRC-invested Yikidiki quarantine center—is an effective way of circumventing Mongolia's limited capacity to meet the sanitary and phytosanitary standards required for exporting. From the viewpoint of national gains from exporting, however, this is a second-best option simply because the country loses value addition from downstream processing activities in the meat value chain. Value addition and employment generation in the meat value chain is heavily concentrated in downstream processing activities.

The relatively brief spike in garments exports from the mid-1990s to 2005, when the Multifiber Arrangement's quota regime was dismantled, clearly shows that, as a remote landlocked country with higher labor costs than the PRC (Inner Mongolia Autonomous Region), Mongolia does not have comparative advantage in standard labor-intensive manufacturing. Even so, Mongolia has a comparative advantage over the PRC in its high-quality cashmere-based apparel products. A similar product line with significant potential for growth through export orientation is high-quality leather footwear and travel goods. Yet, these products account for only a tiny share of Mongolia's nonmineral exports. Mongolia could promote these products globally under unique brand names through a consorted-promotion endeavor and, more importantly, by attracting foreign investors to set up production bases in Mongolia.

Labor migration and its impact on the domestic economy is a sparsely studied aspect of the international dimension of Mongolia's economic performance. Information pieced together in this study from various sources points to the growing importance of the Republic of Korea as the prime destination for Mongolia's migrant workers. And the migration link could be used to promote trade and investment between the two countries.

Because Mongolia is landlocked, it faces disadvantageous trade costs compared with coastal and island economies. However, Mongolia is relatively better placed in world trade than many other landlocked developing countries regarding the cost of trade by ocean transport. It is well placed to reap gains from the high quality of trade-related infrastructure of the PRC, its main transit economy, by developing complementary domestic infrastructure. Mongolia has the advantage of trading across borders with the PRC and the Russian Federation. And Mongolia has regular flights with the dynamic markets in Japan and the Republic of Korea, which will be particularly important for expanding exports of high value-to-weight products, such as meat and agro-based manufactured goods, including cashmere and leather goods. In summary, the constraints imposed by being landlocked are not insurmountable for the Mongolian economy, but further reforms are needed to achieve self-sustained growth to complement significant economic opening and enable the private sector to reach its full potential.

CHAPTER 6

Infrastructure and Connectivity

Richard Pomfret

When Mongolia's transition from a planned to a market economy began in 1990, the country had limited infrastructure. The main transport artery was the north–south railway that was part of a Beijing–Moscow main line, and which also served, through spurs, Mongolia's main mining center at Erdenet. Most roads outside Ulaanbaatar were unpaved, and air services were limited. Coal-fired power stations provided electricity and urban heating, causing severe air pollution, especially in Ulaanbaatar. Domestic and international telecommunications were poor, with only one external phone line, to Moscow. During the 1990s, little concern was given to infrastructure. Instead, the government and multilateral agencies focused on privatization and macroeconomic policy as the key approaches for Mongolia's transition from central planning.

In the 21st century, successive governments have identified infrastructure as a priority. Public investment in infrastructure increased after 2005 as the mining boom gathered momentum, especially during 2012–2016, when there was a massive increase in road building. The management of financing public infrastructure came under increasing criticism for how funds were used and for poor tendering and administration (World Bank 2013). In 2015, the International Monetary Fund (IMF) assessed Mongolia as being at high risk of debt distress and advised that substantial fiscal adjustment would be needed to put public finances back on a sustainable path.¹

¹ Excluding central bank foreign liabilities, Mongolia's ratio of debt to gross domestic product was 86.5% in 2016, compared to 32.7% in 2011. A 3-year arrangement under an IMF Extended Fund Facility was approved in 2017, aimed at stabilizing the economy, restoring debt sustainability, and improving fiscal and monetary management (IMF 2018c).

After a brief review of Mongolia's historical infrastructure legacy, this chapter analyzes the state of infrastructure in transport, energy, and communications. It then examines the country's soft infrastructure problems that are reducing the value of infrastructure investments and infrastructure-related financing issues. The final section draws conclusions and makes policy recommendations.

6.1 The Legacy

The economy was based on nomadic pastoralism when Mongolia became independent in 1921 during the Soviet era. At that time, the country had no paved roads, no railways, and no air services. The first infrastructure development followed the establishment of the People's Republic of Mongolia in 1924. Roads were built and commercial shipping began on two rivers flowing to the Soviet Union. In the mid-1940s, 70% of freight was still carried by animals (Worden 1991).

Following central planning in the First Five-Year Plan, 1948–1952, the Trans-Mongolian railway was built in the 1950s from the border of the Soviet Union to the People's Republic of China (PRC) via Ulaanbaatar (see the map on the page prior to Chapter 1). Industrialization centered on power stations and mining, especially the Erdenet complex that began production in 1978 and was linked by rail to the Central Economic Corridor.

By 1989, Mongolia officially had 49,000 kilometers (km) of roads, although only 3% were paved.² Almost all freight transport was by road or rail, with less than 1% by weight going by river or air. The number of telephones doubled from 1980 to 1989, but in 1989 there were only 62,600 and few households had phones (Milne et al. 1991).

In the central planning era, Mongolia's economy was physically integrated into the Soviet economy as a member of the Council for Mutual Economic Assistance (COMECON). Mongolia shared, and still shares, the wide gauge of Soviet railways, and it was the only country incorporated into the Soviet electricity grid. Until 1990, the only external telecommunication link was through Moscow. In 1990, Mongolia abandoned central planning and pursued an independent political and economic course. The new government, aware of the historical challenges to the country's independence from two large neighbors, sought ties with the United States underpinned by

² Figures for total length of roads vary by source, probably because "unimproved roads" are hard to define. Table 6.1 has a much lower figure for "total" kilometers, but is consistent for paved roads. The table also shows how the categories of unpaved roads have been redefined; e.g., around 2000.

strengthening democracy and a market-based economy (Bumochir 2018).³ Strikingly, the main feature of this economic transition was privatization. In 1991, Mongolia joined the Asian Development Bank (ADB), the IMF, and the World Bank. Although the early reports of these institutions mentioned Mongolia's communication problems, infrastructure was not identified as a development priority.⁴

6.2 Transport

Rail transport

Mongolia's rail system from the PRC's border to the border of the Russian Federation spans 1,811 km and carries passengers and freight. Although Mongolia earns substantial transit fees, international trade along the Central Economic Corridor is hampered by poor soft infrastructure. Delays at border crossing points can be long, and Mongolia's border regulations and food sanitation requirements are highly complex and inconsistent with those of its two large neighbors. The Ministry of Road and Transport Development (2018) reports that the 13 daily crossings at the border with the Russian Federation each way take on average 175 minutes to pass through Mongolia's crossing point and 235 minutes to pass through the Russian Federation's. Crossing the PRC takes even longer because of a change of gauge. Crossing Mongolia by train from the borders of its two neighbors takes 28 hours, and 31 hours if the time spent on the gauge change is included. Freight from Tianjin to Ulaanbaatar can take 200–300 hours, depending mainly on the time taken to leave Tianjin port and to clear the PRC–Mongolia border (Figure 6.1).

Container cargo for importing to Mongolia arrives at Tianjin port where PRC freight forwarders get clearances. It can take 72–144 hours for a container to leave the port because the number of containers destined for Mongolia at any time may not be sufficient to fill a complete train.⁵ Port services cost about \$130 per container. Containers from Tianjin arrive at the Erenhot–Zamyn Uud border crossing point after 96 hours. The cost of transporting a container from Tianjin to Erenhot by rail is about \$1,400. After border checks at Erenhot, the

³ Foreign investment legislation was introduced in 1990 and liberalized in several steps up to 1997.

⁴ Milne et al. (1991) noted that “communications and transportation remain principal bottlenecks in the development of internal markets.” Denizer and Gelb (1992:28) observed that, “Lacking the transport and distribution systems to rapidly open new markets and reorient exports to world markets, Mongolia's considerable mineral wealth could not rapidly be deployed.” Nevertheless, in both documents (the first for the IMF, the second for the World Bank), the focus was on privatization and macroeconomic policy, which was in line with 1990s transition theory (Pomfret 2000).

⁵ Data in this discussion are from ADB (2018b:14).

Figure 6.1: Time–Distance from Tianjin to Ulaanbaatar by Rail

km = kilometer.

Source: ADB (2018b:14).

container is transferred to the wagons of UBTZ, Mongolia's national railway operator, or onto trucks at Zamyn Uud. Crossing the border into Mongolia takes 24–78 hours. Transporting a container by rail from the border to Ulaanbaatar takes 21 hours and costs about \$716. At UBTZ's Ulaanbaatar railway terminal, cargo and container wagons are sent to freight terminals in the city, where customs clearance is done. Delivery to a freight terminal and customs clearance usually takes 6 hours, and terminals charge about \$64 for their services.

Such delays are not inevitable, as the transit route for trade between the PRC and Europe through Kazakhstan shows. The daily Chongqing–Kazakhstan–Duisburg train crosses the PRC–Kazakhstan border, which also involves a change of gauge, in 47 minutes, including customs and all other checks (Pomfret 2019).⁶ Transit speed across Mongolia averages less than 40 km/hour. Because of these and other factors, it is hardly surprising that over 90% of PRC–Europe trade takes the Kazakhstan route. Even for trade between Mongolia and its neighbors, almost all of which is by rail, spending many hours to cross a border wastes resources and discourages trade.

⁶ The incoming and outgoing trains' flatbed trucks line up on a parallel track between which cranes move transferring containers from the former to the latter. CAREC (2018) highlights that crossing the PRC–Mongolia border at Zamyn Uud can take more than a day due to shortages of wagons, slow marshalling, and the time it takes to transfer and inspect goods. Corridor performance measurement and monitoring, however, points to similar delays at the PRC–Kazakhstan border for trains other than the express service (CAREC 2018), which suggests that border crossing can be fast, but it needs special incentives to ensure that it is so.

Mongolia's mining industry largely relies on rail because of its comparative advantage in forwarding bulk commodities over long distances. The other parts of the Soviet-era rail network in Mongolia were a spur from the main line to the Erdenet complex and an older direct line from Choibalsan in the far east of Mongolia that links with the Russian Federation's rail network. In 2010, the Parliament approved a new policy on railways that outlined the construction of 5,600 km of new railways in three phases, costing an anticipated \$6 billion, connecting the main strategic copper and coal deposits in Southern Gobi to border crossings with the PRC in the south and mines in the Russian Federation in the northeast.

An ongoing rail project aims to take the main north–south line around rather than through Ulaanbaatar, reducing the line's contribution to urban pollution and avoiding the risk of hazardous cargo spills in the capital. The specific route is under design review. Longer-term plans include a multimodal dry port on the new line as a key component of the Central Economic Corridor.

Road transport

In 2010, Mongolia had 6,734 km of improved roads (3,016 km paved, 2,072 km gravel, and 1,647 km improved earth surface), and about the same length of unimproved roads (Table 6.1). According to criteria developed by the Department of Roads, 60% of the national engineered roads were in “poor” condition requiring significant repair or complete rehabilitation. Nonengineered roads are natural tracks formed through repeated use. Because of Mongolia's terrain, these tracks can offer reasonable driving conditions, but are prone to closure during winter (World Bank 2013).

In 2011, only nine of Mongolia's 21 provinces had paved road connections and the government announced that it would connect all provincial capitals. By 2016 only three capitals remained to be connected. The program involved constructing thousands of kilometers of paved roads, for a total of over 9,000 km in 2018, which is treble the length in 2010. The challenge will be maintenance, given the harsh climate and the strain that overloaded trucks put on the roads—and axle load is hard to monitor on sparsely used roads.

External financing allowed some road projects to go ahead even after Mongolia ran into debt difficulties in 2016. An ADB-funded project aims to pave the road from the border of the Russian Federation to the PRC's border in Mongolia's far west. The project, which is part of the Central Asia Regional Economic Cooperation (CAREC) Corridor 4a, was in the final stages of completion in

Table 6.1: Road Network, 1950–2018
(kilometers)

Year	Paved	Gravel	Improved	Unimproved
1950	182			1,029
1960	254			1,901
1970	387			2,827
1980	712			3,341
1990	1,243			4,317
2000	1,567	938	948	3,454
2001	1,573	1,943	1,924	3,523
2002	1,802	1,871	1,874	3,673
2003	1,901	1,893	1,874	5,667
2004	1,901	1,938	1,845	5,683
2005	2,279	1,980	1,868	6,127
2006	2,393	1,980	1,908	6,281
2007	2,597	1,962	1,902	6,461
2008	2,671	2,000	1,874	6,545
2009	2,824	1,994	1,874	6,692
2010	3,016	2,072	1,647	6,734
2011	4,063	1,959	1,611	7,633
2012	4,083	1,959	1,611	7,653
2013	5,838	1,865	1,173	8,876
2014	5,838	1,783	1,185	8,876
2015	7,125	1,716	971	9,812
2016	7,457	1,697	973	10,126
2017	8,431	1,309	615	10,355
2018	9,023	1,208	605	10,836

Note: Although unclear from the source, before 2000 all nonpaved roads are defined as unimproved.

Source: Ministry of Road and Transport Development (2019: 36).

2020.⁷ Parts of the Central Economic Corridor's main north–south road are being upgraded to four lanes with support from ADB and the European Bank for Reconstruction and Development. The PRC has supported urban road projects in Mongolia and has promised financing for a 60-km expressway from the new international airport in the Sergelen district of Töv Province to Ulaanbaatar.

Ambitious road building after 2011 reversed the relative importance of road and rail for freight transport. In 2010, 16.8 million tons of freight went by rail and 12.6 million tons by road; in 2018, 25.8 million tons went by rail and 44.1 million tons by road.⁸ A consequence of the slowdown in the construction

⁷ Central Asia Regional Economic Cooperation (CAREC) Corridor 4a connects Yarant at the PRC border to Ulaanbaishint at the Russian Federation border via Hovd, linking the western region of Mongolia to the PRC and the Russian Federation.

⁸ Data from Ministry of Road and Transport Development (2019).

of new roads after 2016 has been the government tempering its emphasis on building more roads in favor of a more comprehensive and sustainable strategy that includes road safety (such as incorporating lighting in road design and more resources for maintenance).⁹

Air transport

Chinggis Khaan International Airport increased its passenger handling capacity from 610,000 a year in 2008 to 1,100,000 in 2013, but even this increase has not kept pace with demand. Because of the airport's one-way take-off and landing, and the effects of cold or windy weather, many flights are delayed in spring and winter. A new international airport is being constructed 60 km south of Ulaanbaatar.¹⁰ The physical structure has been built, but there have been equipment and testing delays. The new airport can handle 3 million passengers a year and, with further expansion, 12 million a year.

The national airline, Mongolyn Irgenii Agaaryn Teever (MIAT), carries over half of international passengers.¹¹ Mongolia also has two privately owned regional airlines, Aero Mongolia and Hunnu, which operate domestically and to destinations in the PRC and the Russian Federation using turboprop planes; MIAT has not operated domestic flights for more than a decade. The domestic market is small, with only 230,000 passengers in 2016, although the country has 23 airports. Similar to the road strategy target of paved roads to all provincial capitals, the civil aviation strategy aims to bring air services to isolated areas. As with the more isolated roads (and the target of constructing roads to the three still-unserved provinces), these projects have mostly social goals rather than a financial value that can be assessed in a cost-benefit analysis.

A few foreign airlines, including Korean Air, Air China, Aeroflot, and Turkish Airlines, serve Ulaanbaatar (Map 6.2), but the services are not frequent and prices are often high. In 2016, the Republic of Korea's Air Busan became the first low-cost carrier to serve Mongolia, but it only has two weekly flights to Ulaanbaatar from Busan. The much bigger Ulaanbaatar-Seoul route has been protected by air services agreements. MIAT and Korean Air have a code-sharing partnership on the Ulaanbaatar-Seoul route, which resulted in an

⁹ The harsh climate is the principal reason for high maintenance costs, but there is also a problem of overloaded trucks using little-patrolled roads with inadequate weight-testing.

¹⁰ The development is led by a joint venture between Japan's Mitsubishi Corporation and Chiyoda Corporation. Loans from the Japan International Cooperation Agency of about \$530 million are helping to fund the project.

¹¹ Passengers carried in 2018 were Mongolyn Irgenii Agaaryn Teever (MIAT) 514,609, other Mongolian airlines 68,683, Korean Air Lines Co. Ltd. 188,571, Air China Ltd. 101,777, Russian Airlines PJSC (Aeroflot) 55,119, Turkish Airlines Inc. 42,058, Air Busan Co. Ltd. 36,589, and other non-Mongolian airlines 13,485.

undersupplied market with high fares until Asiana Airlines Inc., the Republic of Korea's second-largest carrier, was finally able to launch services to Mongolia in July 2019.

Similarly, MIAT tried to object to Turkish Airlines' request to offer nonstop Ulaanbaatar–Istanbul flights, arguing that it would harm its European business, particularly from Germany, the largest western European market for Mongolia's tourism industry and a popular destination for Mongolians (Sobie 2017). However, eventually Turkish Airlines was allowed to increase its capacity to Mongolia and launched three weekly nonstop wide-body flights from Istanbul to Ulaanbaatar in early 2020, while reducing its one-stop flights via Bishkek.

The arbitrariness of public policy in this space is illustrated by the history of air services between Mongolia and Kazakhstan. An intergovernmental air services agreement between Kazakhstan and Mongolia was signed in 1992. After a memorandum of understanding establishing the number of flights to be operated was signed in 2014, Air Astana, Kazakhstan's national carrier, started the flight-permission application process. The airline successfully completed an audit by the Civil Aviation Authority of Mongolia, which in March 2016 granted permission to start flights. Air Astana announced a twice-weekly service between Ulaanbaatar and Nur-Sultan (former Astana) in June of that year. Amid a publicity drive, tickets were sold on the company's website until May 19, when Air Astana announced that the Civil Aviation Authority of Mongolia had, in April, withdrawn permission without valid grounds.¹² However, after intensive efforts by Kazakhstan's Ministry of Foreign Affairs and Ministry of Industry and Development, Air Astana was again granted permission and by June 2019 started direct flights twice a week from Nur Sultan to Ulaanbaatar.

The restrictions on Air Astana, Asiana Airlines, and Turkish Airlines, all reputable major airlines, initially severely reduced international connectivity for the landlocked country. However, the recent moves to allow more direct flights will certainly increase the number of tourists and facilitate the flow of ideas and people.¹³ Furthermore, the opening of the new airport could be a good opportunity to increase competition in Mongolia's civil aviation market and provide more scope for the country's aviation policy to move toward more open skies.

¹² Reasons include the audit (for which Air Astana has confirmation that it passed with zero findings), the unavailability of Chinggis Khaan International Airport in Ulaanbaatar due to the 2016 ASEM Summit, and an alleged blacklist by the International Civil Aviation Organization (although Air Astana has never been blacklisted for any operation by any country).

¹³ Expected to resume once the effects of the coronavirus disease (COVID-19) pandemic abate.

