GOVERNMENT OF MONGOLIA
MINISTRY OF LABOUR AND SOCIAL PROTECTION

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GOVERNMENT OF MONGOLIA
MINISTRY OF ECONOMY AND DEVELOPMENT

MONGOLIA JOBS DIAGNOSTIC

More Vibrant and Inclusive Labor Markets for Economic Recovery and Diversification

KWPF
KOREA-WORLD BANK PARTNERSHIP FACILITY

SYNTHESIS REPORT

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Synthesis Report

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FOREWORD

Over the past two decades, Mongolia has had sustained economic growth, labor productivity has increased, and a significant number of jobs have been created. Structural changes that mark a modernizing economy have been progressing-urbanization has increased substantially while an increasing number of workers has moved out of agriculture and into industry and especially services. At the same time, the country has also benefited from low dependency rates, and the working-age population is increasingly well-educated. Even though the COVID-19 pandemic had significant negative impacts, the economy has started to recover in 2022 and, with it, the prospects for resuming job creation.

However, against this backdrop, the Mongolia Jobs Diagnostic has identified important job-related challenges for the future. To address these challenges, the study proposes specific actions and interventions to create more vibrant and inclusive labor markets for economic recovery and diversification, as envisioned in the New Recovery Policy and Mongolia's Vision 2050 long-term development framework.

As pointed out in the report, there are two major labor market challenges in Mongolia. The first and overarching employment challenge is to create more and better jobs than have been created during the past decade. The growth of labor demand has not been strong enough to reduce unemployment. Many of the jobs that have been created are in relatively low-paying sectors. The second employment challenge relates to inclusion; this includes raising labor force participation for specific groups and creating more opportunities for young people. Mongolia's labor force participation rate is particularly low for women, urban residents, and people with intermediate levels of education. The youth are facing difficulties in their transition into the labor market, and their unemployment rate is high.

Overcoming these challenges will require a jobs strategy that is multi-sectoral and takes a whole-of-government approach. The report identifies deficiencies from the labor demand side and offers recommendations to strengthen macroeconomic and fiscal management, improve the business environment, and encourage diversification. The constraints from the labor supply side will require interventions to improve the education and training systems, and also reform the social assistance programs to support the employment prospects for those recipients who could work. There is also a policy reform agenda to improve information on labor supply and labor demand, enhance public employment services and active labor market programs, and further reform labor market regulations and unemployment protection. To effectively implement such a jobs strategy, it is clear that efforts from the ministries concerned with workforce development will be instrumental; at the same time, the role of ministries responsible for economic policy will be foundational to transform the private sector for more and better job creation.

The Mongolia Jobs Diagnostic is a joint effort between the World Bank and the Government of Mongolia over the last two years and is the latest example of a fruitful collaboration over more than three decades. We hope the present report will help enhance the understanding of Mongolia's labor market trends and prospects and help prioritize policy actions to create more vibrant and inclusive labor markets as economic recovery and diversification progress further in Mongolia.

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The JD was prepared under the direction of Martin Raiser (Regional Vice President and former Country Director), Daniel Dulitzky (Regional Director), Yasser El-Gammal (Practice Manager), and Andrei Mikhnev (Country Manager). The team is grateful to Maheshwor Shrestha (Senior Economist) for his leadership in the preparation stage. The team appreciates the constructive comments and feedback at different stages from peer reviewers Mohamed Ihsan Ajwad (Senior Economist), Wendy Cunningham (Lead Economist), Abla Safir (Senior Economist), and Achim Daniel Schmillen (Program Leader). The team thanks Undral Batmunkh (Economist), Tungalag Chuluun (former Senior Social Protection Specialist), Badamchimeg Dondog (Senior Public Sector Specialist), Jigjidmaa Dugeree (Operations Officer), Pagma Genden (Operations Officer), Elena Glinskaya (Lead Economist), Ganbaatar Jambal (Extended Term Consultant), Toby Linden (Practice Manager), Philippe De Meneval (Lead Private Sector Specialist), Deborah Newitter Mikesell (Senior Education Specialist), Thilasoni Benjamin Musuku (Senior Financial Sector Specialist), Jean-Pascal Nganou (Senior Economist), Monica Paganini (Extended Term Consultant), Josefina Posadas (Senior Economist), Akiko Sawamoto (Education Specialist), and Lansong Zhang (Operations Officer) for their feedback and advice in different stages. Research assistance from Baburam Niraula (Extended Term Consultant) and Shuwen Zheng (Consultant) during the early stages is appreciated. Corinne V. Bernaldez (Senior Executive Assistant), Badamkhand Bold (Program Assistant), Shaista Nafeesa Baksh (Program Assistant), Orgil Erdenebold (Senior Information Technology Assistant), Anna Goodman (Program Assistant), and Sithie Naz Mowlana (Program Assistant) provided invaluable support on administrative affairs.