6.3 Power Sector

Since 2000, Mongolia's energy demand has increased faster than its economic growth. Peak electricity demand doubled from 570 megawatts (MW) in 2005 to 1,099 MW in 2014. The country's electricity supply capacity of 901 MW is generated by five power systems.¹⁴ Power generated by thermal power plants accounts for 90% of total domestic generation, almost all from Soviet-era coal-fired plants; diesel (2%), hydropower (2%), and renewables (6%) comprise the rest (Ministry of Energy 2018). The failure of domestic supply to keep up with demand is exacerbated by inefficiencies from the sector's aging capital stock and heavy losses in the distribution and transmission systems (technical losses of about 12.5% in distribution and 3% in transmission on average). Blackouts are frequent. In 2016, outages in Ulaanbaatar's distribution network averaged 3,200 minutes per customer, with more than 12 interruptions per customer (ADB 2018d). Because of Mongolia's small electrical power infrastructure and its supporting facilities, electricity is imported from the PRC and the Russian Federation; the share of imported electricity in total electricity consumption rose from 5% in 2001 to 20% in 2016.

A key challenge is to increase the capacity of domestically generated electricity, while tackling public concerns about air pollution and meeting the country's commitments on global climate change action. Two of the three coal-fired plants in the Central Energy System have been operating for almost 50 years and the largest plant for 25 years, without proper emission control devices. These are inefficient and highly polluting, but difficult to supplement or replace. POSCO International Corporation of the Republic of Korea was awarded a contract after a public tender to build a coal-fired combined heat and power station in Ulaanbaatar, but by 2018 the project had been abandoned because of public calls for cleaner energy projects. The plant would also not have been socially inclusive, because combined heat and power stations only provide heat to buildings linked to the network and do not serve the poorer *ger* communities on the outskirts of Ulaanbaatar.¹⁵

The government's current strategy is to refurbish power stations and build new plants outside Ulaanbaatar—for example, the 450 MW plant near the Tavan Tolgoi coal mine. The government also aims to reduce the inefficient use of raw coal and wood by about 200,000 *ger* inhabitants in Ulaanbaatar by encouraging use of electric heaters instead of coal or wood stoves. Raw

¹⁴ Central Energy System (814 MW), Eastern Energy System (36 MW), Dalanzadgad Energy System (24 MW), Altai-Uliastai Energy System (15 MW), and Western Energy System (12 MW).

¹⁵ Peri-urban informal settlements.

coal use has been banned in 2020, replaced by middling briquettes, which has significantly reduced PM 2.5 (by more than 40%) but has created other challenges.

Mongolia has considerable potential to produce energy from wind and sun. Renewables production is increasing, but this is from a low base and still only accounts for 6% of total electricity generation. The largest solar and wind producers have faced difficulties from the power grid not being able to absorb much variable power, and from the willingness of electricity consumers to accept the necessary tariff increases.¹⁶ Hydroelectricity projects run into opposition due to the threats they pose to delicate environments, the fact that water resources cross borders, and the inability to function for several winter months due to frozen water. If renewable energy production can be boosted, electricity could become a source of exports.

6.4 Communications and Internet Services

The government launched a telecommunications reform program in the mid-1990s, establishing an independent regulator and partially privatizing the fixed-line operator, Mongolia Telecom Company. Public access internet centers were established from 1998, but usage was low because of the high cost.¹⁷ Mobile phone usage grew rapidly in the decade after 1995 in a competitive environment, and e-banking and e-commerce started to catch on from around 2000. In 2005, the government introduced the One Home One PC Program, providing computers to households for about \$250 a unit; by 2009 over half of households had laptops.

MobiCom Corporation, G-Mobile, Skytel, Unitel, and Mongolian Telecom are the major providers of telecommunications. The coverage of wireless networks is relatively high in Ulaanbaatar, where free Wi-Fi is provided in city buses, major districts, and restaurants and shopping malls. With support from a World Bank communications infrastructure development project, all of the country's 335 districts (*soums*) were, by 2011, provided with access to mobile voice services and, in many cases, to medium-speed internet. MobiCom launched the first mobile broadband network in 2009. In the same year, MCS

¹⁶ Existing generation assets are fully amortized and need to cover only variable costs, while privately owned new assets must cover fixed and variable costs. A wind farm reported difficulty receiving payments—for example, when there is insufficient transmission capacity. This is despite contractual obligations to pay and the backing of investors, including the European Bank for Reconstruction and Development and the European Investment Bank, that the government presumably does not wish to alienate.

¹⁷ Home use was also expensive with email access costing MNT15,000 and the internet MNT75,000 in 1999, when average monthly salary was about MNT30,000.

Electronics started a fiber-to-the-building project for broadband connections to all major buildings in Ulaanbaatar.

Mobile phone use is very high, with more accounts than people, and 85% of the population is connected to the internet. Mongolia is expected to have 95% coverage for fixed and mobile networks by 2021. Given this level of coverage, mobile connectivity should be a great boost in a large, sparsely populated country such as Mongolia, but some observers worry that its different digital preparedness for rural and urban areas will lead to a widening social and economic gap between Ulaanbaatar and the rest of the country. The government is assessing the state of the country's digital readiness and moving toward providing government services online, which can act as a nudge for sceptics to become internet-savvy. A peculiarity of internet use in Mongolia is that much e-commerce is done through Facebook, especially transactions between small enterprises.

6.5 Hard and Soft Infrastructure

A theme of the discussion so far on transport infrastructure, which is reflected in the literature, is that improvements in hard infrastructure (roads, rail tracks, and so forth) can be nullified by poor soft infrastructure. It makes little sense, for example, to speed up the physical gauge change at the PRC–Mongolia rail border if delays are caused by slow marshalling or the inspection of goods. The government recognizes this issue and, with support from ADB and other development partners, is accelerating customs clearance by introducing single windows to fulfil all regulatory requirements and electronic documentation by 2020 under the wider Regional Improvement of Border Services Program with border officials from the PRC and the Russian Federation.¹⁸ Progress in customs clearance in Mongolia is benchmarked by the biennial World Customs Organization's Time Release Study.¹⁹

A difficulty with soft infrastructure is its multifaceted nature. Despite the improvements described above, Mongolia does not do particularly well in CAREC Corridor Performance Measurement and Monitoring exercises, which

¹⁸ The 2017 Tripartite Road Transport Agreement between Mongolia, the PRC, and the Russian Federation led to some improvement—for example, allowing Mongolian trucks to operate in the PRC (before the agreement, cargo had to be transferred to PRC trucks at the border). Ongoing negotiations for a trade agreement between Mongolia and the Eurasian Economic Union could lead to reduction in costs of doing trade with the Russian Federation.

¹⁹ Mongolia ratified the World Trade Organization Trade Facilitation Agreement in 2016. World Bank (2019c) forecasts substantial reductions in trade costs from the full implementation of the agreement by Mongolia, rather than mere legal compliance.

assess the cost and speed of international freight and identify especially long delays at Mongolian borders. Mongolia also fares poorly in other commonly cited rankings. It was 108th of 137 countries in infrastructure in the World Economic Forum's 2017–2018 Global Competitiveness Index (WEF 2017). In the World Bank's 2019 Doing Business project, Mongolia ranks highly on several regulatory and bureaucracy indicators (23rd of 190 countries in dealing with construction permits), but it was 148th for ease of getting electricity. A World Bank survey of traders reported 60% satisfaction with Mongolian customs, but only 20% with standards and health, and sanitary and phytosanitary checks (World Bank 2019c). Mongolia's score on the World Bank's Logistics Performance Index for customs dropped from 2.39 in 2016 to 2.22 in 2018. Its overall Logistics Performance Index score of 2.37 in 2018 was below the scores of other Asian landlocked economies (Uzbekistan 2.58, the Lao People's Democratic Republic 2.70, and Kazakhstan 2.81), and Mongolia's neighbors (the Russian Federation 2.76 and the PRC 3.61).

General problems include lack of collaboration between agencies, the poor interoperability of systems, and a “convoy” approach whereby border clearance times are determined by the slowest process. A specific difficulty at Mongolia's border crossing points is that implementation of sanitary and phytosanitary measures still follows the Soviet-era practice of not trusting external testing and physically inspecting every item.²⁰ Mongolia has introduced or upgraded five laboratories near the border to facilitate sanitary and phytosanitary clearance, but the real need is to replace universal checking by risk-based assessment. The government is currently receiving ADB support to upgrade its capacity around sanitary and phytosanitary measures. The wider point is that getting the soft infrastructure broadly right will be meaningless if policy or practice are seriously wrong on just one vital point. In other words, transport, electricity, Internet access, and the digital economy are all connected, and lack of attention in one area can undermine progress in other soft-infrastructure areas.

6.6 Infrastructure Planning and Financing

The government has drawn up specific plans for developing infrastructure in Mongolia, and goals for developing transport and power systems have been planned in different stages. Tasks to be undertaken in the first stage include enforcing regulations, developing smaller power-generating facilities, and improving the network of roads and supply systems. Planned work in the

²⁰ Mongolia's trade partners also have concerns about Mongolia's own animal sanitary standards. The PRC has a quarantine farm on Mongolian territory where sheep and goats spend 30 days of testing and inspection before crossing the border to a PRC abattoir.

second stage comprises implementing large projects related to clean coal and thermal power stations and achieving full internet coverage in provincial capitals and major cities. The media and communications industry has been targeted as an accelerator of infrastructure change because modern information technologies can be applied to various fields, such as health-care, finance, business, environmental monitoring, national defense, and emergency management.

Public infrastructure investment before the mining boom

Before the mining boom, Mongolia relied largely on overseas development assistance to finance capital spending. After 2005, domestically funded investment increased, particularly after the Oyu Tolgoi copper and gold mine went into operation in 2010, and gross fixed capital formation increased from 27% of gross domestic product (GDP) in 2005 to 49% in 2011. Public investment in infrastructure increased from 11% of government spending and 4% of GDP in 2005 to a budgeted 35% of expenditure and 14% of GDP in 2013. Almost all of this expenditure was by the central government.

The World Bank (2013) identified three major shortcomings in Mongolia's investment boom: the composition of spending (not enough on maintenance), the geographical distribution of spending (not enough in Ulaanbaatar), and lack of fiscal prudence.²¹ The World Bank raised concerns about Mongolia's off-budget financing for infrastructure using the build-transfer mode for road and energy projects that were financed by construction companies on the condition that they would later be repaid by the government. In the same report, the World Bank raised further concerns about the excessive lending of the Development Bank of Mongolia (DBM), in particular for nonrevenue generating public infrastructure projects. The value of off-budget build-transfer projects and DBM-financed schemes, in total project cost, increased from 3% of the total capital budget in 2008 to over 41% in 2012—a significant fiscal liability for the government.²²

²¹ The peri-urban informal settlements, or *ger* areas, home to three-fifths of Ulaanbaatar's residents, were not served by the city's heating, water supply, and sanitation network. In the winter months, residents had to burn coal for heating, and the resulting smog turned into the world's most polluted capital city in the winter. The poor condition of unplanned and unstructured earthen roads in *ger* areas was a major problem for residents, as many portions of the roads were impassable for vehicles, had drainage problems, posed traffic safety hazards, and were the source of a substantial amount of dust. Solid waste collection from *ger* areas was unreliable and infrequent—once a month or even once in 3 months—with obvious unpleasant consequences and health hazards.

²² The World Bank identified several weaknesses in the DBM's legal framework: insufficient clarity of its mandate, in particular no explicit reference to cost-recovery implying that the bank can and is funding projects that should be funded from the government budget; the Parliament's excessive authority for requesting the DBM to finance specific projects, which compromises its independence; lack of clarity on who the government shareholder is; lack of independence of the DBM's board; lack of a clear supervision function; and excessive authority to lend funds, which can create substantial future fiscal liabilities for the government.

Public procurement requires government officials to exercise discretion and make decisions over large sums of money at specific points in time, often attracts influence from “interested” parties. These problems are particularly evident in Mongolia because of the small size of the formal sector and the close connections between ministers, members of Parliament, and the construction industry.²³ The World Bank concluded that, combined with the common technical problems of poor public procurement planning and limited human resources in low-income countries, political interference in public procurement in Mongolia resulted in frequent time and cost over-runs and low value for money of infrastructure projects. Furthermore, high public spending was a major factor for large and growing public deficits that led to the need for the Extended Fund Facility from the IMF. In a later assessment, the World Bank (2018c:xi) emphasized the poor management of public spending, concluding that “public spending in Mongolia ... was extremely high, as well as poorly managed and largely responsible for large and growing public deficits from 4.1 percent in 2011 to 16.4 percent (of GDP) in 2016.”

The Systematic Diagnostic Report for Mongolia praised the country’s many achievements since 1990 (World Bank 2018d). But in explaining why things could have been better, the World Bank repeatedly returned to the significant “implementation gap.” Although Mongolia’s regulations are strong and modern in many areas, they need to be better implemented, enforced, and monitored. “This implementation gap is due to shallow, fast-changing, and sometimes politicized institutions, public sector management and civil service” (World Bank 2018d:x). These criticisms are relevant to the infrastructure investment boom that followed the windfall from the resource boom.

Public investment in infrastructure since the mining boom

By 2015, copper and gold prices had fallen substantially from their peaks in 2011/12 and Mongolia was experiencing debt-servicing difficulties. The problems arose not just from the level of external debt but also poor implementation. The IMF specifically cited nontransparent build-transfer agreements as a practice that committed large sums of cash to unaudited infrastructural projects. Working with the IMF, the government is striving to reform the way it plans infrastructure spending and reduce inefficient capital spending in a program aimed at stabilizing the economy, restoring debt sustainability, and improving fiscal and monetary management. Under the IMF

²³ The World Bank estimated that “approximately 10 percent of parliamentarians in the 2008–2012 parliament owned shares in construction companies, and the top ten local construction companies, which together received 30 percent of road construction contracts in the past five years, were either owned by members of parliament or by individuals who had close ties to them” (World Bank 2013).

program, the government agreed to end build-transfer agreements and other harmful practices identified by the IMF (IMF 2018c).

Implementing the IMF program is expected to boost growth, seen averaging 6.5% in 2019 and 2020. The initial implementation of the program has been responsive, with the overall fiscal deficit, including spending from the DBM, falling from 16.4% of GDP in 2016 to 1.9% in 2017. Government revenue increased from 24.4% of GDP to 29.2% in the period. And public spending fell from 40.5% to 31.0%, led by a drop in public capital expenditure, from 10.9% to 4.3% of GDP (IMF 2019b).

Despite the fiscal constraints, Mongolia's infrastructure finance could improve in the medium term due to two factors: the flow of foreign direct investment has accelerated, and the government is leveraging the country's strategic location to attract investment under the PRC's Belt and Road Initiative. The governments of Mongolia, the PRC, and the Russian Federation have floated the prospect of a trilateral economic corridor, which would increase transport capacity between Tianjin and Ulan-Ude. The PRC and Mongolia have discussed upgrading the electrical grid and continuing a history of cooperation between Ulaanbaatar and Beijing, among other areas. As of July 2017, the PRC had invested \$4.1 billion in Mongolia.

The potential for a surge in loans related to the Belt and Road Initiative has drawn criticism on fears that it will lead to unsustainable levels of borrowing in debtor countries (Hurley, Morris, and Portelance 2018). PRC debt was part of Mongolia's fiscal difficulties in the mid-2010s, and the relationship between the two countries has not been without acrimony. Even so, increased foreign direct investment, including from the PRC, will provide an opportunity as long as Mongolia can carefully manage its external debt.²⁴

Mongolia faces a substantial challenge in how it balances austerity and infrastructure development. On the plus side, Mongolia has international partners willing to assist in the process. It has benefited in particular from productive engagements with Japan and the Republic of Korea, and multilateral partners. This process presents an opportunity both for Mongolia and its international investors.²⁵

²⁴ On the Belt and Road Initiative, it is important not to be overoptimistic about the transit fee revenue that can be generated to service foreign loans. Even with upgrades of border crossing points and the single-track main line, it is unclear to what extent a trans-Mongolian route from the PRC to Europe can compete with the current preferred routes through Kazakhstan. A similar issue of revenue-raising capacity applies to many road projects funded with foreign loans, including ADB projects.

²⁵ Improving links to Vladivostok/Nakhodka and Japan could reduce Mongolia's dependence on Tianjin as its ocean port.

6.7 Policy Recommendations and Conclusions

Building and upgrading infrastructure in the world's least densely populated country is an enormous challenge. In transport, the challenge is to substantially upgrade the aging Russian Federation–PRC rail line and the country's poor road network, and to establish modern air services by opening competition to the national airline. In energy and electricity, the government has to meet the demands of a growing population and rising incomes. The main challenges are upgrading energy infrastructure, including linking urban and rural areas, and accessing export markets in neighboring countries. At the same time, the government needs to take care of the environment and take action on climate change. One challenge that Mongolia has risen to is building practically from scratch an effective network for communications connectivity and platforms for e-commerce and digital trade.

Helped by the resource boom, Mongolia has made good progress in improving infrastructure in the 21st century, but there is a gnawing sense that the country could have done better. Public management has been flawed—for example, the lack of coordination between government agencies at border crossing points, despite the commitment to a single window, and the emphasis on road construction to the neglect of road maintenance. Examples of delayed and over-budget projects abound. A particularly egregious one is the rail line that was abandoned after being partly built and then being built along a different route. It is widely believed that funds for infrastructure projects are being allocated in a nontransparent way to cloak large-scale corruption.

It must be acknowledged that infrastructure decisions are often difficult, involving large, mutually exclusive projects with important externalities. Building a road or railway or laying a cable across sparsely populated areas of Mongolia are unlikely to yield a positive net present value unless the cost–benefit analysis is able to convincingly show positive externalities. And there is an inherent challenge to the conceptual basis of such a cost–benefit analysis: benefits will continue to accrue long after discounting at the time of investment has reduced the benefit flow to negligible amounts.

The policy recommendations focus on improving the implementation of policy directions that have already been set. Difficult decisions must be made and require essentially political choices. For example, meeting demands for heating and electricity in Ulaanbaatar will involve a trade-off between expanding coal-fired generation or initially more expensive but the more environmentally friendly expansion of renewables. For isolated provinces, the trade-off is

between ameliorating isolation by paving roads, providing air services, and providing e-connectivity and the cost of providing these services across a large sparsely populated country.

The government must identify a method for prioritizing future transport investments while maintaining fiscal balance and external debt sustainability. The challenges are that the scope for transport improvements in Mongolia is huge but doing serious cost-benefit analyses will be difficult given the range of economic and noneconomic externalities and the long life of road and rail projects. The increased emphasis on road maintenance and road safety should be continued.

The opening of the new airport will be a good opportunity to adopt an open skies policy and introduce greater competition in providing international flights. Protecting MIAT is far less important than increasing flights and reducing airfares, both of which will promote trade and increase tourism.

In the energy sector, significant work needs to be done on energy planning to ensure that the right investment decisions are made to tackle the challenges facing Mongolia. Coal burning by individual households combined with continued reliance on obsolete and environmentally unfriendly power stations for Ulaanbaatar's electricity and heating should be addressed sooner rather than later. If renewables are to be encouraged, a clear pricing policy and its effective implementation are necessary. Reliable electricity supply is essential for maintaining progress in the development of internet connectivity.

CHAPTER 7

The Business Climate: Institutions and Governance

Byambajav Dalaibuyan and Julian Dierkes

Mongolia's governance indicators have long been an anomaly in Asia, viewed both in terms of the country's state socialist past and in its place in the world today. Since its political and economic transition started in the early 1990s, Mongolia has shown all the nominal and structural features of a capitalist democracy. But it is also a rare case among countries of the former Soviet bloc in that its democracy has been neither eroded nor reversed.