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ABBREVIATIONS

ALMP	active labor market program
Aramco	Saudi Arabian Oil Company
CIP	corporate income tax
ECI	Economic Complexity Index
EPF	Employment Promotion Fund
EPS	Employment Permit System
FDI	foreign direct investment
GASI	General Agency for Specialized Inspection
GDP	gross domestic product
GIFF	Growth Identification and Facilitation Framework
GOLWS	General Office of Employment and Welfare Services
HEI	higher education institution
HSES	Household Socioeconomic Survey
ILO	International Labour Organization
ILOSTAT	International Labour Organization Database
IT	information technology
JD	Jobs Diagnostic
LFPR	labor force participation rate
LFS	Labor Force Survey
LGE	local government enterprise
LLC	limited liability company
LMIS	labor market information system
MLSP	Ministry of Labor and Social Protection
MNT	Mongolian tugrik
MUST	Mongolian University of Science and Technology
NEET	not in education, employment, or training
NGO	nongovernmental organization
NSO	National Statistics Office of Mongolia
OECD	Organisation for Economic Co-operation and Development
PAYG	pay as you go
PDR	People's Democratic Republic
PES	public employment services
PIT	personal income tax
pp	percentage points
PPP	purchasing power parity
PWT	Penn World Table
Q1	first quarter
Q2	second quarter
Q3	third quarter
Q4	fourth quarter
RILSP	Research Institute of Labor and Social Protection
SABIC	Saudi Basic Industries Corporation
SAR	Special Administrative Region

SME	small and medium enterprise
SOE	state-owned enterprise
TFP	total factor productivity
ToT	terms of trade
TVET	technical and vocational education and training
UB	Ulaanbaatar
UI	unemployment insurance
UISA	unemployment insurance savings account
VAT	value-added tax

EXECUTIVE SUMMARY

The objective of the Jobs Diagnostic (JD) is to generate evidence that will inform policies that create more and better jobs in Mongolia while moving toward a more diversified economy. The strategic direction of the World Bank's engagement in Mongolia emphasizes jobs as a cross-cutting issue that requires interventions from different sectors. Aligned with this, the JD was initiated to carry out a series of analytical studies intended to provide a rich and nuanced jobs narrative for diversified and sustainable job creation in the country. This task includes core analyses on the macro environment, labor demand, and labor supply as well as in-depth studies in specific areas, including labor market regulations and policies, migration, social assistance programs, COVID-19, and the global green transition. The JD also identifies specific actions and interventions needed to create more vibrant and inclusive labor markets for economic recovery and diversification as envisioned in the recently released New Recovery Policy and Mongolia's Vision 2050 long-term development framework.

Sustained economic growth and increased labor productivity across the economy over the past two decades have resulted in the creation of better jobs for more people in the country. Annual gross domestic product (GDP) per capita growth averaged 5.4 percent between 2000 and 2019. Population dependency ratios have been falling since the early 2000s, urbanization has increased substantially, and both total and wage employment have experienced substantial growth. Labor productivity rose across the economy, particularly in agriculture but also in industry and services, even as off-farm employment increased. Consequently, average real wages rose. As is usual in growing economies, most of the contribution to labor productivity growth came from within sectors, but structural transformation also contributed, adding about one percentage point to annualized aggregate labor productivity growth from 2000 to 2018. During this period, the shares of both agricultural employment and agricultural value added in the economy decreased. The COVID-19 pandemic had significant consequences for the economy and the labor market, with real GDP contracting by 4.4 percent in 2020—the first decline in a decade—and employment plummeting by about 5 percent in 2021, though the recovery package mitigated an even steeper decline.

Mongolia's relatively low levels of labor productivity compared to its peers, high degree of volatility, slow capital deepening, and reliance on the mining sector pose challenges for future job creation. Although labor productivity growth has been substantial, Mongolia's levels of labor productivity are not necessarily high when benchmarked against its structural peers. Capital per worker has grown slowly on average and is heavily concentrated in the mining sector, which, despite its importance to the economy, employs just a small share of the working-age population. Investment mostly has been financed through foreign direct investment (FDI), which moved in parallel with improved terms of trade. The rise and fall of capital inflows, which are tied to trends in Mongolia's commodity markets, have brought volatility to the overall economy, which, in turn, has slowed per capita growth since 2014. Furthermore,

Mongolia has lost comparative advantage in more complex export products over time and has become more specialized in a smaller number of natural resources, posing a challenge for further economic diversification and job creation through nonmineral exports.

Mongolia's labor force is young and relatively highly educated, but it is aging, and labor force participation is low and unemployment is high. Mongolia is still a young country that can benefit from the demographic dividend, but it is also aging at a rapid pace. Less than 60 percent of the working-age population (ages 15 and older) participated in the labor market, and only about half were employed in 2021. These figures place Mongolia at the lower end of the comparator countries used in this report. At the same time, Mongolia has a highly educated workforce; however, there are concerns regarding quality and inequality in education, with lower outcomes for males, rural areas, and the poor. Returns to upper secondary and college education remain significant, though they have been falling since 2018 and especially so for men. Unemployment is high, particularly in urban areas and among those with an upper secondary education or technical and vocational education and training as well as among youth.

Mongolia's labor demand expanded substantially over the past two decades, but many of the jobs that have been created are in relatively low-paying sectors. The increase in labor demand mainly has been driven by the private sector, with the number of small businesses having increased disproportionately. Regional employment growth has also been substantial, but the share of jobs in the capital city still increased because many migrants came to Ulaanbaatar (UB) to find employment. Today, Mongolia's labor demand is dominated by small firms in the commerce sector, and two-thirds of firm-based jobs are in UB. The role of the public sector declined substantially but remains significant, especially in regions with limited alternative job opportunities. Nearly 60 percent of jobs created between 2010 and 2020 are in sectors that, on average, pay below the median wage; sectors creating higher-paying jobs include mining and construction, but these have not been major sources of new jobs. The process of labor reallocation within firms is sluggish. Most hires are replacement hires-not adding new job opportunities but rather filling previously vacated positions-in part due to a relatively high number of quits. Constraints related to worker skills and access to finance are reported by many firms. Moreover, recent domestic lockdown measures and border frictions caused by COVID-19 strained mining, manufacturing, construction, and the service sector as a whole and disproportionately affected small and medium enterprises, which limited the creation of high-paying or even average-paying jobs.

Mongolia's overarching employment challenge is to create more and better jobs than have been created during the past decade; this calls for a multisectoral jobs strategy that drives private sector development. The performance on job creation has not been strong enough to bring more people into the labor force and to reduce unemployment. The overarching challenge the country faces in terms of employment is to create more and better jobs to meet the aspirations of the increasingly educated workforce and to drive higher incomes and productivity. This calls for a more vibrant and innovative private sector and a public policy environment that enables it. An important part of this challenge will be to diversify beyond the resource sector. However, as already noted, the process has been slow, and there is little evidence of emerging sectors that are creating large numbers of good jobs. Actions on the part of the Ministry

of Labor and Social Protection and other departments and agencies concerned with workforce development are important for meeting this challenge. But reforms from ministries responsible for economic policy that can transform the private sector must provide the foundation for meeting Mongolia's jobs challenges.

Going forward, Mongolia also faces employment challenges that are specifically related to inclusion; these include raising labor force participation—particularly for certain groups—and creating more opportunities for young people. Mongolia's labor force participation rate is relatively low when benchmarked against comparator countries and has been slowly declining. Three particular segments of the working-age population stand out with low participation rates: women, urban residents, and people with intermediate levels of education. The transition of young people into the labor market is important given the country's large youth cohort and the substantial investments in education. However, this transition is not going well, especially for the less educated, and even young people with tertiary education have inactivity and unemployment rates that are too high.