Mongolia's many features of a functioning democracy include the 1992 Constitution, which has popular legitimacy even as it is being amended in late 2019, and a Parliament that has been regularly elected and has seen a transfer of power between different parties. This achievement has been rooted in near universal literacy in a small population. The country is increasingly overcoming some of the challenges that its low population density poses by being very connected and active online. All these features are commonly used criteria to assess the extent to which a country is judged to be democratic. Freedom House, in its yearly Freedom of the World survey, has categorized Mongolia as a "free" country since 2014 on the basis of its popularly supported democratic decision-making processes.

In Freedom House's 2020 survey, Mongolia scored 84 on a scale ranging from 0, scored by Syria, to 100, scored by Finland, Norway, and Sweden (Freedom House 2020). The scoring suggests a fine-grained resolution of the scale that is probably somewhat illusory even when it is tied to the answers on specific questions that make up the index. Countries scoring 83–85 are Antigua and

Barbuda, Argentina, Croatia, Monaco, Panama, Poland, the Republic of Korea, Romania, and Sao Tome and Principe. That is not bad company to keep in such a ranking of governance. Note that the only Asian country in this range is the Republic of Korea, and only three former socialist states, Croatia, Poland, and Romania (now members of the European Union) are in the same range.

The only Asian economies assessed as more free than Mongolia in Freedom House's survey are Japan (96) and Taipei, China (93). The Republic of Korea, just below Mongolia with its score of 83, provides a good comparison because both countries broadly started on their democratic paths in the late 1980s—the Republic of Korea in 1987, when military control ended. Compared with other former state socialist countries, Mongolia scores well—it is only outdone by Estonia and Slovenia (both 94), the Czech Republic and Lithuania (both 91), Latvia (89), Slovakia (88), and Croatia (85).

Mongolia's civil rights have consistently scored 2 (7 = lowest, 1 = highest) on Freedom House's *Freedom in the World* report. For Freedom House's political rights subcategory, Mongolia consistently gets high scores for electoral process and extent of political pluralism. It scores less well for the subcategory of the functioning of government. For the civil liberties subcategory, Mongolia ranks well in extent of freedom of expression and association, but has a lower rank in the rule of law.

On the Bertelsmann Foundation's 2020 Transformation Index, which focuses on countries in transition, Mongolia ranks 28th of 137 countries for political transformation (Bertelsmann Foundation 2020). Unlike Freedom House, which focuses on political and civil rights, the measure of "political transformation" most closely approximates a measure of the institutionalization of democracy. Here, in a scoring system that ranges from lowest (0) to highest (10), Mongolia had a political transformation score of 7.30. That puts Mongolia into a similar category (+/- 0.1 in the score) with Ecuador, El Salvador, and North Macedonia (7.20), India (7.25), Montenegro (7.35), and Brazil (7.40). The Asian economies that rank above Mongolia for political transformation are Taipei, China (9.55), the Republic of Korea (8.60), and Timor-Leste (7.55). Many former state socialist countries in Europe rank ahead of Mongolia. In Central Asia, the Kyrgyz Republic (6.10) ranks below Mongolia and other countries are significantly lower.

Mongolia's democratization has been all the more remarkable because it happened in a context that was hardly conducive to this process, given poverty, regional politics, and democratic traditions. Until 1911, Mongolia was

a feudal society focused entirely on pastoral herding to serve the nobility and Buddhist monasteries. During the state socialist period (1921–1990), Mongolia developed economically. Industries were built with Soviet support from the early 1920s on. Within the the Council for Mutual Economic Assistance (COMECON), Mongolia's contribution largely came through meat exports, but central planning placed industrial production in many of the provincial centers that were created through state socialist administrative reforms.

With the collectivization of animal husbandry, even this central sector was somewhat rationalized around economic targets in the 1960s. Mining projects helped underpin Mongolia's economic development during the Soviet era. The Erdenet copper mine was the largest of these, operating from the 1970s as a Soviet–Mongolian joint venture contributing significant copper production. The Mongolian economy collapsed in 1991 after the withdrawal of Soviet economic support.

While Mongolia's nascent democracy was being designed and the first steps taken to institutionalize it, the country was mired in poverty. Throughout the 1990s, the economy underwent “shock therapy” experiments following international advice. The 1990s was the decade of Mongolia's initial institutionalization of democracy, and the first peaceful change of power followed an election in 1996. It was not, however, a period of economic security or comfort.

Mongolia's democracy developed without regional support. The former state socialist countries in Eastern Europe developed their democracies in close geographical proximity to the European Union, but Mongolia essentially had “to go it alone.” And although Asia's democracies were regarded as “third neighbors” by Mongolia's foreign policy, they did not actively promote democracy in the way that the European Union did to the former state socialist countries of Eastern Europe. Mongolia's democratic credentials are attested by global surveys, the country's membership since 2012 in the Organization for Security and Co-operation in Europe, and its hosting of the annual meeting of the Community of Democracies in 2013.

7.1 Political Institutions, Risks, and Governance

Remarkable though Mongolia's democratization has been, concerns are growing about the quality of government and governance. As Figure 7.1 shows, key governance indicators, including rule of law (separation of powers, independent judiciary, and prosecution for abuse of office), have not been as high as Mongolia's commitment to democratization. Indeed, recent international and local surveys identify negative perceptions of Mongolia's political institutions and policy making as the largest impediments to the country's business and investment climate. The World Economic Forum's 2018 Global Competitiveness Index ranks policy instability and corruption as the biggest problems to doing business, and both have topped previous surveys (WEF 2018). A survey of 2,000 companies by the National University of Mongolia shows that the policy and the legal environment for doing business are problems for local businesses (Mongolian Chamber of Trade and Industry and NUM 2017).

The following sections examine the performance of key political institutions and the challenges they face for implementing reforms.

Political parties

Asian Barometer surveys show that since the early 2000s public trust in political parties has fallen dramatically: see Figure 7.2 (Hu Fu Center for East Asia Democratic Studies 2019). Some observers attribute this to corruption in political parties. The Asia Foundation's survey on Perceptions and Knowledge of Corruption has, since 2015, ranked political parties in the top five institutions in Mongolia perceived to be most corrupt (Asia Foundation 2018b).

Figure 7.2: Public Trust in Political Parties, Selected Years 2003–2014

Source: Authors' analysis of survey data from Asian Barometer Surveys for the years shown (Hu Fu Center for East Asia Democratic Studies 2019.).

The Defacto Institute's 2018 Internal Democracy Index concluded that most political parties in Mongolia were "semi-democratic" in their internal processes, and that competition within political parties is increasingly dominated by financial capital and patronage networks (Defacto Institute 2018). The membership in political parties and activists' allegiance to these parties are very low, suggesting that "political parties are not considered to be the backbone of democracy even by their foot soldiers, but rather thought of 'at best' as an instrument for some other purpose" (Koo 2018: 375).

According to an International Institute for Democracy and Electoral Assistance report, Mongolia does not meet international guidelines and best-practice recommendations on party funding (Burcher and Bértoa 2018). The oversight and disclosure of party finances by a mandated authority especially fails to meet international standards. Current party finance regulations do not effectively deter parties or candidates from illegal funding. The Organization for Security

and Co-operation in Europe noted that new requirements for Mongolia's political parties on financial reporting and auditing have been introduced into the election laws, but there are hurdles to their implementation (OSCE 2017). While the law requires political parties and candidates to submit reports on the donations they receive before elections to mandated authorities, it does not include clear requirements for public disclosure and access to information. By law, the Mongolian National Audit Office has a broad range of powers and responsibilities on pre- and post-election audits of election campaign financing, but implementation has been inadequate (Enkhsetseg 2017). The Law on Political Parties, revised in 2005, requires parties to disclose annually their audited financial reports, but this has not been enforced. As a result, there has been little incentive for financial transparency among major parties.

Several proposals have been made to revise the Law on Political Parties to improve transparency and accountability. The National Plan for the Fight against Corruption approved by the government in November 2016 defined measures for ensuring the transparency of party finances. In 2017, a parliamentary task force began work on drafting an amendment of the law, regarding transparency. The focus of the reform is to eradicate the illegal private funding of political parties and other forms of corruption by introducing public funding and better oversight and disclosure mechanisms.¹ Previous attempts to reform the Law on Political Parties failed, suggesting the ongoing attempt may not be straightforward. For example, a 2016 draft law prohibiting political parties from setting up committees in small districts (*soums*) attracted a lot of criticism. Improving the oversight of public funding and the disclosure of private funding through better adjudication and judicial mechanisms in the law will be crucial for reforming political parties.

Mongolia's political parties' positions on socioeconomic development and well-being tend to be rather vague and inconsistent. Voters and party members often do not have the opportunity to decide on competing policy packages that reflect the core values that the parties proclaim. But it is important that political parties have clear, long-term perspectives on important economic issues, such as taxation, credit access, and pensions, which tend to be wrapped up in general pronouncements. Policy debates are not integrated into the party structures and processes. Youth initiatives within parties have tried to transform their parties into policy institutions, but no clear path forward to achieving this has been identified. Indeed, the party system incentivizes parties to state vague and less testable platforms, and it motivates individual politicians and factions within parties to aim at opportunistic electoral advantage.

¹ By law, political parties receive MNT1,000 (\$0.40) for each vote they receive and MNT10 million (\$4,000) for each parliamentary seat they win.

The lack of substantial policy debates in party politics and election campaigns partly reflects the country's majoritarian electoral system. Elections campaigns are centered on electoral districts, and candidates narrowly focus their campaigns on local issues. The 2012 introduction of proportional representation for 28 of the 76 seats in Parliament was important for motivating political parties to develop policies of substance, but this was cancelled by amendments to election laws in 2016.

Parliament

Parliament has been a crucial support to the country's political and economic transition. As a forum for collective decision-making and inter- and intra-party competition for power and influence, Parliament has in many ways prevented a reversal of democratization in Mongolia, as has happened in many post-Soviet countries that chose presidential systems. Public trust in Parliament has, however, plummeted since about 2010, as well as in the country's political parties (Figure 7.3).

Figure 7.3: Public Trust in Parliament, Selected Years 2003–2014

Sources: Asian Barometer Surveys for the years shown (Hu Fu Center for East Asia Democratic Studies 2019).

Parliamentary debates are frequently derogatory. An Asia Foundation survey found that members of Parliament (MPs) are widely seen as corrupt or belonging to business-political groupings (Asia Foundation 2018b). The owners and shareholders of many large companies are also MPs. And many MPs have direct and indirect beneficial business ownerships, according to their assets and income statements submitted to the Independent Authority Against Corruption (Ikon.mn 2017).

The disclosure by Mongolian investigative journalists of the names of 49 MPs allegedly connected to companies or their beneficial owners that received low-interest loans from the state-run Fund for the Development of Small and Medium-Sized Enterprises showed the depth of conflict of interests in Parliament (Transparency International 2019b). The government's approval of an obscure, interim regulation for allocating loans to small and medium-sized enterprise (SME) projects from the fund in 2016 increased the influence the government and politicians had on decisions affecting the fund.² Although the head of the fund, the state auditor, and the minister overseeing the fund have been dismissed, efforts to hold MPs accountable were constrained by their parliamentary immunity.

The number of new laws and amendments passed by Parliament since about 2010 has steadily increased (Enkhbaatar et al. 2016), suggesting that the workload of MPs has increased. By law, Parliament can pass laws and regulations by a majority vote of no less than 50% of all 76 MPs who are present. Thus, the attendance of a minimum of 38 MPs allows Parliament to hold a session and their majority (a minimum of 20) can pass laws and regulations.

The Law on Legislation, passed in 2015, is based on lessons learned from ill-prepared laws, and aims to integrate research, stakeholder consultation, and analysis into lawmaking. However, strong research and advisory bodies still need to be developed for Parliament. Although this is broadly acknowledged, efforts and political backing to accomplish it have been inconsistent.

Government

International investors cite political instability as a big cloud in Mongolia's business climate. Foreign mining and mineral exploration companies have expressed concerns about the country's lack of political certainty and unwelcome surprises from cyclical instability. The *Annual Survey of Mining Companies* (Fraser Institute 2018) show that political instability has affected Mongolia's attractiveness as an investment destination (Table 7.1).

Mongolia has had 14 governments since 1992 (Table 7.2). The average term in office of Prime Ministers is 2 years, a pattern that has been well-established since 2004. The Constitution states that Parliament is the "highest organ of state power." The Prime Minister does not have discretionary power of dissolution, which is common in many traditional parliamentary democracies.

² The interim regulation allowed the fund to provide business loans of up to MNT2 billion (\$750,000) with an interest rate of 3%, which is extremely low compared with bank rates of up to 20%.

Table 7.1: Mining Companies Business Climate Perception, 2008–2017
(%)

Indicator	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Mineral potential assuming current regulations and land use restrictions	64	53	45	25	59	68	82	76	82	90
Uncertainty concerning the administration, interpretation, and enforcement of existing regulations	93	87	78	75	80	82	85	100	82	70
Regulatory duplication and inconsistencies (includes federal/provincial, federal/state, interdepartmental overlap, etc.)	84	69	76	48	58	75	84	89	82	82
Legal System (legal processes that are fair, transparent, non-corrupt, timely, efficiently administered, etc.)				71	88	92	94	89	73	91
Taxation regime (includes personal, corporate, payroll, capital and other taxes, and complexity of tax compliance)	84	33	79	67	81	84	89	76	82	73
Socioeconomic agreements/community development conditions (includes local purchasing, processing requirements, etc.)	57	72	76	71	66	64	77	75	82	60
Political stability	97	88	70	73	94	86	88	87	64	90

Note: Numbers indicate % of negative ratings. Orange cells indicate consistent risks.
Source: Authors' analysis of Fraser Institute (2018) data.

Table 7.2: Mongolian Prime Ministers and Their Governments Since 1992

Prime Minister	Time in office	Composition of the government	Reason for termination
Puntsag Jasrai	21 July 1992–19 July 1996	MPP (former MPRP)	General election
Mendsaikhain Enkhisaikhan	19 July 1996–23 April 1998	Coalition of MNDP and MSDP	Ousted by opposition and own party
Tsakhia Elbegdorj	23 April 1998–9 Dec 1998	Coalition of MNDP and MSDP	Ousted by own party
Janlav Narantsatsralt	9 Dec 1998–22 July 1999	Coalition of MNDP and MSDP	Ousted by opposition and own party
Renchinyam Amarjargal	30 July 1999–26 July 2000	Coalition of MNDP and MSDP	General election
Nambar Enkhbayar	26 July 2000–20 Aug 2004	MPP	General election
Tsakhia Elbegdorj	20 Aug 2004–13 Jan 2006	Coalition of DP and MPP	Resignation of cabinet members
Miegombo Enkhbold	26 Jan 2006–7 Nov 2007	Coalition of MPP and other parties	Ousted by own party
Sanj Bayar	22 Nov 2007–29 Oct 2009	Coalition of MPP and other parties	Resigned due to declining health
Sukhbaatar Batbold	29 Oct 2009–10 Aug 2012	Coalition of MPP and other parties	General election
Norov Altankhuyag	10 Aug 2012–21 Nov 21 2014	Coalition of DP and other parties	Ousted by own party
Chimid Saikhanbileg	21 Nov 2014–8 July 2016	Coalition of DP and other parties	General election
Jargaltulga Erdenebat	8 July 2016–4 Oct 2018	MPP	Ousted by own party
Ukhnaa Khurelsukh	4 Oct 4 2018–present	MPP	

DP = Democratic Party, MPP = Mongolian People's Party, MPRP = Mongolian People's Revolutionary Party.

Sources: Enkhbaatar et al. (2016) and authors' analysis of various sources.

Without this power, which can be an important incentive for MPs to support the cabinet, the Prime Minister and the cabinet frequently face no-confidence votes. The Prime Minister has to carefully navigate competing interests of individuals and factions within their political parties and other parliamentary parties to avoid obstructions. Importantly, factional politics and their effects on cabinet composition and performance inhibit the government's effective treatment of complex whole-of-government issues. Because providing the Prime Minister with the power to dissolve Parliament is unlikely to be widely accepted in Mongolia, it is crucial that changes are made to find a balance between politics and policy.

Amendments to the Constitution in 2000 lifted the prohibition on MPs holding concurrent posts, allowing MPs to become ministers. Boldbaatar (2017) and others argue that this change may have created a strong motivation for backbenchers to oust the government and become cabinet members during a Parliament's term. As Table 7.2 shows, backbenchers or MPs of their own party have frequently used votes of no confidence to cause the resignation of a government.

In November 2019, Parliament passed several constitutional amendments. Public discussion of the amendments had started in June 2019 and was extensive, with several of the proposals evolving. Some of the amendments will only have an impact if followed up on by specific laws, but others have nudged Mongolia from its hybrid presidential-parliamentary constitutional system in the direction of more parliamentary power. For example, the Prime Minister, elected by Parliament, will be able to appoint cabinet members without requiring approval from the President. As O. Munkhsaikhan, who was a member of the constitutional working group, notes, "With a view to addressing problems of government instability... the amendments require an absolute majority for the dismissal of the Prime Minister, instead of a simple majority as is currently the case, and an obligation to appoint a new Prime Minister within 30 days, failing which the President is obliged to dissolve Parliament" (Munkhsaikhan 2020). While Parliament has been restrained in terms of individual MPs' ability to add items to the budget vote, MPs have also been given greater powers to initiate investigations.

In established democracies, the negative effects of frequent government changes on the business climate are often minimized by long-term policies and politically impartial and independent civil services. However, new governments in Mongolia often make significant policy shifts. When the Altankhuyag administration stepped down in 2017, the new minister of justice reversed

justice reforms initiated by the previous minister. The frequent government changes do not provide sufficient time for new policies to be designed and implemented.

Mongolia's Constitution and Civil Service Law prohibits the removal of civil servants because of political discrimination or election outcomes. Government changes have, however, led to the replacement of large parts of the civil service. According to a World Bank report, turnover rose from 5% of the civil service in 2007 to 14% in 2014, weakening morale, reducing accumulated experience, and diminishing its effectiveness and capabilities (Forneris et al. 2018: 12).

The Civil Service Law, passed in 2019, aims to protect public administration from political influence, and improve professional capabilities in the civil service and enhance its accountability. The government is expected to draw up about 40 supplementary procedures or guidelines to the law and to submit a bill on the conduct and responsibilities of civil servants to implement the law. However, a long-term government policy or substantial policy debate on the size, competency, and performance of the civil service is still lacking and will be vital for implementing the law effectively.

Recent assessments of Mongolia's investment climate have sent a clear message to the government that, despite the imperfections of existing laws, more effort is needed to properly implement them and to give investors time to become familiar with them before they are changed again. As the International Finance Corporation, commenting on Mongolia's Investment Reform Map, puts it, the "costs of launching yet another revision process of the investment law in a country where it has changed so often have to be balanced against the benefits of these changes" (IFC 2018: 5). Bruckner and Danielson (2017), in an assessment of Mongolia's mining policy, conclude that frequent revisions of laws that affect mining risk lowering investor confidence and are a source of stakeholders' lack of clarity on the current rule of law. More independent reviews and multistakeholder efforts are needed to tackle the duplications and contradictions in Mongolia's laws. A 2017 media report found numerous examples of this in the minerals sector (News.mn 2017). The inconsistencies appear to deter mining and exploration companies from operating in Mongolia (Table 7.1).

Public perceptions of the scale of the abuse of power by government officials have historically been negative in Mongolia (Figure 7.4), but have been particularly noticeable since the mid-2000s, especially during the mining boom.

Figure 7.4: Perceptions of Corruption and Bribe-Taking in National Government, Selected Years 2003–2014

Note: The question asked in the surveys was, “How widespread do you think corruption and bribe-taking are in the national government?”

Sources: Asian Barometer Surveys for the years shown (Hu Fu Center for East Asia Democratic Studies, 2019).

The local business community perceives corruption by government officials as high. Nearly 80% of respondents in an Asia Foundation survey on private sector perceptions of corruption in Mongolia rated such corruption as a “a lot” or “some.” The top five government agencies seen to be the most affected by corruption are the Tax Office, the Specialized Inspection Agency, the Customs Agency, the Land Administration, and the Government Trade Authority (Asia Foundation 2018a).

The number of cases the Independent Authority Against Corruption has investigated and submitted to the courts has increased, including cases against cabinet members and provincial (*aimag*) governors. But 25% of these cases in recent years were terminated by prosecutors and only 9.5% led to convictions (OECD 2019). Courts have also dropped corruption charges because of limitation periods in the Criminal Law, passed in 2017. While limitation periods on corruption and the embezzlement of public funds are long enough or nonexistent in many countries, such limitations are not integrated into relevant laws in Mongolia (Transparency International 2010). In 2018, the local media alleged that politicians, civil servants, and businesses used the prosecution limitation periods to avoid criminal and civil liabilities for themselves and their associates (Mongolian National Broadcasting 2018; *UB Post* 2018).

Judicial system

Mongolia ranked 53rd of 129 countries in the 2019 World Justice Project’s Rule of Law Index; it scored 0.55, where 1.0 is the highest score and 0, the lowest (Figure 7.5). The country scored very well for absence of civil conflict, and very poorly for absence of government interference in criminal justice and absence of corruption in Parliament. Central Asian countries that ranked below Mongolia in the index were Kazakhstan, 65th (0.52), and the Kyrgyz Republic, 85th (0.48). Mongolia ranked 8th of 15 countries in East Asia and the Pacific and 3rd of 30 lower-middle-income countries. Countries with similar scores to Mongolia include Bulgaria, Macedonia, and Trinidad and Tobago, (0.54); Malaysia and Senegal (0.55); and Jamaica (0.56).

Mongolia’s judiciary has a poor reputation among domestic and foreign investors for impartial decisions in legal disputes, as indicated by the US Department of State’s annual Mongolian Investment Climate Statements. As regularly noted in these statements, foreign investors report that, in resolving disputes, a Mongolian private party exploited contacts in government, the

judiciary, law enforcement, or prosecutor's office to coerce a foreign private party to accede to some demand (US Department of State 2018). By contrast, investment agreements and contracts that specify international arbitration to resolve disputes have a higher level of confidence.

Experience and prominent cases are behind the foregoing negative assessments. One case involved Khan Resources Inc., a Canadian uranium miner that had its Mongolian mining license revoked in 2009. Despite receiving judgments against this decision in the Mongolian courts, Khan Resources ultimately had to turn to arbitration to win a \$100 million settlement (Dierkes 2015). As Zhang (2015) notes, an international arbitration tribunal under the United Nations Commission on International Trade devoted a large portion of their analysis of the merits to the claims of unlawful expropriation. That is, whether the invalidation of the mining licenses and failure to reregister them constituted an unlawful expropriation under Mongolia's Foreign Investment Law of 2013. Government officials argued at the time that investors should consider that it is better to invest in a country where it is possible to sue the government against decisions like this, than in a country where such decisions cannot be disputed. But the lack of enforcement of domestic decisions remains a stain on confidence in the judicial system.

Transparency International (2019b) indicates that doubts about the independence of Mongolia's judiciary intensified after a March 2019 law gave the National Security council the power to dismiss judges, arguing that the wrongdoing of judges required sanctions. But this has also undermined the ability of judges to act, if needed, against the state or political actors.

The independence and accountability of the Judicial General Council—which has the power to select, nominate, and appoint judges—has been endangered by a series of failed judicial reforms since about 2000 (Munkhsaikhhan 2014). The council was set up in 1993 under the Law on Court Administration with 12 members and a chair (incumbent for 3 years and appointed by council members). The chief justice of the Supreme Court was the first chair. The law was amended in 1996 to allow the minister of justice to chair the council. In 2002 the law was again amended to enable the chief justice become the chair. While this gave judges a key role in court administration, it eroded internal checks and balances within the judicial system. In 2012 the Law on Court Administration allowed the President to appoint the chair, who should be nominated by the members of the Judicial General Council.

One of the areas of the recent constitutional amendments where follow-up legislation will be crucial is judicial appointments and dismissals. The composition of the Judicial General Council is set to be balanced and representative. The amendments also create a new constitutional body, the Judicial Disciplinary Council, and determine its composition. This body is envisioned to be tasked and staffed to review cases of misbehavior by judges, but until new legislation is passed, power rests with the National Security Council since the 2019 March legislation that created that power.

Policies for judicial reform in Mongolia have been a focus of support from development partners. White (2009) argues that their approach has been institution-building to improve the capacity and resources of judicial institutions, and that priorities for reform have been defined with the consent of the leadership of these institutions. This top-down approach focusing on capacity building, professionalism, and resources failed to address deep-seated concerns over institutional corruption and popular demands and popular movements for judicial reform.

Anticorruption institutions and initiatives

As Figure 7.5 shows, access to information has improved noticeably. Important publicly accessible information databases and sources now include the State Registration Information Database, the Digital Information Database of Courts, and the online database of the Extractive Industries Transparency Initiative (EITI). In 2018, independent media used publicly available data to expose the companies that had received loans from the Small and Medium-Sized Enterprise Fund. When the names of such companies were disclosed, open databases and other sources, such as Statement of Assets and Income submitted by government office holders to the Independent Authority Against Corruption, were useful for journalists to identify their owners and connection to politicians. The Law on State Registration, passed in 2018, requires the government to set up a public database containing the registration- and ownership-related information of legal entities.

In 2019, the government approved a new regulation of the Small and Medium-Sized Enterprise Fund that aims to improve transparency and fair competition in the selection for allocating loans. The fund is one of 29 special funds financed by the government budget—and there are concerns about governance and accountability. As in case of judicial reform, development partners have tended to focus on capacity building and the training of key stakeholders

(including government officials) on their support for SMEs, rather than on the distribution and accountability of government loans to the sector.

The development partner community can put pressure on governments to carry out reforms—as the International Monetary Fund did during the Asian financial crisis for Indonesia in an assistance program that was conditional on setting up an independent anticorruption agency, among other things. One of the most prominent international anticorruption efforts is the EITI, which is funded by the World Bank and others (World Bank 2018f). The Asian Development Bank is the main external funder of the EITI Secretariat in Mongolia since 2019. The EITI has been working in Mongolia since 2006, but its efforts are undermined by the lack of a long-term legal and financial basis. An attempt to embed the EITI into a government-backed draft law promoting transparency in the minerals sector failed to progress. Even so, the EITI has been producing detailed reconciliation reports that seek to match the reports on payments by the extractive industry to government receipts. The first report was issued in 2008 and 12 have been done as 2017.

Under the EITI, national and regional civil society councils have been set up. Along with other international efforts, the EITI in Mongolia does project reporting and, more recently, has added contract transparency to its work. While reporting is extensive and structures for civil society engagement have been created, the EITI's ultimate ambition—to arm civil society actors with information to demand accountability from politicians and administrators—remains largely unfulfilled due to a lack of engagement on the part of civil society with the evidence provided by reports by media and civil society. As was clear from the 2018 scandal over the Small and Medium-Sized Enterprise Fund, when public attention was focused on a particular issue, evidence can be crucial to introducing a public debate on government accountability. The EITI is therefore an important transparency and anticorruption tool that Mongolia can use.

Market institutions and business climate

The private sector constitutes about 80% of GDP and 75% of employment in Mongolia (ADB 2017a). The important role that the private sector plays in the economy is widely recognized in Mongolia and property rights for domestic and international investors are acknowledged in laws and regulations as an important element of economic freedom (Figure 7.6) that spurs entrepreneurialism (Bertelsmann Foundation 2020).

Figure 7.6: Indicators of Economic Freedom, 2013–2019

Source: Authors' analysis of the Heritage Foundation's 2019 Index of Economic Freedom data (Heritage Foundation 2019).

The government publicly endorses a policy of improving market competition and easing government bureaucracy, including e-governance initiatives. A 2015 Independent Authority Against Corruption survey found that business registration agencies were seen as the least corrupt among government agencies, and the easiest to access (IAAC 2016). The Law on Value-Added Tax, passed in 2016, introduced an incentive mechanism through which taxpayers can recover up to 20% of taxes paid; this reform helped develop a better registration system.

Market competition in many sectors of the economy is increasing, including in agriculture, textiles, telecommunications, food processing, tourism, and health and education (or will do so again when the effects of the coronavirus disease [COVID-19] pandemic recede). All these sectors are dominated by a few big companies. Banking, civil aviation, and petroleum are controlled by oligopolies (Bertelsmann Foundation 2018). The results of a 2015 Authority for Fair Competition and Consumer Protection (AFCCP) survey found that local companies, especially medium and large ones, view the government as a major contributor to unfair competition (AFCCP 2017). The government has a monopoly in some sectors, and develops quasi-competitive criteria for government support, such as concession agreements, subsidies, low-interest

loans, and unequal access for businesses to essential facilities and supplies (UNCTAD 2012). The Law on Restricting Unfair Competition was revised in 2010 to cover all types of legal and illegal business entities, and to combat monopolistic or cartelistic structures (such as mergers, dominant market positions, and concentration) and practices (such as collusion, price fixing, and predatory pricing).

The AFCCP's regulatory board, its highest governing body, comprising a chairperson and eight members, has the power to define the agency's competition policy priorities, monitor the enforcement of competition law, and resolve disputes between inspectors and violators. The Prime Minister nominates the chair, the two staff members, and three nonstaff members; the remaining three nonstaff members are nominated by the National Chamber of Commerce and Industry, the Mongolian Trade Union, and a nongovernment organization engaged in protecting consumer rights. All the members are appointed for 4 years, renewable for a further 4 years. The AFCCP's authority is subordinated directly to the first deputy Prime Minister.

The AFCCP's lack of independence from the government leads to substantial difficulties in its ability to enforce competition (UNCTAD 2012). Political appointments have led to instability in competition policies and high employee turnover at the AFCCP. The Law on Competition lacks clarity on important legal terms, such as dominance and mergers. Furthermore, according to a review document prepared for revising the Law on Restricting Unfair Competition, passed in 2010, stakeholder consultations and the AFCCP's performance show that its power and procedural mechanisms are not up to adequately reviewing and investigating cases of unfair competition (AFCCP 2017). For example, anticompetition cases should be reviewed and investigated by the AFCCP within 14 days to 2 months, which is not enough time in many cases, especially those involving sophisticated commercial and financial analyses and investigations. The limitation periods for competition law actions in many market economies range from 1 to 5 years (Baker McKenzie 2016).

Most private companies in Mongolia are at an early stage of maturity. USAID (2008) noted that lack of transparency is one of the weakest areas of corporate governance in Mongolia. And a 2015 report by the National Council on Corporate Governance noted that information on the ownership, management structure, and performance was not consistently disclosed by Mongolian companies (National Council on Corporate Governance 2015).

Trade and financial liberalization

Since the start of Mongolia's economic transition, the government has promoted foreign trade and investment and achieved tangible results in trade liberalization. The country joined the World Trade Organization in 1997, which was the start of an ongoing effort to integrate the economy into world trade; align its trade agenda to its major trading partners in industrialized economies; and overcome some of the challenges linked to this, such as being a small, landlocked country. To this end, Mongolia has adopted international economic and trade standards to an extent that makes it stand out from many other transition economies. The US and Mongolia signed a Trade and Investment Framework Agreement in 2004 and an Agreement on Transparency in Matters Related to International Trade and Investment in 2013. In 2016, Mongolia signed a Foreign Investment Protection Agreement with Canada and an Economic Partnership Agreement with Japan. An intention to establish free trade agreements with the People's Republic of China and the Russian Federation has been expressed, but this is likely to be a lengthy process.

Although Mongolia's level of trade liberalization gets high scores in international surveys, as Figure 7.6 shows, local companies face challenges to exporting their products and services. A nationally representative sample of over 1,500 SMEs showed that only 5.3% of small businesses export their products (Narantuya and Empson 2018), because of the low level of economies of scale that affect many businesses and the moderate level of income.

Many local businesses and foreign investors complain about ambiguous export and import licensing procedures of government organizations (Mongolian Chamber of Trade and Industry and NUM 2017). In 2019, the Independent Authority Against Corruption released documents relating to the bribery of senior officers at the General Agency for Specialized Inspection, which clearly indicate serious costs and risks for businesses caused by the ambiguity and discretionary powers of government agencies over operational permits and sanctions (*Daily News* 2019). The Asia Foundation's Study of Private Sector Perception of Corruption has consistently shown that, in the view of survey respondents, the General Agency for Specialized Inspection and the Customs Authority has created risks and obstacles for businesses (Table 7.3).

**Table 7.3: Survey Results of Government Agencies
Most Affected by Corruption**
(% of respondents)

Agency	2016	2017	2018
Specialized Inspection Agency	28	25	29
Tax Office	29	19	25
Customs	26	23	19

Source: Data from Asia Foundation (2018a).

The Mongolian financial system has undergone sweeping modernization reforms. Banking reforms in the late 1990s led to a modern, stable banking system that generally meets international standards (Bertelsmann Foundation 2018). The legal compliance of banks and the protection of the rights of investors and clients improved with the Financial Regulatory Commission being set up in 2006. Despite this progress, bank lending is concentrated in just a few sectors, reflecting a similar concentration in the economy, which increases the risk for the banking system. As of 2016, 60.7% of past-due banking loans were from mining, manufacturing, construction, real estate, and trading companies. In 2014, Savings Bank, Mongolia's fifth-largest lender, was declared insolvent by the Bank of Mongolia (BOM)—the central bank. The BOM declared Savings Bank insolvent after its controlling shareholder companies, which run oil and construction businesses, defaulted on loans.

In 2017, one of the International Monetary Fund's conditions for an Extended Fund Facility was comprehensive banking sector reforms, including ensuring the BOM's independence. As a result, Parliament amended the Banking Law in 2018 to introduce disclosure requirements for the owners of Mongolian commercial banks; new restrictions on banking activities, including a prohibition on establishing subsidiaries or affiliates; clarifications of corporate governance rules; and comprehensive measures to prevent bank failures and provide solutions to rescue troubled banks. The Law on the Central Bank was also amended by Parliament in 2018 to include provisions aimed at ensuring independent and professional management of the BOM through accountability mechanisms, and limiting the funding of government deficits and expenditure. The amended law limited the powers of the BOM's governor, who is appointed by Parliament, and required that specialized, collective decision-making committees and councils be set up to improve the BOM's management and independence.

Doing business

While many governance indicators capture the formal structures that are in place, measures of the business climate offer a broader assessment that also includes perceptions. Given the broader aim, indexes of business climate are commonly some variant of a meta-index combined with survey data. That is also the case for the World Bank's Doing Business project.

In the 2018 Doing Business project, Mongolia ranked 74th of 190 countries for ease of doing business (World Bank 2019b). It had a high rank for the ease of getting a construction permit (23rd), and a low one for getting electricity for a business (148th). Countries clustered around Mongolia include Greece, India, Indonesia, Jamaica, the Ukraine, and Uzbekistan. Mongolia is ranked 10th among 47 lower-middle-income countries, and 10th among 25 countries in East Asia and the Pacific (World Bank 2019b). The 2019 survey indicates that registering a property in Mongolia requires five procedures, takes 10.5 days, and costs 2.1% of the property value, which ranks Mongolia 49th out of the 190 countries. Contract enforcement takes 374 days and costs 22.9% of the value of the claim, ranking Mongolia 66th for the ease of enforcing contracts. Compared with the People's Republic of China, Kazakhstan, and the Russian Federation, Mongolia has ineffective judicial processes. In Mongolia, all contested foreclosure actions require court reviews and are subject to appeal to the Supreme Court; a final resolution can take up to 36 months.

Difficulties in accessing financing are one of the main barriers to doing business. Mongolia ranked 109th of 140 countries for financial market development in the World Economic Forum's *Global Competitiveness Report 2018* (WEF 2018). The banking system provides 97% of total lending and 93% of lending to SMEs. Alternative sources of financing in Mongolia are very limited (OECD 2016). Mongolian banks offer business loans with interest rates ranging from 16.2% to 22.2% (Economic Policy and Competitiveness Research Center 2017). Small businesses struggle to deal with banks' high rates and short tenures. Commercial banks view lending to SMEs as risky largely because they lack collateral (Narantuya and Empson 2018). The high rates have been criticized for inhibiting the growth of businesses. Initiatives to allow foreign banks to operate in Mongolia, which could result in better access to affordable financing, have been opposed by domestic banks.

Discussions with Mongolian entrepreneurs suggest that some seek foreign partners and foreign investment not only as a source of financing and expertise but also for the security that having international links can provide

local businesses. For some businesses, having recourse to international arbitration provides much greater certainty than the prospect of domestic dispute litigation. Further, having a foreign partner can be used as an excuse (a quasi-moral element) for refusing to engage in corrupt practices. Such strategies, however, cannot be a long-term solution for Mongolian businesses. Foreign partnerships are only generally an option for a certain scale of business operations, and ultimately economic development will have to be driven by local factors.

7.2 Policy Recommendations and Conclusions

Mongolia's consistent commitment to building a democracy and a market economy has been remarkable in comparative perspective. Important governance structures and institutions beneficial for a strong business environment have been either created or reformed since the transition process started in 1990. The role of the private sector in the national economy has been widely acknowledged and property rights for domestic and international investors have been enshrined in laws and regulations. Mongolia has also aligned many structures, plans, proposals, and standards with international practice.

While broad indicators on governance look good by international comparisons, especially as such indicators largely measure the form and structure of compliance, many doubts have been raised about actual compliance. Governance indicators for political institutions and policy making have been the most problematic, and have been highlighted in international and domestic assessments of Mongolia's business and investment climate.

Transparency and accountability mechanisms are not adequately integrated into Mongolia's political party system. The lack of such mechanisms disincentivizes parties from competing by testable policy propositions, and it motivates politicians and factions within parties to aim at populist or opportunistic point scoring, causing policy uncertainty. Parliament's ability to develop and scrutinize laws and regulations is adversely affected by the lack of substantive policy debates within and between political parties, and a widespread conflict of interests in political institutions.

Political instability is a serious impediment to Mongolia's business climate. New governments often make significant shifts in public policy priorities, including policy reversals. Frequent government changes do not provide

enough time for decision makers to implement new policies. Without a long-term development policy and a politically impartial and independent civil service, the frequent changes in government will continue to have negative effects on the business climate. More effort is needed to implement the laws, despite their implications—and to allow time for international and domestic investors and businesses to become familiar with the laws before they change again.

The government publicly endorses a policy of improving market competition. It has implemented policy programs to ease government bureaucracy, including e-governance initiatives. The business community has a highly negative perception of corruption by government officials, especially in the Tax Office, Specialized Inspection Agency, and the Customs, Land, and Trade Authority. Businesses see important obstacles to doing business resulting from the ambiguity of licensing procedures implemented by government organizations, the discretionary powers of officials, and taxation policies. The judiciary's ability to pursue wrongdoing by government officials and political figures needs to be strengthened.