Constraints to meeting Mongolia's jobs challenges come from a range of sources, including the skills and availability of workers. On the supply side, labor force skills do not seem to be a universal problem, but skills mismatches are concerning in a couple of specific ways. First, the education and training systems are not preparing adequate numbers of skilled workers in strategic sectors that are critical to the country's recovery plan and to the longer-term development strategy. Second, a significant minority of recent graduates do not have the skills needed in the labor market, especially to fill higher-skilled jobs. Another supply-side constraint stems from the challenges some women face in participating in the workforce while providing family care (which largely falls on women). It is difficult to disentangle the separate effects of receiving social welfare benefits from a lack of child care options in explaining whether social welfare benefits disincentivize female labor force participation; however, overlapping benefits among households with children tend to be generous, and a lack of incentives to participate in the labor force and effective activation measures are causes for concern.

As already noted, significant constraints also exist on the demand side of the economy and result in a private sector that has not been dynamic enough to generate the needed job creation. Most unemployed workers cite a lack of jobs as the main barrier they face in finding employment. Mongolia's firm landscape is dominated by small firms, very few of which seem to grow into larger companies that employ a lot of workers. Indeed, firms report a range of barriers in their business environment that they feel limit their operations. These include political instability, taxes, access to credit, and corruption. However, not all demand-side constraints are due to policies. Mongolia's geography and extremely low population density are inherently limiting factors in terms of allowing the country to benefit from agglomeration effects. This will require special efforts to connect regions and to exploit the potential of the country's single large urban area.

The JD proposes policy recommendations in a range of areas to address these supply and demand constraints to job creation as well as to improve the functioning of the labor market. The policy recommendations are meant to address the constraints affecting job creation and the particular challenges we have identified regarding employment. Taken together, these actions address the challenge for more

dynamic job creation in the private sector, which will lead to better jobs and more opportunities for groups with high levels of exclusion from the labor market. Some recommendations focus on enhancing the labor supply. These cover reforms to improve the skills development system as well to create incentives and pathways for social welfare and unemployment benefit recipients to (re)integrate into the labor market. Several recommendations are intended to improve the functioning of the labor market. These include proposals to build a comprehensive labor market information system, to enhance the capacity of active labor market programs to support job seekers, to increase the protection offered by unemployment insurance, and to strengthen labor regulation through improved enforcement. Finally, with respect to labor demand constraints, some proposals are put forward to improve the business climate to encourage diversification and job creation. These proposals add to recommendations already made by the World Bank in recent reports that address various issues related to economic development and diversification.

1. COUNTRY, MACRO, AND STRUCTURAL CONTEXT

Country and Policy Context

Mongolia is a landlocked country sandwiched between its two giant neighbors: the Russian Federation and China. Beginning in the early 1990s, the country changed its economy from a centrally planned system to a market-based one and politically transitioned to a democracy. Mongolia's political and economic transition process followed a peaceful but volatile path. The first decade of economic transition was characterized by deep recessions and increased unemployment and poverty while privatization, price liberalization, and structural and institutional adjustments took place. With respect to employment, labor and social protection policies were fundamentally reformed.[1] The following two decades witnessed further adjustments and reforms, but these occurred amid increasing dependence on exports of a few commodities, economic volatility, political and policy instability, growing corruption, and limited capacity to effectively enforce laws.

Mongolia has achieved significant progress in human development and economic growth, with the latter driven by heavy reliance on the mining sector. The economic growth over the last decade (before the COVID-19 pandemic), however, has had a limited impact on increasing sustainable jobs and reducing poverty and income inequality. The labor market continues to be challenged by the seasonality of many economic sectors, limited structural upgrading, and significant unemployment and inactivity, particularly for women and youth. These challenges are, ultimately, of a structural nature and will require a vibrant, diversified, and growing private sector that creates a sufficient number of productive and well-paying jobs. Mongolia has had success in creating private sector wage jobs, but creating more productive and higher wage jobs remains a challenge. The recent Country Economic Memorandum (CEM) for Mongolia highlighted constraints the country faces in terms of private sector development and economic diversification, such as fiscal crowding out and an unpredictable business climate (World Bank 2020b).

Currently, the government faces the challenge of implementing reforms necessary to facilitate diversification and growth while ensuring an economic recovery in the context of the pandemic and new shocks arising out of disrupted trade and the impact of the war in Ukraine. It has succeeded so far in mitigating the impacts of the prolonged pandemic on jobs through instruments such as taxation and social insurance contribution relief and microloans and on household welfare through instruments such as the vertical expansion of social assistance programs and bonuses for vaccination, among others. The government has also announced its three-year plan of economic recovery, which emphasizes supporting agricultural and export sectors and small and medium enterprises (SMEs) as well as allocating financing for kicking off megaprojects, housing construction, and mortgage financing.