Market competition is increasing in many key sectors of the economy, including agriculture, textile, telecommunications, food processing, tourism, and health and education. But these sectors are often dominated by a few big companies and the government. The businesses community views the government as a major contributor to unfair competition by having a monopoly in some sectors; developing quasi-competitive criteria for government support, such as concession agreements, subsidies, and low-interest loans; and setting unequal terms of access for businesses to essential facilities and supplies.

International financial institutions and development partners have devoted significant resources to helping the country implement broader institutional reforms. They can put pressure on the government to carry out reforms, such as the needed banking sector regulations. Avoiding state capture and the assuring rule of law will be essential for improving Mongolia's business climate and future development. Without the rule of law, corruption cannot be combated, investors will increasingly turn away from the country as an investment destination, and economic development momentum will be lost. The following recommendations are offered to the government, international organizations, and business associations:

Promote the disclosure of political party and election funding and combat corruption. The government should introduce clear guidelines and

procedures for implementing the relevant laws. Because the government has recently gained experience in implementing open data policies, it could improve the practice of election finance disclosure and information accessibility by enhancing the capacity of the state audit agency, and through participatory and digital methods, such as real-time donation reporting and the integration of government databases. The Independent Authority Against Corruption and the Mongolian National Audit Office could increase their role in reducing political corruption by increasing their focus and investing more resources on political party and election campaign finance.

Open up participation in elections. The 2020 parliamentary election will be particularly important because it offers opportunities for independent and new political movements. It is essential that these parties and their candidates are able to register to take part in the election without hindrance.

Strengthen the democratic quality of the justice system. To restore the confidence of the public and the business community in the country's political and economic institutions, the independence and legitimacy of the courts should be improved by enhancing the court system's transparency and through independent and carefully balanced self-governance mechanisms, specifically, the Judicial General Council and the Ethics Commission.

Increase access to business financing through better market competition and incentive mechanisms, which will require a broad-based dialogue.

Significantly improve the transparency and clarity of licensing and permitting procedures in the Specialized Inspection Agency and the customs authority. This urgently requires putting relevant policies in place. Development partners should avoid project capture by institutional elites, recruit a diversity of actors, and the public.

Strengthen independent decision-making, institutional capacity, and the procedural regulations of the fair competition authority to improve government performance.

The government and business associations should seek opportunities to collaborate on implementing laws and policies. Industry and business associations need to be proactive and leading voices for improving business practices in health and safety, the environment, social and community participation, and corporate accountability and ethics.

Develop and expand systems for public access to information.

Government action on this is essential, especially for disclosure of and accessibility to corporate information on beneficial ownership, tenders, and conflict of interests.

Secure permanent funding for EITI work in Mongolia. To ensure that information about resource revenue will continue to be available, secure the EITI's funding by international development partners or by institutionalizing the funding through legislation. The Multi-Stakeholder Group of the EITI should consider the pros and cons of both models and decide which to adopt based on what is best for the future of the EITI.

CHAPTER 8

Living Standards, Labor Market, and Social Development

Ariun-Erdene Bayarjargal and Haidy Seang Ear-Dupuy

This chapter examines recent developments and challenges in living standards, the labor market, and social development in Mongolia. It reviews progress on poverty reduction and inequality; examines gender inequality, youth employment, and the skills mismatch in the labor market; and discusses challenges in social protection and the health sector.

When Mongolia was under a socialist regime for 70 years, the government maintained a policy of relatively equal income distribution and allocated generous resources to social welfare. Education and health were among the major achievements of the socialist era. The labor market benefited from gains in educational attainment: in 1990, 96% of the working-age population was literate, 18.7% of employees had technical and vocational training, and 15.3% had higher education degrees. However, many of the qualifications became obsolete when the central-planning system collapsed. During the socialist era, Mongolia significantly reduced child and maternal mortality rates and improved life expectancy—to 60.3 years in 1990 compared with 48.4 in 1960. The quality of health services, however, was inadequate.

Mongolia's transition to a market-oriented economy had substantial impacts on social aspects of the people's lives. High inflation reduced real spending on health and education, and the government was unable to subsidize social transfers.

Consequently, poverty increased rapidly and became widespread.¹ By late 1992, the proportion of the population living in poverty was 17.0%, and this rose to 26.5% by March 1994 (Griffin 1995). Although the economy gradually

¹ In accordance with the living standards that the government maintained under the socialist regime, there was no official estimate of poverty.

recovered from recession, the exceptionally harsh winters of 2000–2002 caused the poverty headcount ratio to reach and remain at over 40% in rural areas. As of 2017, Mongolia has been a lower-middle-income country. Despite its positive socioeconomic performance in two-and-a-half decades of transition, poverty remains high at 29.6% (as of 2016, at the national poverty line), implying that almost one in three people are poor. There is also a strong perception among the population that inequality—not only of income but also opportunity—is increasing.

Health and education were hit hard by the economic transition. Lack of resources for the already inefficient delivery of health services and aging technology undermined health indicators. Although Mongolia's health sector has made progress, the prevalence of noncommunicable diseases and obesity are concerns. Participation in education is relatively good. But gender disparities exist and opportunity in access to education by different socioeconomic groups is unequal. There are concerns over the quality of education caused by outdated curricula at all levels, and inefficiencies continue in the allocation of education resources. The “reverse” gender gap in education attainment has not resulted in better employment outcomes for women. Young women face difficulties in the labor market: compared with men, they tend to spend longer time looking for jobs, encounter limited occupational choices, and are paid less. Skills are mismatched in the labor market, and key sectors of the economy face shortages of skilled workers.

Mongolia has a large social protection system that includes universal coverage with pensions and transfers to children. The government has initiated reforms to move to a contributory pension scheme, but implementation is a problem and the pension fund is running a chronic deficit. Mongolia's social welfare system is fragmented and benefits often overlap because of poor targeting. Poverty remains high despite a high level of government social spending and numerous welfare programs.

Mongolia has set a course toward socially inclusive economic development. It adopted the Mongolia Sustainable Development Vision 2030 in 2016 to align the country with the global agreement on the 2030 Agenda for Sustainable Development Goals (Government of Mongolia 2016). Vision 2030 states that the principles for achieving sustainable social development are accessible and high-quality education and health-care services that are protected from financial risks and equal participation of the working-age population in the labor market. The government aims to achieve inclusive welfare services that target people in need, ensure gender equality in social development, and

ensure the equal participation of disabled people in social and economic life. Overall, equal participation in the labor market, improved quality of health and education services, and the efficient delivery of social protection are key to achieving social development in Mongolia.

8.1 Living Standards

Before 1990, Mongolia's social indicators were impressive relative to countries at similar levels of development. Despite Mongolia's sparsely dispersed settlements and limited communication networks, exacerbated by adverse weather conditions, the population had universal coverage of primary education, primary health services, and state-guaranteed employment and social assistance.² The government ensured that people had access to basic needs and income distribution was relatively equal.

Mongolia's transition to a market economy hit living standards hard. The shock-therapy approach of rapid liberalization, deregulation, and privatization caused substantial economic instability, with an 18% drop in real gross domestic product (GDP), a 9% unemployment rate, and inflation soaring to a rate of 325.5% within 2 years (Figure 8.1). The economic collapse in the early transition caused the incidence of poverty to jump to 26.5% in 1994, according to the government's income-based estimation (Government of Mongolia 2001).³ High inflation and unemployment undeniably contributed to the deterioration of livelihoods. Government cuts in the funding of social welfare programs caused the real value of benefits to fall significantly. Large-scale privatization followed, with the closure of many small and medium-sized state-owned enterprises contributing to the rising unemployment rate.⁴ Although economic growth resumed in 1994, bringing inflation down to single-digit levels by the end of the 1990s, a substantial drop in social assistance to mitigate the negative impact of the transition on livelihoods had already entrenched poverty and inequality, which became prominent features of the socioeconomic landscape.

² The government, in 1989, spent 27% of its resources on "social consumption," which covers a wider variety of activities, including health-care, education, arts, sports, pensions, and social security payments. Social security payments accounted for nearly one-third of this expenditure, or about 7% of GDP (Sukachevin et al. 1991).

³ Some reports say that the poverty incidence was 17% as of 1992. Different poverty lines were used for rural and urban areas. It is often noted that rural poverty is more likely to be higher than the reported numbers.

⁴ The unemployment rate is officially measured by the number of unemployed people registered with the Labor Regulation Office and actively seeking employment—and is therefore likely to be underestimated.

Figure 8.1: Main Economic Indicators, 1991–2017
(%)

GDP = gross domestic product, LHS = left-hand scale, RHS = right-hand scale.
Source: National Statistics Office of Mongolia. Statistical Information Database: Statistical Yearbook 2018.
www.1212.mn (accessed December 2019).

Progress on poverty reduction⁵

The Mongolia Sustainable Development Vision 2030 aims to eradicate poverty in all its forms by 2030, reduce inequality, and expand the middle classes to 80% of the population. The progress on reducing poverty since the early 1990s shows this has not been an easy challenge. Despite inconsistencies in the methodology of measuring poverty incidence across surveys conducted in the early transition period, there is broad agreement that poverty has been a significant social issue. Since the mid-1990s, the government and international development institutions have poured resources into a series of antipoverty programs. The first comprehensive program, the National Poverty Alleviation Program, was launched by the government with assistance from the United Nations Development Programme in 1994. The program had the ambitious goal of reducing the incidence of poverty to 10% in a decade even though it was already estimated at 36.3% in 1995. However, a summer drought followed by a severe winter (a *dzud*) in 2000 and 2002 set many herders back economically.

The government's Economic Growth Support and Poverty Reduction Strategy, adopted in 2003, was aligned with the Millennium Development Goals and supported by the World Bank. In the strategy, the government proposed a

⁵ The analysis in this chapter uses the national poverty line, in contrast to the international (Povcal) poverty line used in Chapter 1. Although the two series draw on the same data base, they measure different things. The Povcal data are necessary for international comparisons, as in chapter 1, whereas the Mongolian national line provides a more detailed picture of poverty conditions and trends in the country.

more holistic and comprehensive approach to poverty reduction in line with implementing a broad range of policies for sustainable economic growth, intensifying structural reforms, improving banking and financial services, and enhancing social safety nets (Government of Mongolia 2003). To achieve the poverty target set in the Millennium Development Goals, the government took several measures focused on providing financial support through social assistance to those in need. Most of the measures were not targeted, however. Despite a significant effort on this and positive economic growth, the government failed to reduce poverty, which peaked at 38.8% in 2010. The incidence of poverty differs in urban and rural areas, with almost 50% of the rural population living in poverty. Rural households are particularly vulnerable because of the effect of *dzud* and drought. (Starting in 2010, the National Statistics Office of Mongolia's poverty indicators are comparable over time after the methodology was revised in collaboration with the World Bank.⁶)

Policy makers combat poverty with a variety of instruments, including social assistance and transfers; economic measures, such as supporting growth; job creation; and raising of incomes. Mongolia's high economic growth has not been enough to significantly alleviate poverty, and the majority of households remain vulnerable to income fluctuations. Although poverty fell by 0.3 percentage points for 1% of economic growth from 2010 to 2014, this reversed substantially when the economy slowed in 2016, presenting a worrying development (Table 8.1).⁷ Procyclical policies that funded huge social transfer programs in boom years were hit by the economic slowdown and faced pressures.⁸ The National Statistics Office of Mongolia, decomposing the change in poverty into growth and inequality components, concluded that 7.3% in the increase in poverty was from the growth component and 0.7% from the inequality component. An improvement in household income in 2017 and 2018 and a positive economic outlook contributed to a reduction in poverty after its increase in 2016.

Survey data show that many households are just above the poverty line, indicating their vulnerability to slipping back into poverty (Figure 8.2). The rise in poverty has been led by a uniform decrease in consumption caused by the 2015–2016 economic slowdown. Government transfers to households

⁶ To make the poverty rate comparable over time, the National Statistics Office of Mongolia defines the national poverty line in collaboration with the World Bank by taking 2010 as the base year. The cost-of-basic-needs approach was used to estimate the basic poverty line in 2010. Basic consumption needs, comprising two components—food and nonfood—are defined, and the poverty line set as the cost of obtaining this consumption bundle in the price of a given year (NSO 2017).

⁷ Cumulative GDP growth during this period was 55.5%, implying that poverty was only reduced by 0.3 percentage points for 1% of economic growth.

⁸ Social welfare transfers were suspended to more than 20% of households receiving these transfers.

Table 8.1: Poverty Indicators by National Poverty Line, Selected Years 1995–2018
(%)

Year	Poverty Headcount Ratio			Poverty Gap			Poverty Severity		
	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural
1995 ^a	36.3	38.5	33.1	10.9	12.2	8.9	4.8	5.7	3.6
1998 ^b	35.6	39.4	32.6	11.7	13.9	9.8	5.6	7.1	4.4
2003 ^b	36.1	30.3	43.4	11.0	9.2	13.2	4.7	4.0	5.6
2008	35.2	26.9	46.6	10.1	7.7	13.4	4.0	3.1	5.2
2009	38.7	30.6	49.6	10.6	7.9	14.4	4.1	2.9	5.6
2010 ^c	38.8	33.2	49.0	11.5	9.4	15.2	4.6	3.7	6.4
2011 ^c	33.7	28.7	43.2	9.2	7.7	11.8	3.5	3.0	4.5
2012 ^c	27.4	23.3	35.4	7.1	6.2	8.8	2.7	2.4	3.2
2014 ^c	21.6	18.8	26.4	5.2	4.9	5.8	1.9	1.9	2.0
2016 ^c	29.6	27.1	34.9	7.7	7.2	8.8	2.9	2.8	3.2
2018 ^c	28.4	27.2	30.8	7.2	7.2	7.2	2.7	2.8	2.4

^a Poverty rate was estimated by the National Statistics Office of Mongolia in collaboration with the World Bank using the information from the Monthly Household Survey and the Living Standards Measurement Survey.

^b Poverty rates are estimated based on the Living Standards Measurement Survey, but are not comparable due to differences in consumption baskets and different poverty lines (Griffin 1995; Marshall, Nixson, and Walters 2008).

^c Poverty measures have become comparable from 2010 on in accordance with the National Statistics Office of Mongolia and the World Bank as the methodology has become consistent.

Source: National Statistics Office of Mongolia. Statistical Information Database: Poverty Indicators. www.1212.mn (accessed June 2019).

also fell substantially, which clearly shows the dependence of household livelihoods on government transfers.

Figure 8.2: Consumption Distribution per Capita, 2014 and 2016

MNT = Mongolian togrog.

Source: Authors' calculations from the raw data of the National Statistics Office of Mongolia. Statistical Microdata. Household Socio-Economic Surveys, 2014 and 2016. <http://web.nso.mn/nada/index.php/catalog/HSES/dataset> (accessed June–August 2019).

In line with the global trend, poverty in Mongolia is highly related to education. Although Mongolia has relatively good statistics for school enrollment, education attainment varies by socioeconomic group. The poverty headcount ratio decreases as the highest level of educational attainment of the household head increases (Figure 8.3). This fact shows that education and human development are vital for reducing poverty. The nomadic lifestyles of rural households create geographical disadvantages for accessing education, further exacerbating the urban–rural disparity.

The latest Household Socio-Economic Survey (HSES) indicates a household in poverty is more likely to be headed by a woman than a man (Figure 8.4). Figure 8.4 also shows that agricultural households are the group most likely to be vulnerable to economic changes, followed by those in the private sector—and that both groups experienced the highest growth in the poverty headcount ratio from 2014 to 2016. Households receiving income from social security services were the least affected by economic downturn in terms of percentage changes, indicating that social welfare policies helped them to avoid falling into poverty.

Figure 8.3: Poverty Headcount Ratio by Highest Educational Level Attained by Head of Household, Selected Years 2010–2016

Sources: National Statistics Office of Mongolia. Statistical Information Database: Household Socio-Economic Survey Report 2010, Poverty Report 2012, Household Socio-Economic Survey Report 2014, and Poverty Profile 2016. www.1212.mn (accessed June 2019).

While the overall progress in reducing poverty has been positive since about 2010, it will be challenging for the government to achieve the ambitious target of eliminating poverty by 2030, as set out in the Mongolia Sustainable Development Vision 2030 and compared with the Sustainable Development Goals target of halving the global poverty rate by that year.

Figure 8.4: Poverty Headcount Ratio by Source of Income and Gender of Household Head (%)

Sources: National Statistics Office of Mongolia, Statistical Information Database: Household Socio-Economic Survey Report 2014 and Poverty Profile 2016. www.1212.mn (accessed June 2019).

Widening inequality

Based on Living Standards Measurement Survey data, Mongolia's Gini coefficient was estimated at 0.31 in 1995 and 0.35 in 1998, which is comparable to that of other transition and East Asian economies in the same period (Table 8.2).⁹ The Gini coefficient was estimated at 32.3 in the 2016 HSES. The data indicate that no significant progress has been made in tackling inequality over time. Despite the strongly shared perception among the public that inequality has increased considerably in recent years, the Gini coefficient estimates do not capture this sentiment.

Table 8.2: Gini Index, Selected Years 1995–2016

Country	1995	1998	2002	2007	2012	2016
Mongolia	31.0	35.0	32.9	35.8	33.8	32.3
Kazakhstan	35.4 (1996)	...	34.9	30.1	28.1	...
Kyrgyz Republic	...	...	30.3	33.9	27.4	26.8
Viet Nam	...	35.4	37.0	35.6 (2008)	35.6	35.3
Lao PDR	34.9 (1997)	...	32.6	35.4	36.4	...

... = not available, Lao PDR = Lao People's Democratic Republic.

Note: The closest year is reported in parentheses if the index is not available for the column year.

Source: World Bank. World Development Indicators Database. <https://databank.worldbank.org/source/world-development-indicators> (accessed March 2019).

The extent of inequality based on consumption expenditure from household survey data tends to be underestimated as the rich often spend a smaller share of their income than the poor do. In addition, it is often argued that the rich are underrepresented in the HSES and therefore the Gini coefficient is highly likely to be an underestimation. Even though scholars have attempted to measure inequality in developing countries by using other data sources such as administrative tax data and household survey for input–output tables, the availability and quality of such data have often been an issue.¹⁰ The HSESs since 2010 show that the top 1% of households' average monthly consumption expenditure per person is 4.4 times that of the bottom 90%. The top 1% spends only 72% of its total income on household consumption expenditure, leaving

⁹ Even though the Gini coefficient indicates that inequality has at least not worsened over the years, inequality of opportunities is increasing and gender inequality in the labor market is apparent.

¹⁰ There is a widespread concern that inequality may be underestimated due to underreporting of income and wealth as well. This can be an issue not only in developing countries, but also in developed countries. Studies using different data sources for inequality measurement have found that inequality is underestimated using the household survey data.

some for savings or investment, whereas consumption expenditure exceeds income among the bottom 90%.¹¹ Although the gap is not directly comparable and as severe as the similar ratio in developed countries in terms of income, it shows how unequal Mongolia's income distribution is.¹²

An indirect approach to demonstrate the claim of widening inequality is also used. Each year, the Independent Authority against Corruption of Mongolia collects wealth and income statements from public officials. From the 2016 report, five individuals (all members of Parliament) who had the highest income and wealth were chosen and selected indicators for this group were compared with those of the average household from the HSES. The average annual household income from the HSES was MNT20.5 million (\$9,544.92¹³) in 2016 while that of the five individuals was MNT3.3 billion (\$1.5 million), 160 times the HSES average. The average savings of the five individuals was MNT6.0 billion (\$2.8 million). Those who reported increases in their savings in the last financial year had additional savings of MNT970.7 million (\$451,963.46) on average. That is 900 and 200 times larger than the increase in savings of the average and top households of the HSES, respectively. The International Monetary Fund advised the government to introduce a progressive income tax system to address the income inequality issue; however, political obstacles to such a reform are very powerful (IMF 2019b).

The Mongolia Sustainable Development Vision 2030's target to have 80% of the population in the middle- and upper-middle-income categories is ambiguous because there is no conventional measure to test the achievement. There is also no consensus on how to measure the middle class globally. The Economic Research Institute's 2014 study on Mongolia's middle class estimated that two-thirds of the population is middle and above-middle class (Byambaa 2012).¹⁴ The average monthly consumption expenditure per person of a middle-class household is only two times the national poverty line and the per person expenditure is greater than their income, suggesting that most of such people are unable to save.

¹¹ Households are grouped by their income. The ratio of monthly income per person of the top 1% to the bottom 90% has been 6.70 on average since about 2010. It increased during the economic boom period to 9.02 and has remained at over 6.00 since then.

¹² For example, in the United States, the top 1% earns 39 times what the bottom 90% earns.

¹³ Calculated at the average exchange rate of \$1=MNT2,147.74 in 2016 (NSO. 2019 Exchange Rate. www.1212.mn [accessed August 2019]).

¹⁴ The study took people in the 3rd and 4th quintiles as middle class, although some other studies use people in 20th–80th percentile.

Social assistance

Mongolia's social welfare system generally aims to provide support to certain population groups, including the poor and vulnerable, although some programs benefit all income groups. In the Asia and Pacific region, Mongolia has the second-highest coverage of social assistance for vulnerable groups (ILO 2019). Its social welfare policies have, however, been greatly affected by economic cycles and political promises. With the mining boom, transfers to households, many of which overlapped, have increased, making the system fragmented. New universal transfers were introduced in 2010, accounting for 3.5% of GDP. The transfers include the Child Money Program, which is claimed to distribute the government's natural resource revenue to children.¹⁵ During economic downturns, it was essential to protect vulnerable households from negative shocks, and this has been done by rationalizing untargeted programs and directing more resources to the most vulnerable. That a significant number of people fell back into poverty between 2014 and 2016 questions the effectiveness of social welfare policy. Fiscal consolidation pressures during a period of economic slowdown have challenged Mongolia's universal child allowance program, but the government tends to keep universal eligibility (IMF 2019b). Even if means-tested or targeted social welfare programs use less public resources while universal programs provide less to the poor, the United Nations Research Institute for Social Development suggests universality for combating poverty and inequality. Given a trade-off between resources used and coverage, designing an efficient social welfare program requires in-depth analysis and research.

The Law on Social Welfare, passed in 1995 and revised in 2005, contributed to improving the legal basis for an efficient and sustainable social welfare system. The law consolidated benefits and introduced poverty-based targeting. The poor and vulnerable are entitled to a social pension (assessed on the basis of livelihood circumstances, such as where they live, educational attainment, number of household members, employment status, disabilities, and housing conditions) and assistance that aims to provide social protection to vulnerable groups (for example, households headed by women, the elderly, the disabled, and children in difficult situations). In 2009, the Asian Development Bank helped the government to design and implement a targeted food stamp program and to strengthen social welfare strategies and systems. The government took over the program's management in 2014 and the program has expanded since then. Most of the social welfare transfers are

¹⁵ The Child Money Program started in 2005 to transfer funds to poor households. Political pressure and poor targeting turned the program into a universal benefit for children under 18 as political parties tried to win favor with the public by expanding social protection commitments.

targeted by category, such as age and gender. Only the Food Stamp Program targets the poorest 5% of the population.

Because funds are distributed through several social welfare programs, as promised by political parties, the government has significantly increased the coverage of these programs. But doing the increase has resulted in inefficiencies and has diffused the effectiveness of the programs. The number of Social Welfare Fund beneficiaries has increased substantially, from 155,500 in 2004 to 1,772,300 in 2018. In an attempt to rein in the program's cost in 2016, families were required to register in the Living Standards Assessment Database, which uses a proxy means test assessment to identify qualified children. As a result, about 65% of children have been receiving fund benefits since 2016 (ADB 2018a). Even without taking into account the number of children receiving a universal cash benefit, the total number of beneficiaries increased five times in 15 years.

Table 8.3: Social Assistance Expenditure
(MNT billion, current prices)

Type of Social Assistance	2010	2011	2012	2013	2014	2015	2016	2017
Pensions	27.6	35.7	65.6	79.5	82.1	86.1	87.1	85.6
Allowances and benefits	42.9	61.0	125.2	87.7	84.0	94.8	94.9	97.8
Social welfare services and concessions	36.5	53.8	53.8	60.1	69.0	66.8	68.3	68.7
Cash benefits for children below age 18	0.1	...	53.3	229.0	238.4	246.6	197.9	257.7
Human Development Fund allowances	277.1	733.1	693.7	28.1	...	...	...	...
Total	384.1	883.5	991.5	484.3	473.6	494.4	448.3	509.7
Share of GDP	3.9	6.7	5.9	2.5	2.1	2.1	1.9	1.8
Excluding 4 and 5	1.1	1.1	1.5	1.2	1.1	1.1	1.0	0.9
Number of beneficiaries of social welfare services	226.1	251.5	260.8	232.1	300.4	300.1	384.3	323.5
Number of beneficiaries of social pensions and allowances	171.1	163.4	168.2	173.0	181.2	182.7	215.5	205.3
Exchange rate (MNT/\$)	1,356.4	1,265.5	1,359.4	1,525.7	1,818.3	1,970.7	2,147.7	2,472.7

... = not available, GDP = gross domestic product, MNT = Mongolian togrog.

Source: National Statistics Office of Mongolia. Statistical Information Database: Social Insurance and Welfare. www.1212.mn (accessed June 2019).

On average, the government allocates 1.1% of GDP to social welfare programs, excluding cash transfers to children (Table 8.3.). Families may benefit from multiple programs, and the lack of an information system can result in a duplication of benefits. Furthermore, no systematic impact evaluation is done to determine the efficiency of programs. Without the Child Money Program, 24% of all citizens receive benefits. The World Bank (2015) indicates that 14% of the population benefits from multiple programs. The HSES shows that almost 30% of households receive pension payments from the government. A National Statistics Office of Mongolia report indicates that the increase in poverty was lowest among households receiving social benefits from the government (NSO 2017).

Table 8.4 shows that the share of social security transfers in total consumption expenditure increased substantially during economic slowdown. This suggests that social transfers may have helped the poor to avoid falling into poverty; however, international development institutions and other experts often warn that targeting is a major issue in Mongolia. Apart from child money, the second largest beneficiaries are mothers with many children. This transfer, in particular, is not targeted, though its share of households' total consumption expenditure was the smallest as of 2016. The World Bank (2015) estimates that individuals in the top 40% of household income receive benefits equivalent to 80% of the benefits that go to the poorest quintile. The same figure is about 40% in Europe and Central Asia. The statistics clearly show that poverty is highly dependent on the provision of social transfers, and the sustainability of social safety programs is inevitably being affected by economic downturns.

Table 8.4: Social Security Transfers, 2012 and 2016

Transfers	Households with Transfers (%)		Share of Consumption (%)	
	2012	2016	2012	2016
Pensions to elderly	26.4	29.2	43	65.3
Maternity leave and lactating mothers	9.1	8.9	3.4	4.8
Assistance to mothers with many children	16.0	19.0	4.5	4.3
Concessions and assistance to disabled	10.7	11.3	19.7	34.1
Child Money Program ^a	99.6	63.9	13.3	5.1

^a Child Money Program for those 18-years old and under replaced the universal Human Development Fund transfer that was provided to the whole population in 2013.

Sources: National Statistics Office of Mongolia. Statistical Information Database: Poverty Report 2012 and Poverty Profile 2016. www.1212.mn (accessed August 2019).

8.2 Labor Market

Demography and employment

In 2017, Mongolia's population was 3.2 million; 2.1 million were of working age and 967,900 were children under age 14. A demographic dividend resulted from high population growth in the 1980s, making Mongolia a relatively young nation that needs job creation.¹⁶ A dramatic drop in the birth rate in the early 1990s made the age structure uneven, which creates “waves” in the population age pyramid. The working-age population was 54.4% of the total population in 1990 and peaked at 69.6% in 2011. An increasing working-age population in the early 2000s should provide a favorable environment for economic development and the labor market (Table 8.5).

Table 8.5: Labor Market Indicators, Selected Years 1995–2017

Indicator	1995	2000	2005	2010	2015	2016	2017
Population ('000)	2,243	2,403	2,551	2,761	3,058	3,120	3,178
Working-age population ('000)	1,305	1,506	1,629	1,899	2,038	2,065	2,087
Employed ('000)	767	809	968	1,033	1,151	1,148	1,238
Agriculture (%)	46.1	48.6	39.9	33.5	28.5	30.4	28.8
Industry (%)	17.9	14.1	16.8	16.2	20.3	19.0	19.2
Services (%)	35.9	37.2	43.3	50.2	51.3	50.6	52.0
Participation rate (%)	69.9	62.9	63.5	61.6	61.5	60.5	61.1
Unemployment rate (%)	5.5	4.6	3.3	9.9	7.5	10.0	8.8
Urban unemployment (%)	...	...	...	11.6	8.7	12.2	10.4

... = not available.

Source: National Statistics Office of Mongolia. Statistical Information Database: Population and Employment. www.1212.mn (accessed March 2019).

Mongolia has urbanized rapidly since the early 2000s. One of the major contributing factors was the *dzud* in 2000–2002, which led to large-scale livestock losses and subsequent migration of herders to cities to look for other livelihoods. In 2017, the urban population was 67.6% of the total population—Ulaanbaatar's population rose from 27.2% of the country's total in 1990 to 46.0% in 2017.¹⁷ Agriculture was the largest employer in 1995, accounting for 46.1% of total employed. Since then, the economy experienced a Harris-Todaro model type of movement in its labor force from agriculture, where

¹⁶ As of 2017, 30.5% of the population was under age 14 and 55.3% under 30. Average annual population growth has been 1.6% since the early 1990s, dropping from a peak growth rate of 2.8% in the late 1980s.

¹⁷ During this period, net population growth in the Western and Eastern Regions (farthest from Ulaanbaatar) were 0.1% and 0.6%, respectively, whereas it was 3.7% in Ulaanbaatar.

wages and productivity are relatively low, to services and industry, causing higher unemployment in urban areas.

The structural change in employment is driven by sectoral productivity differences. Mining makes the highest contribution to GDP per worker; agriculture's is the lowest. Mining, however, does not generate much employment due to its capital intensity. The labor-intensive services sector accounts for more than 50% of employment. The average real wages in industry (including mining) have been 2.1 times higher than those in agriculture since about 2010, and services 1.8 times higher than in agriculture (Figure 8.5).

Figure 8.5: Employment and Nominal Gross Domestic Product per Employed Person, by Sector, 1994–2017

GDP = gross domestic product, LHS = left-hand scale, MNT = Mongolian togrog, RHS = right-hand scale. Source: National Statistics Office of Mongolia. Statistical Information Database: National Account and Employment. www.1212.mn (accessed June 2019).

Mongolia's high growth stems mainly from the extractive industry. Employment has risen as the economy grew, but at a lower rate. The average elasticity of employment in terms of GDP has been low in years of positive economic growth. Specifically, for every 1% of growth employment increased 0.5 percentage points between 2000 and 2017. Services and industry are absorbing more employment from people with technical skills (Nganou et al. 2018). Even though forecasts by the government and international organizations point to growth staying strong in 2019 and 2020, at or above 5% a year, diversifying the economy will be essential to reduce the

variability in employment. Employment policies need to be formulated in line with economic development policies, and careful reviews done to ensure inclusive growth.

Labor force participation

Mongolia's labor force participation rate (LFPR) of 61.1% in 2017 is relatively low compared to the region, but close to the world average (Figure 8.6).

During the socialist regime, the government provided jobs, making the LFPR relatively high. The economic downturn in the early 1990s led to a continuous decline in the LFPR, with only two-thirds of the working-age population participating in the labor market by 2000 (Figure 8.7). The recent trend shows the gap between men and women is widening in the LFPR.¹⁸ Variability in the LFPR is largely due to a fluctuation in the rate for women, whereas the LFPR for men increased during the economic boom and has since remained relatively stable.

¹⁸ Until 2009, the National Statistics Office of Mongolia estimated the labor force participation rate from administrative data. Since then, this has been based on Labor Force Surveys, so that the rate from 2009 on is consistent in terms of methodology and comparable. Because of this, the big drop in the rate for women in 2009 was not considered. From 2009, labor market analysis is based on the surveys.

Figure 8.7: Labor Force Participation Rate by Gender, 1992–2017
(%)

Source: National Statistics Office of Mongolia. Statistical Information Database: Employment. www.1212.mn (accessed April 2019).

The main reasons for not working tend to be schooling among youth and retirement for old people. Mongolia is no exception. On average, 58.5% of people aged 20–24 are studying, and 63.2% of people aged 55–59 years are retired.¹⁹ The age-group disaggregation partly explains the reason for women's low LFPR. The rate is significantly lower for women in the 20–29 age group, and the gap closes around middle age. One of the major reasons for the relatively lower LFPR of young women than among young men is that the women attend school longer: they spent 1.1 times more years in school than the national average (as of 2010).²⁰

Mongolia has no explicit discrimination in terms of gender in the labor market. But traditional tendencies persist: women bear more responsibility for raising children and spend more time in unpaid family work, and employers prefer to hire men. Ages 20–24 and 25–29 are prime childbearing ages, which also dampens the female LFPR.²¹ Labor Force Survey data show that women spend 1.9 times more hours than men in unpaid household activities and 2.7 times more hours caring for elders and children.²² Expanding early

¹⁹ About 39.3% of women aged 50–54 and 36.1% of men aged 55–59 are retired even though the official retirement age is 55 for women and 60 for men.

²⁰ According to Barro–Lee education data, the average years of total schooling of women aged 25–29 was 10.5 years in 2010 while the national average was 9.8 years (World Bank, World Development Indicators Database, accessed April 2019). UNESCO data show the school life expectancy of women was 15.6 years and 14.4 for men in 2013 (UNESCO Institute for Statistics Data Centre, accessed April 2019).

²¹ The birth rate is highest in these two age groups, and is 1.7 times higher than the general fertility rate on average.

²² The average hours per week spent on unpaid household activities was 24.3 for women and 12.6 for men. The average hours per week for caring for elders and children was 5.6 for women and 2.1 for men in 2010–2017.

childhood education centers, in addition to benefiting children, could have a positive impact on the female LFPR. Access to preschool services is still not adequate, despite significant efforts by the government to make it so (World Bank 2017).²³

Labor Force Survey data show the second major reason for the lower LFPR of women aged 20–29 is looking after children. The LFPR for women is unlikely to increase soon unless the shortage of preschools and care facilities for aging family members is addressed. Social welfare provides monetary benefits to pregnant women and mothers of infants, and in 2018 the benefits were extended for up to 3 years after birth; the benefit amount, however, is small.²⁴ Although this provides support to mothers, it also keeps women away from the labor market for longer periods.

Gender inequality in the labor market

Women have attained higher levels of education, but it has not resulted in better employment outcomes. According to the 2008 School-to-Work Transition Survey, women spend longer times than men looking for jobs, encounter a limited number of job opportunities, and are paid less than men.

Table 8.6 shows that female outnumbered male employees in only three categories, which demonstrates the limitation of women's employment choices. The index of dissimilarity rose from 0.30 to 0.37 during 2011–2017 (0.48 in 2017 if the skilled agricultural occupation group is removed).²⁵ Women also tend to be paid less in all occupations but two. The concern is that the pay gap between men and women has widened, and this is consistent across occupations. The ratio of the average monthly wage and salaries of male to female employees increased from 1.10 to 1.22 during 2009–2017. Employers tend to perceive that service jobs are for women, who are often paid less (World Bank 2018e).

²³ In the mid-2000s, the government made substantial investments in preschool education. The total number of kindergartens doubled and the number of children attending preschools tripled from 2001 to 2017.

²⁴ The benefit, equivalent to about \$20 a month, is paid from 5th month of pregnancy for up to 3 years.

²⁵ In a hypothetical world with no occupation segregation, the share of women workers in every occupation is expected to be the same as the share of women employees in total employment, which was 48.9 in 2017. The index of dissimilarity measures the share of female workers that need to be shifted to different occupations to achieve occupational equality in the labor market.

Table 8.6: Labor Market Gender Gap by Occupation, 2017

Occupation	Ratio of Number of Employees (male to female)	Ratio of Average Monthly Wage (male to female)
Managers	1.4	1.1
Professionals	0.5	1.3
Technicians and associate professionals	0.9	1.2
Clerical support workers	0.3	1.3
Service and sales workers	0.5	1.3
Skilled agricultural, forestry, fishery workers	1.3	0.9
Craft and related trades workers	2.7	1.3
Plant and machine operators, assemblers	17.5	0.9
Elementary occupations	1.2	1.1
Armed forces occupations	9.9	1.0

Source: Authors' calculations from National Statistics Office of Mongolia. Statistical Microdata. Labor Force Survey 2017 (accessed June 2019).

Aware of the gender disparity in employment, the government outlawed gender discrimination in the hiring practices for certain jobs in 2008 and launched the National Program on Gender Equality in 2011. Many employers, however, are still biased against women in their hiring practices due to lack of awareness of the law, force of habit, and unconscious bias. Traditional views, such as seeing men as the main breadwinners, are still entrenched, and employing women is sometimes seen as taking jobs from men (World Bank 2018e).

Other aspects of discrimination in the labor market include age discrimination. College graduates find it difficult to enter the job market because they lack work experience, and people older than 45 are seen as too old. The 2016 *Human Development Report* shows that more than half of young Mongolians (aged 25–34) have difficulty finding jobs, with some taking up to 2.9 years before to get their first job (UNDP 2016). Although young women have a higher university attendance rate than men and do well in school, they have a harder time getting a job, and tend to take longer to transition to the job market due to the narrow job choices and traditional views on the hiring of women. And once women are hired, they face the additional obstacle of unequal pay (ILO 2017).

Unemployment is prevalent among Mongolia's youth, particularly women. The youth unemployment rate was twice as high as the national average, but for women it was four times higher than the national average in 2017 (Figure 8.8).

Figure 8.8: Ratio of Youth Unemployment to National Unemployment Rate, 2009, 2013, and 2017

Note: Youth are people aged 15–24.
Source: National Statistics Office of Mongolia, Statistical Information Database: Employment, www.1212.mn (accessed April 2019).

The government has tackled the issue of gender disparity and youth unemployment in several policies and projects. The Mongolia Sustainable Development Vision 2030 specifically mentions the need to support youth employment by reducing unemployment, improving training opportunities, and providing support for entrepreneurship activities. In 2016, the government adopted the National Policy on Employment, which introduced measures to improve the employment framework for youth and other vulnerable groups, including the disabled and the poor. The policy sets objectives to enhance opportunities for in-demand skills training and to improve public sector employment and the legal environment for labor market interactions. Other efforts included declaring 2011 as the Year of Employment to put a spotlight on employment and amend the Employment Promotion Law. Since then, the government has implemented several programs, including targeted ones, for the youth, herders, informal workers, and men and women over 40 years (ILO 2011). One notable short-term vocational training program, started in 2003, is the oldest and largest program to promote jobs for out-of-work youth. An impact evaluation of the program by external researchers concluded that participation in the program increases a person’s chance of getting a job by up to 13%, increases earnings by 25%, and increases by 4% the chance of matching their skills to the job. Moreover, combining technical training with labor market information increases the chance of a young person getting a job by 5% (Batchuluun et al. 2017). Nonetheless, the government is not doing proper evaluations of the impacts of the employment promotion programs and projects.

Preliminary results of a forthcoming study on age, gender, and education impacts on employment show that the likelihood that men are more likely to be employed than women. Despite the government's attempt to improve the relevance of technical and vocational education and training (TVET), people will have a better chance of getting a job if they have education higher than TVET. This outcome evidently supports youth's preference for higher education rather than TVET. Furthermore, job seekers who have children less than 6 years old tend to be less employable, and women with young children have more of a problem with this than men do. Place of residence also significantly affects the probability of employment. Rural residents are more likely to find employment than urbanites, because urban unemployment rates are high. The likelihood of being employed is low for people living with disability, which is why the government is increasingly focusing employment policies for disadvantaged groups (Bayarjargal, forthcoming).²⁶

Implementation of international labor standards

Mongolia is one of the 187 members of the International Labour Organization (ILO) that have ratified all eight of the organization's fundamental conventions on core labor standards covering four key areas of protection: freedom of association and the effective recognition of the right to collective bargaining, the elimination of all forms of forced or compulsory labor, effective abolition of child labor, and the elimination of discrimination for employment and occupations.

Mongolia has ratified the ILO's convention concerning Discrimination in Respect of Employment and Occupation (Convention No. 111), and the government amended the Labor Law, passed in 1999, that excluded women from certain jobs. The amendments included the concept of "work of equal value" and adopting a broader definition of "remuneration" to better align with the convention. Despite these measures, wage and employment data show that significant gaps persist between legislation and practice.

Mongolia ratified ILO Convention No. 155 on Occupational Safety and Health in 1993 and Convention No. 176 on health in mines in 2015. According to a 1997 national survey on occupational safety and health, 18.7% of the workforce was employed in inappropriate conditions, and about 5,700 people were disabled

²⁶ Tsogtsaikhan and Tumur (2013), in their study on migration, show the main reason for migration is economic; in other words, to look for jobs and economic opportunities.

because of work injuries.²⁷ In 2001, the government adopted the National Program for Occupational Safety and Health Improvement, which aims to upgrade the country's occupational safety and health in a way that reflects the economy's shift from agriculture to mining. The government is working with civil society to strengthen and improve occupational safety and health data to inform policy making, set up a training system, and strengthen the inspection system, among other aspects of labor standards governance to be aligned with international conventions. Ongoing government efforts to improve working conditions are some of the incremental steps being taken to provide further protection to workers. Hazardous workplace practices identified in Mongolia include the use of old equipment, improper use of equipment, inadequate training on equipment use, and unsafe working environments. Efforts to improve work safety include collaborating with the ILO and similar institutions to conduct more training and raise awareness on safety issues, while recognizing that the country's Constitution promotes living and working in a safe and healthy environment (ILO 2006).

Demand for labor and the skills mismatch

The Barometer Study of Labor Demand is a major source of information on labor demand by reporting short-term labor demand by economic sectors, occupations, and locations (Table 8.7). It aims to generate dynamics of labor-demand information in the long term. The survey shows that demand for labor in Mongolia often tends to be high (on average more than 70%) in the first half of the year. Construction and services, which are affected by seasonal economic activity, generate most of the demand in this period. Demand for labor in the professional, education, and financial sectors is likely to be higher in the second half of the year. By industry, construction and processing account for the largest share of labor demand. By occupation, more than 60% of labor demand in 2019 was in occupations that require technical, vocational, or general education.²⁸ The Barometer Study of Labor Demand indicates that only 20% of high-demand occupations require higher education, which clearly shows the mismatch of skills in the labor market.

²⁷ The Labor Force Survey shows the second major reason of inactivity among men is "disability," particularly for among the prime working-age group (35–44). This indicates that occupational safety and health is a significant issue in the labor market, especially in industries such as construction and mining where men dominate the employment.

²⁸ This includes trades workers, plant and machine operators, and elementary occupations.

Table 8.7: Labor Demand by Economic Sector, 2015, 2017, and 2019

Sector	2015		2017		2019	
	'000	%	'000	%	'000	%
Agriculture, forestry, fishing, and hunting	7.4	9.3	4.9	6.9	1.9	2.7
Mining and quarrying	1.7	2.1	3.3	4.7	2.2	3.2
Processing industries	9.1	11.4	10	14.2	10.3	14.8
Construction	11.4	14.3	9.8	13.9	17.7	25.5
Wholesale and retail trade	24.5	30.7	5.5	7.8	13.2	19.0
Transport and storage	2.3	2.9	3.2	4.5	2.8	4.0
Accommodation and food service activities	2.6	3.3	5.8	8.2	3.8	5.5
Information and communication	1.2	1.5	2.2	3.1	1.6	2.3
Financial and insurance activities	1.5	1.9	0.9	1.3	1.6	2.3
Real estate activities	0.4	0.5	2.1	3.0	1.8	2.6
Professional, scientific, and technical activities	2.8	3.5	1.9	2.7	2.5	3.6
Administrative and support service activities	2.4	3.0	4.8	6.8	4.1	5.9
Education services	2.8	3.5	5.5	7.8	1.7	2.4
Human health and social work activities	1.8	2.3	6.6	9.3	1.5	2.2
Arts, entertainment, and recreation	1.9	2.4	1.6	2.3	1.2	1.7
Other	6.1	7.6	2.5	3.5	1.5	2.2
Total	79.9	100.0	70.6	100.0	69.4	100.0

Source: RILSP. Barometer Study on Labor Market, 2015, 2017, and 2019. <http://rilsp.gov.mn/> (accessed August 2019).

The seasonality in labor demand and high dispersion of people across regions but with a high concentration in Ulaanbaatar (Figure 8.9) reduces the likelihood of employment for people living in remote areas and intensifies rural–urban migration and poverty, and creates an issue of high unemployment in urban areas.²⁹ The Household Socio-Economic Survey (HSES) results indicate searching for better job opportunities as one of major reasons for migrating to cities in addition to better access to health and education.

The Barometer Study on Labor Demand shows a strong bias in favor of male workers regardless of occupations, and that employers, in 2017, preferred to hire men over women in all occupations, thereby intensifying gender inequality in the labor market. This result is supported by the World Bank's qualitative study on the gender imbalance in the labor market (World Bank 2018e).

²⁹ Urban unemployment has been 1.5 times higher than rural unemployment on average since about 2010.

Figure 8.9: Labor Demand by Region
(%)

Source: RILSP. Barometer Study on Labor Market, 2015, 2017, and 2019. <http://rilsp.gov.mn/> (accessed August 2019).

The study shows that the main job market challenges cited by employers and graduates are lack of experience and skills mismatches (Table 8.8). This clearly shows that the TVET and higher education institutions' curricula need to be overhauled to meet employers' expectations and the labor market's rapidly changing skills requirements. Traineeships and internships should be offered to students so they can have workplace experience before graduating. Even though employers understand the importance of internships, they are often unpaid. The culture of paid traineeships and internships needs to be considered in addition to curriculum change.

Table 8.8: Obstacles to Employment Cited by Employers and Graduates
(% of respondents)

Employers		Graduates	Higher Education	TVET
Lack of experience	22.2	Lack of information related to job vacancies	17.3	19.9
Unrelated education	8.8	Lack of experience	22.7	11.0
Unsatisfied with work conditions and pay	17.1	Can't find the matching job to education	16.8	16.1
No incentive to work permanently	18.2	Unsatisfactory work conditions and pay	14.2	17.4
Foreign language knowledge	1.8	Foreign language knowledge	13.6	10.0
Not suitable gender and appearance	1.9	Discrimination by gender, age, and appearance	3.8	7.9

TVET = technical and vocational education and training.

Source: RILSP. A Barometer Study on Labor Demand 2017 and A Graduate Employment Survey 2017. <http://rilsp.gov.mn/> (accessed August 2019).

Employers indicate that the most crucial skills that job applicants should possess are being responsible, being able to work independently and in a team, possessing good communication skills, and being able to handle time management—skills that graduates themselves think they lack.³⁰ This, in addition to the graduates' perception that knowledge of a foreign language is needed, indicates that the education system does not equip students with skill sets that meet the employers' needs. TVET and higher education curriculum reforms should focus on these skills to prepare new generations entering the workforce in the artificial intelligence era. The surveys show that employers and graduates perceive that there is discrimination by gender, age, and appearance in the labor market, although the percentages of this response were small. World Bank (2018e) indicates that new graduates and people over age 40 noted gender and age discrimination in hiring practices. And because 55 is the retirement age for women, both age and gender discrimination were perceived to be present in employers' hiring decisions. Although Mongolia has ratified the ILO's convention on nondiscrimination in employment, the country lacks mechanisms to enforce the convention.

Social insurance

Mongolia inherited a relatively large social security system from the socialist government, and undertook substantial reforms to the system in 1994 (and has enacted a series of related laws since then). Mongolia's social protection policy aims to improve the quality of life by increasing health and income security and reducing poverty. The Ministry of Labor and Social Protection has overall responsibility for administering social security and implementing social insurance legislation. Mongolia still spends generously on social protection, at 8% of GDP on average since about 2010. Social protection coverage is near universal, although the adequacy of benefits is a concern. The effective coverage of social protection is 72.4%.³¹

Mongolia's social insurance system has five major programs: pension insurance, employment-related injury and occupational disease insurance, unemployment insurance, benefits insurance, and health insurance. The Law on Social Insurance requires compulsory payments from people working in the formal economy and the self-employed can make voluntary payments. The health, pension, disability, and unemployment funds are based on contributions

³⁰ The survey on the employment of graduates shows that 49.8% of higher education graduates and 52.8% of TVET graduates said they lacked the same skillsets.

³¹ Effective coverage is measured as the number of people who are either actively contributing to the social insurance scheme or receiving benefits (contributory or noncontributory) as a percentage of the total population. This coverage excludes health protection (ILO 2019).

from the employer and the employee; hence, these funds cover formal sector employees. Health insurance coverage is nearly universal because the government subsidizes the health insurance contributions of more than 50% of the population. Of the five components, the pension fund is the largest. It runs a chronic deficit (Figure 8.10). All citizens are guaranteed a pension from either social insurance or social welfare when they reach the retirement age.

Figure 8.10: Social Insurance Fund Surplus and Deficit, 2004–2017

GDP = gross domestic product, LHS = left-hand scale, MNT = Mongolian togrog, RHS = right-hand scale. Source: National Statistics Office of Mongolia. Statistical Information Database, Social Insurance and Welfare. www.1212.mn (accessed June 2019).

The government is aiming for a stable social insurance system, but this will not be easy to achieve in the near future given the progress being made. Mongolia introduced a Notional Defined Contribution scheme in 1999;³² its successful delivery largely depends on adequate contributions, duration of contributions, and levels of public confidence in and understanding of the scheme, among other factors.³³ Flaws exist in the scheme because it is still running like a pay-as-you-go scheme (Donorov 2013). This levies “double burden costs” with the current working-age population financing pay-as-you-go benefits for existing pensioners by paying into their retirement accounts. Since the 1980s, many developing countries have introduced systemic pension reforms that have replaced all or part of pay-as-you-go schemes. Most of these countries,

³² The defined benefit scheme continues for people born before 1 January 1960. Those born between 1 January 1960 and 31 December 1978 can choose between the defined benefit and the Notional Defined Contribution schemes; those born on after 1 January 1979 are on the Notional Defined Contribution scheme.

³³ Other factors that policy makers control include fees and charges deducted from contributions and accumulated assets, parameters for the design of the default fund, the allocation of assets in the pay-out phase (life annuities and/or programmed withdrawals), and the interaction of the age at which decumulation begins and life expectancy. In April 2019, when a Mongolian commercial bank went bankrupt, an account was found to contain a significant amount from the Pension Fund deposited with that bank. This clearly shows that the government is not overseeing the risks properly.

however, have either fully or partly reversed these reforms and returned to the old scheme. The major issues are low coverage, incentive incompatibility, and trade-offs between systemic reform and social pensions (Wang et al. 2016).

Mongolia's pension system covers only about half of the labor force. A 2015 amendment to the Law on Social Insurance introduced more flexibility in the contribution schedule to encourage herders, the self-employed, and those working in the informal sector to participate, but the results have been modest. Only 10.4% of contributing-age herders are registered under the voluntary schemes, and their contributions tend to be discontinued mainly because of fluctuations in income. The number of voluntary insurers declined in 2008 during the global financial crisis and even the number of compulsory insurers decreased during the economic slowdown in 2015–2016 (Figure 8.11).

Figure 8.11: Insurers Paying Social Insurance Contributions, 2004–2018
(‘000)

LHS = left-hand scale, RHS = right-hand scale.

Source: National Statistics Office of Mongolia. Statistical Information Database, Social Insurance and Welfare. www.1212.mn (accessed on June 2019).

Despite the increasing number of contributors, revenue generated from contributions to the pension fund is insufficient to cover total expenditure because the number of beneficiaries is steadily increasing. Revenue fell from 76% in 2004 to 57% in 2017, whereas the share of expenditure has remained relatively stable at around 76% in the same period. The government budget makes up the shortfall. The Mongolia Sustainable Development Vision 2030 states that sound management policies of social insurance funds are expected to be implemented in Phase III, planned for 2026–2030. This shows that the government's policy to ensure the accountability and independence of social insurance funds is inadequate.

Although the first pensioners under the Notional Defined Contribution scheme are only now beginning to draw benefits, a significant decrease in the benefit level is anticipated. Research by the Organisation for Economic Co-operation and Development suggests that lengthening the contribution period by postponing retirement is an efficient approach to improving the chances of achieving a target retirement income.³⁴ The government has prepared broad reforms of the pension system aimed at achieving universal coverage and strengthening the system. A universal pension is a successful instrument to prevent older people from falling into poverty and reduce the vulnerability of households. The Household Socio-Economic Survey (HSES) data show that a large share of the population is dependent on social insurance and social welfare transfers. More than 30% of households have pensioners receiving at least the universal pension. In line with a global trend, population aging is inevitable in Mongolia. The total number of people who receive pensions from the Social Insurance Fund increased by 1.5 times between 2004 and 2017. People aged 60 and over comprise 6.4% of the total population, and their ratio to the working-age population was 10% in 2017. The share of people aged 60 and over is projected to double by 2045, and their ratio to the working-age population is projected to increase to 24%. Ensuring that the national pension insurance system is financially sustainable and can meet future liabilities is a priority of the pension system.³⁵

8.3 Social Development

Education

Mongolia has achieved almost universal primary and basic education, but improving the quality of education is proving challenging. Despite setbacks in this effort during the transition period, Mongolia has high education participation and literacy rates. The primary net enrollment rate was 97.9% in 2017, but access to quality early childhood education services is low, especially among the most disadvantaged.³⁶ A “reverse” gender disparity is apparent with more young women participating in education while young rural men have

³⁴ Amendments to the Law on Social Insurance, passed in, 2017 stipulate that the retirement age will be increased by 6 months every year until reaching a retirement age of 65 for men by 2026, and 65 for women by 2036 (starting from 2018). The same applies to the eligible age for a social welfare pension in old age. The pension contribution rates for both employers and workers has been increased by 2.5 percentage points (1.0% in 2018, 0.5% in 2019, and 1.0% in 2020), bringing the total mandatory contribution to 19%. The same applies to the voluntary pension insurance contribution (1.0% in 2018, 0.5% in 2019, and 1.0% in 2020), rising to 12.5%.

³⁵ The Asian Development Bank works with the government to develop and strengthen legal and institutional infrastructure for private pension system.

³⁶ This is 9 percentage points higher than the world average of 89%.

Table 8.9: Population Ages 18 and Over with Highest Educational Attainment, 2010 and 2016
(%)

Item	None		Primary		Secondary		Vocational		Bachelor		Master	
	2010	2016	2010	2016	2010	2016	2010	2016	2010	2016	2010	2016
Location												
Urban	21.1	31.2	22.0	32.5	67.9	71.2	66.6	80.0	78.7	80.3	92.6	89.2
Rural	79.0	68.8	78.1	67.5	32.2	28.8	33.4	20.0	21.3	10.8	7.4	10.8
Gender												
Male	52.3	52.9	51.8	47.7	47.8	47.4	42.4	59.0	39.3	39.3	37.7	34.2
Female	47.7	47.1	48.3	52.3	52.2	52.6	57.6	41.0	60.7	60.7	62.3	65.8
Quintile												
Poorest	33.0	34	28.1	24.9	16.2	19.1	11.2	15.6	5.3	6.4	1.5	0.9
Q2	24.8	25.7	24.8	23.5	19.0	20.6	16.9	20.5	11.4	12.3	2.7	3.2
Q3	21.1	18	19.7	19.8	21.3	20.6	21.8	22.3	17.6	19.5	11.3	7.8
Q4	12.5	14.6	15.6	18.3	23.6	20.3	23.8	21.1	25.5	25.8	20.3	22.4
Richest	8.6	7.7	11.9	13.4	19.9	19.4	26.2	20.5	40.5	36	64.2	65.7

Source: National Statistics Office of Mongolia. Statistical Information Database: Household Socio-Economic Survey Report 2010 and 2016. www.1212.mn (accessed June 2019).

the lowest enrollment rates. The completion rate of primary education fell to 74.7% in 1995 from 99.9% in 1980, but it has gradually increased from the mid-1990s, reaching 98.3% in 2015 (UNESCO 2018).³⁷ Women outnumber men at all education levels—except vocational education—and the gap is increasing (Table 8.9).

In the 2008/09 academic year, Mongolia undertook major reforms of the education system.³⁸ The Education Master Plan 2006–2015 aimed to prioritize reducing inequality by improving access to quality education for people regardless of their social status and living conditions (Government of Mongolia 2006). It also aimed to target programs and standards to meet the demand for labor and to empower young people to work and make informed choices in education (GOM 2016). Notwithstanding this, some groups, including rural youth, boys, and children from poor families, continue to be left behind. For example, even though 0.9% of Mongolians aged 15–29 were illiterate in 2016, the percentage of illiterate people in rural areas was twice that in urban areas.³⁹ The location of higher education and vocational institutions is biased toward cities, especially Ulaanbaatar, which exacerbates the rural–urban disparity in educational attainment.⁴⁰

The links between income level and access to education are strong. According to the latest Multiple Indicator Cluster Survey (2013), the nonpoor are seven times more likely to have a university degree than the poor. No one from the lowest two quintiles has a doctoral degree, while 67.5% of those with a doctoral degree are from the richest quintile. One in five of upper-secondary-school age children from the poorest quintile were not in school, but that was one in 50 for the richest quintile.

The school curriculum still focuses on academic skills and is therefore not preparing students for a fast-changing job market. An employer survey ranked innovation, critical thinking, teamwork, and communication skills as the most important skills (in that order), and noted that these are more important than theoretical, technical, and foreign-language knowledge (RILSP 2017). International development institutions, including the Asian Development

³⁷ Although the primary completion rate is slightly higher for males (98.8% and 97.8% for females in 2015), this is reversed for all other levels of education.

³⁸ The primary and secondary education system of 10 years of schooling, where students started formal education at age 8, moved to 12 years of schooling, starting at age 6. The formal education system now consists of kindergarten and/or preschool (up to age 6), primary education (5 years), secondary education (4 years), and upper secondary education (3 years).

³⁹ The 2016 HSES shows the share of illiterate young people was 0.60% in urban areas and 1.12% in rural areas.

⁴⁰ As of 2013, 44.0% of technical and vocational training institutions and 83.4% of higher education institutions are in Ulaanbaatar.

Bank, have initiated projects to empower students in decision-making about their future studies and careers, including providing career guidance as part of school and TVET curricula and introducing elective courses in science, technology, engineering, and math. These initiatives, however, are being implemented mostly in urban schools, with very few in rural schools, accentuating the inequality of opportunities for students in rural areas.

Mongolia's growth in mining and construction is creating rising demand for technical workers—a demand that TVET centers are not meeting. Recognizing this, the government has carried out TVET reforms, including providing a stipend to motivate young people to do TVET, which boosted student numbers by 27% in 2008 alone. Even though TVET graduates are more employable than graduates of higher education, TVET is still not popular. From 2012, the number of students has been declining continuously, with the highest drop at 11% in 2017. Studies show that the major issues in TVET education are an outdated curriculum, lack of development opportunities for teachers, insufficient industry engagement, and underinvestment in equipment and facilities (ADB 2016).⁴¹

General education and most TVET education are funded by the government, a practice inherited from the socialist regime. Mongolia spends a reasonable amount on education at 4.9% of GDP; however, variable costs, including teachers' salaries and heating, account for 85% of budgets. Therefore, only an extremely small amount is left for classroom materials, equipment, and infrastructure, which affects the quality of education.⁴² In addition, the efficiency of capital investment in education is undermined by inadequacies in the planning of those investments and capacity. Although the government is utilizing the “funds follow students” approach, efficiency and accountability are still concerns without the autonomy of local schools (World Bank 2017).⁴³

Health

The Mongolia Sustainable Development Vision 2030 aims to increase life expectancy at birth to 78 years and to improve the quality of and access to health-care services. Since about 2010, life expectancy at birth has increased continuously; the rate, however, has not been the same for males and females (Figure 8.12). Mongolia's total life expectancy at birth is 69.8 years—65.7 for

⁴¹ The Asian Development Bank has been implementing the Skills for Employment Project for Mongolia.

⁴² The world average for government spending on education is 4.8% of GDP as of 2015.

⁴³ The fund is allocated on a per student basis in addition to fixed costs.

males and 74.2 for females.⁴⁴ The morbidity rate per 10,000 population is 1.5 times higher among women, while the mortality rate is 1.5 times higher for men, which partly explains the low life expectancy at birth for males. Pretransition Mongolia had good access to basic health services, although many of them were not efficient and some were probably unsustainable (and so deteriorated significantly at the beginning of the transition period). The government provides free access to primary health-care services to all.

Mongolia has made notable progresses in health indicators since the setbacks in the early transition period. The maternal mortality ratio and under-5 mortality rates have fallen substantially and are already better than the target of the Sustainable Development Goals. The neonatal mortality rate is still above the target, indicating that more work is needed on this (Table 8.10).

⁴⁴ The difference of almost 10 years of life expectancy between males and females is comparable to the Russian Federation's 67.1 years for males and 77.4 for females, and Kazakhstan's 68.7 for males and 76.9 for females in 2017 (World Bank. World Development Indicators Database, accessed June 2019).

Table 8.10: Health Indicators of Sustainable Development Goals, Selected Years 1990–2017

Indicators	1990	2000	2010	2015	2016	2017
Maternal mortality ratio, per 100,000 live births	121.5	166.25	47.5	25.6	48.6	26.9
Under-5 mortality rate, per 1,000 live births	97.2	44.5	25.6	18	20.8	16.7
Neonatal mortality rate, per 1,000 live births	65.4	32.8	20.2	15	16.8	13.6
Number of new HIV infections per 1,000 uninfected population	...	0.0007 (2007)	0.001	0.006	0.008	0.008
Tuberculosis incidence per 1,000 population	0.8	1.3	1.5	1.4	1.3	1.2
Hepatitis B incidence per 100,000 population	...	...	...	16.0	11.9	17.0
Mortality rate attributed to cardiovascular disease	...	...	...	18.5	17.4	17.5
Mortality rate attributed to cancer	...	...	...	13.2	13.4	13.0
Mortality rate attributed to diabetes	...	...	...	0.6	0.5	...
Mortality rate attributed to chronic respiratory disease	...	...	...	0.6	0.6	2.0
Number of doctors per 1,000 people	...	...	...	3.2	3.3	3.4
Number of pharmacists per 1,000 people	...	...	...	0.5	0.5	0.6
Number of nurses per 1,000 people	...	...	...	4.1	4.1	4.0

... = no data available, HIV = human immunodeficiency virus.

Source: National Statistics Office of Mongolia. Statistical Information Database: Public Health. www.1212.mn (accessed March 2019).

Mongolia faces a range of health challenges related to noncommunicable diseases. According to a 2013 STEPS report, 53.2% of the population aged 45–65 are at high risk of noncommunicable diseases (Public Health Institute 2013). Based on the first nationwide large-scale cohort study in 2009, the World Health Organization listed noncommunicable diseases as being responsible for 79% of total deaths in Mongolia (WHO 2014). The top cause of death is diseases linked to cardiovascular and blood disorders, followed by neoplasms (Table 8.11). A 2010 knowledge, attitudes, and practices study concluded there is a significant knowledge gap about hypertension and hypertension-related diseases, and that the gap is largest for young men. The same study found that urban and more educated Mongolians tend to have more knowledge about the risk of hypertension, but an overall “lack of perceived importance” is listed as a barrier to seeking health services (Demaio et al. 2013). The study found

significant differences in the lifestyles of men and women, meriting a different approach to devising health-care strategies between the sexes (Tsogzolbaatar et al. 2016).

Among neoplasms, liver cancer is predominant in both genders, and is responsible for almost two-fifths of all cancer diagnoses, followed by cancers of the stomach, lung, and esophagus in men and cervix, stomach, and esophagus in women. The cumulative risk of incidence for all cancers—27.7% for men and 20.8% for women—puts Mongolia above the People's Republic of China (20.2% and 13.3%), below the United States (34.1% and 28.5%), and close to the Russian Federation (26.1% and 19.1%). These figures shed light on the considerable magnitude of cancer and cardiovascular diseases in Mongolia, although this could substantially be reduced by lifestyle modifications and vaccination.

Table 8.11: Leading Causes of Death
(%)

Cause of Death	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cardiovascular and blood disorder diseases	37.7	36.7	35.1	35.1	34.3	34.1	33.3	34.2	34.4
Neoplasms	20.8	20.6	21.2	23.4	24.3	24.2	25.6	25.5	24.9
Injury, poisoning, and other external causes	16.1	18.3	18.9	17.2	16.8	15.7	15.0	16.6	16.9
Digestive system disease	8.5	8.9	8.9	8.4	7.7	7.9	7.4	7.3	6.8
Other	16.9	15.4	15.9	15.9	16.9	18.1	18.6	16.3	17.0

Source: National Statistics Office of Mongolia. Statistical Information Database: Public Health. www.1212.mn (accessed August 2019).

Injury, poisoning, and other external causes accounted for 17% of deaths in 2017, and disaggregated data show the other causes affect men more than women. This corresponds to the occupational health and safety concern of workplace injuries, and injuries in the environment, as men tend to work in more physically challenging and riskier occupations, such as mining, herding, and agriculture, and as machine operators. The 2009 large-scale cohort study found that men tend to have more vigorous physical activity at work and in free time than women.

A study by Komatsu et al. (2011) examines the role of dietary habits and aging in Mongolia and concludes that large amounts of meat, milk, dairy, and wheat flour products contribute to high levels of serum triglycerides and

cholesterol in the blood that can increase the risk of cardiovascular disease. They identified a high-fat diet as responsible for obesity that contributes to early aging (Komatsu et al. 2011). Cross-sectional surveys on the prevalence of risk factors for noncommunicable diseases conducted in 2005, 2009, and 2013 were used to quantify trends in the mean body mass index and waist circumference of Mongolian men and women. Being overweight and obese increased dramatically during this period (Chimeddamba et al. 2016). The age-standardized prevalence of obesity, denoted by the international body mass index, increased from 10.8 to 17.6 for men and from 18.9 to 26.4 for women from 2005 to 2013. Using Asian-specific body mass index cut-off values, the prevalence of obesity increased from 20.0 to 32.8 for men and from 33.4 to 43.7 for women in the same period. The study calls for obesity treatment, prevention, and monitoring.

Health-care is provided at three service levels. As of 2016, the health-care system consisted of 3,500 state-owned, private, and mixed organizations, including facilities manufacturing medicines and those delivering public health and medical, pharmaceutical, medical education, research, and training services. The number of private health institutions had more than tripled since the start of the 2000s (Table 8.12).

Table 8.12: Number of Health Institutions

Institutions	2000	2008	2017
Clinics, specialized hospitals, and centers	19	15	13
<i>Aimag</i> and district general hospitals	30	36	28
Intersoum hospitals	13	35	39
<i>Soum</i> hospitals	334	286	273
Private health institutions	466	1,063	1,466
Family hospitals	99	228	218
Pharmacies	321	741	1,277

Note: An *aimag* is a province; a *soum* is an administrative unit in a province.

Source: National Statistics Office of Mongolia. Statistical Information Database: Public Health. www.1212.mn (accessed March 2019).

The health sector employs 48,173 people and has 32.4 physicians, 37.2 nurses, and 24.5 other medical professionals and technical education staff per 10,000 people. Geographical barriers prevent rural populations from accessing quality health-care services. Long distances to reach health facilities can delay access to services and increase overall costs. The ratio of medical doctors to nurses is 1 to 1.13 nationally and 1 to 1.45 in primary health-care. This differs across regions: the highest ratio is in the Western Region (1:1.44) and the lowest is in Ulaanbaatar (1:0.98).

The number of persons per doctor and nurse has declined since about 2010, implying improved access to services (Figure 8.13). Mongolia's human resource strategy needs to be updated to reflect sector challenges, including enhancing human resource planning, improving the database and licensing system, and strengthening competencies.

Figure 8.13: Number of People per Physician and per Nurse

Source: National Statistics Office of Mongolia. Statistical Information Database: Public Health. www.1212.mn (accessed March 2019).

To tackle these challenges, the World Health Organization's Representative Office in Mongolia initiated a subnational health system strengthening program in 2013 involving national and international partners. All aimag and soum health departments are developing local health plans consistent with the state policy and principle of "leaving no one behind." This is vital for achieving universal health coverage and the Sustainable Development Goals. Despite the government's effort to pay more attention to primary health-care services, the health system is still hospital centric due to people's preference for hospital care.

Mongolia's health expenditure, at slightly over 4% of GDP, is lower than that of regional peers. Similar to the education sector situation, most health expenditure is for recurrent spending (85%), leaving very little for improving the quality of services and facilities. The efficiency of spending is also undermined by poor planning and insufficient coordination among state health service providers (WHO 2013).

8.4 Policy Recommendations and Conclusions

Mongolia has made noteworthy achievements in social development yet challenges remain. The government understands the need to improve the quality of education and health services, generate jobs, and harmonize social welfare transfers to reduce poverty and inequality. Although a wide variety of policies have been developed and a number of reforms carried out, issues remain in the inefficiency of implementation, low enforcement, discontinuity of policies and reforms, and inadequate coordination and management of government institutions.

Employment and gender bias. A relatively young population could be advantageous for economic development, but the participation of youth in the labor market is problematical. The youth have a hard time finding employment because of skills mismatches, and they prefer professional jobs while the market needs skilled workers with technical and vocational training. Mongolia needs to improve measures to support youth through active labor market policies. Support could include career counseling, entrepreneurial skills training, access to finance, and technology and information training. Using such approaches is already stated in policies, but the active implementation is crucial. The projects being implemented in cooperation with international development institutions and the government on career guidance for secondary school students in urban areas need to be extended to rural schools and the higher education sector.

Even though women outpaced men in education attainment and achieved relative equality in the workplace during the socialist regime, the wage gap and gender-based discrimination persist in the labor market, and occupational segregation has increased. Employers, albeit a small percentage of them, prefer hiring young men rather than women. Women are still taking on most household and family duties, which is reducing their labor force participation. Effective employment policies should consider measures to improve opportunities for women to balance work and household duties. Facilitating flexible forms of employment, increasing the availability of care facilities and after-school activities for children, introducing a father's parental leave, and subsidizing workplace training for women after parental leave are recommended instruments for increasing the women's LFPR.

The government needs to nudge businesses to improve workplace flexibility (such as through part-time contracts) and allow workers access to entitlements (such as paid medical leave). The government needs to improve the enforcement of labor laws to strengthen the ability of part-time workers to claim their rights. Implementing additional training programs targeting women who return to work and rethinking the early retirement age of women would help women find jobs. The government could encourage businesses to employ older or younger women or disabled people through financial incentives such as a wage subsidy or tax breaks for small businesses. In addition to improving access to early childhood education, introducing flexibility to enrollment could be used as an instrument. Labor market policies need to tackle gendered wage differences, and the policies need then to be actively implemented.

Further work is needed to tackle gender bias, such as enforcing nondiscrimination in hiring practices, and to raising employers' awareness and understanding of the issue. The active promotion of employment projects focusing on women, rural men, and people over 40 would help provide more equal opportunity for all workers. Instruments already included in policies need to be extended to reach the targeted groups.

Mongolia's narrow economy relies on mineral extraction that generates little employment. Diversifying and expanding the economic base to be more resilient and inclusive would be beneficial. Exploring the comparative advantage in animal husbandry by expanding the value chain for livestock and exploring possibilities for diversifying crop production could lead to ways Mongolia can diversify its economic base. Expanding infrastructure strategically to facilitate the transport of agriculture production to the growing urban market is also important. A more active approach to support employment generation in remote locations can also help to narrow the employment gap between the rural areas and urban centers.

Education and training. Mongolia already has the foundation of a strong education system. Further refinement and reorientation of the education system to meet the development needs of the future workforce will be essential to deal with the skills mismatches in the labor market. Despite expanded access to education, quality is still a concern. Numerous policies and programs have been implemented to address this but with limited success. Moving to a 12-year education system was a positive change, but the development and review of content, standards, curricula, and textbooks have not kept pace with this reform. Capacity development and facilities remain

weak, particularly for rural schools. International development institutions have developed and implemented a range of projects to support education and employment. These need to be consolidated because the collaboration is scattered between the Ministry of Education, Culture, Science, and Sports and the Ministry of Labor and Social Protection. Currently, the government is developing a new Education Master Plan for 2030 with support from the Asian Development Bank. The plan's aim to reduce inequality in education and improve quality is the same as that of the previous plan. However, the new plan has not been finalized, and it is obvious that major challenges for the education system in the coming years will still be the lack of financial resources, particularly for capital investment and capacity development.

While there is strong recognition of vocational training's importance to the economy, many problems in TVET persist, including its low status, the need for skills taught to be relevant to the labor market and the demand of industry. To overcome the skills gap and mismatches that youth encounter, the government needs to co-opt the participation of employers in setting TVET curricula and improving the connection between industry and education institutions. Another solution is to create an independent assessment system for skills certification. Programs matching workers to jobs can also help to align employer requirements and labor supply. Career advice centers in higher education institutions and government job centers are important entities that can help to tackle the skills mismatch by identifying gaps and for a programmatic response. Cultivating a culture of internship that links students to their first jobs can also help reduce the time it takes to obtain the first employment.

Poverty and inequality. Inequality is persistent and progress on poverty reduction is slow. Strategies to combat poverty must include creating more jobs, and supporting not only the poor but also the bottom end of the middle class to prevent this group from falling into poverty. A thorough review of activities that generate the most income for the poor will facilitate the understanding of the poor's situation and benefit policy formulation. To tackle widening inequality, the International Monetary Fund recommends introducing a progressive tax system at the beginning of an Extended Fund Facility program in 2017; however, without government willingness, this is not an easy task to accomplish (IMF 2019a). Although Parliament passed the Law on Property Tax in 2001, its implementation had been postponed several times. To reduce inequality, active government policy is required in addition to poverty reduction programs.

Poverty reduction and social protection are important for Mongolia to support inclusive growth that is sustainable and aligned to the Sustainable Development Vision 2030, in addition to encouraging labor force participation. Because education is key to reducing poverty, the government needs to improve policy to support the poor in obtaining certain levels of skills and education. Further enhancing policy to promote rural areas will be vital for reducing poverty in rural areas. The HSES clearly shows that in addition to poor households, a large group of households could easily fall back to poverty during an economic downturn.

To achieve Vision 2030's target of expanding the middle class to 80% of the population, Mongolia needs to identify and assist not only the poor but also those vulnerable to economic shocks. Developing the Living Standards Assessment Database could help to identify them, but support measures for this are not clearly affirmed in any policies.

Although the interaction with international development institutions has been frequent, cooperation and coordination on specific social spending issues or projects is less common (IMF 2019b). The government needs to take the initiative in coordinating poverty reduction projects by international and civil organizations to improve their efficiency.

Mongolia has implemented numerous social welfare programs, but a systematic impact evaluation is needed to eliminate overlapping of programs, implement targeted policies, and enhance program efficiency. Reviewing and harmonizing programs, and abolishing duplicated or unnecessary benefits, would release resources to spend more on vulnerable groups, such as the poor and the disabled. Moreover, improving the effectiveness and efficiency of program delivery could relieve the administrative burden of large, cumbersome, and fragmented programs; help enlarge the level of benefits going to targeted groups; and help maintain sustainable sources of funds to build resilience in people's ability to cope with unexpected economic and life risks.

Health. In Mongolia, noncommunicable diseases now claim more lives than infectious diseases, and circulatory system diseases and cancer are particularly prevalent. Although reforms have made the health system more decentralized, the hospital-based care system needs to be transformed because it is not cost-effective. The country needs to invest in health education and awareness-raising on healthy lifestyles. Investing in people is a key foundation to support strong economic development.

Through programs in health and education, the government can aim to build a capable workforce that is healthy and has adequate institutional support. The continued decentralization of the health-care system whereby the population can get primary health services at well-functioning health centers is important for helping the government to keep health expenditure down. Cooperation with community-supported programs to raise awareness on health issues and promote healthy lifestyles can build a healthier population with a focus on prevention rather than cure, thus potentially saving money from the health budget later. Programs to work with grocery stores to carry fruit and vegetables, school programs on nutrition and health, and community center programs to promote walking and jogging are some of the ways to combat a sedentary lifestyle and bad food habits.

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Mongolia's Economic Prospects

Resource-Rich and Landlocked between Two Giants

This book examines Mongolia's recent economic development and outlines reforms that would help the country take advantage of its many opportunities. Mongolia is rich in natural resources and, although landlocked, is well-placed to boost trade with its two giant neighbors. The country needs to diversify its economy beyond mining, enhance economic stability, and increase employment. To maximize Mongolia's potential the government can improve macroeconomic management, enhance the skill base, and provide hard and soft infrastructure to promote trade and efficient logistics. Governance and institutional reforms are also crucial. The government will need to continue to drive reforms so that they are well implemented and deliver the intended change.

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ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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