The Mongolian government has set out an ambitious vision for longer-term development. The longer-term development priorities of the government, and the president alike, are summarized in three catchphrases: "From Welfare to Jobs," "From Extraction to Processing," and "From Import to Export." These priorities are in line with

[1] Social insurance laws were adopted in 1994; the Labor Law was revised in 1999, and public employment services were introduced in the mid-1990s.

Mongolia's Vision 2050 (2019), a long-term development framework that emphasizes human and economic development, efficient governance, protection of the ecosystem, and green development. The country's economic priorities focus on macroeconomic stability, effective fiscal management, increased national savings, economic diversification, building an export-oriented economy, trade facilitation, participation in regional economic integration, and development of financial markets. Further, Mongolia has set goals of positioning itself as an economic corridor between the Russian Federation and China, striving to become the investment hub of Northeast Asia, turning into an energy-exporting country, and becoming a digital nation with skills developed for the digital era. The climate agenda is rising, too, as the economic and livelihood impacts of desertification, land degradation, and other extreme climatic events are increasingly recognized, and the global (and China's) efforts to reduce carbon emissions are accelerating.

From the sectoral and regional perspectives, the country has identified several priorities. On the backbone of the mining sector, the country has prioritized the following sectors for economic diversification: value-added manufacturing of minerals-based production, agro-processing, construction materials, light and food industries, transportation, logistics networks, information technology (IT), tourism, and the creative industry. As for regional development, Vision 2050 focuses on identifying the regions with growth potential and connecting them with infrastructure networks, developing sustainable agriculture and tourism, and developing Ulaanbaatar (UB) and satellite cities. Various policy documents suggest that most development initiatives are likely to concentrate geographically along the vertical railway corridor. The Concept of Regional Development of Mongolia, adopted by the parliament in 2001, is expected to be revisited to further clarify the regional development strategies.

Recently, the parliament adopted the New Recovery Policy, a 10-year program that focuses on post-COVID economic recovery while addressing the binding constraints that hinder economic growth, diversification, and achievement of Vision 2050's policy goals. The New Recovery Policy focuses on the following six areas to be addressed as priorities for the next decade: (i) tripling the capacity of dry ports through enhanced connectivity and necessary infrastructures, gradual liberalization of air transportation, and establishment of free economic zones next to ports; (ii) doubling electricity production capacity and undertaking preparatory works for exporting electricity through the Northeast Asia Super Network; (iii) developing the mineral processing and agricultural industries to fully meet domestic supply and exporting; (iv) recovery of cities and regions with an emphasis on UB and satellite cities, new settlement regions, free economic zones, and allowing *aimags* (provinces) to independently generate local revenues; (v) green development by implementing a "Billion Trees" program, protecting water sources, increasing water reservoirs, and establishing waste recycling plants in UB and regional centers; and (vi) enhancing public sector productivity by digitizing public services, reducing bureaucracy, improving governance of state-owned enterprises (SOEs), and tightening criminal liabilities for corruption.

Creating more and better jobs is a priority in this development agenda. Increasingly, authorities find it is critical to reform labor regulations, policies, and institutions and to develop the workforce to support productivity, competitiveness, and private sector growth as well as to increase the income and well-being of workers and

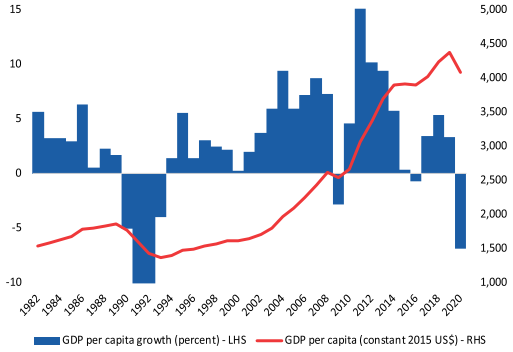
their families. The recent revision of the Labor Law (July 2021) addressed regulatory gaps and weaknesses and is intended to have a positive effect on employment for youth, women, and other vulnerable groups.

Macro Trends

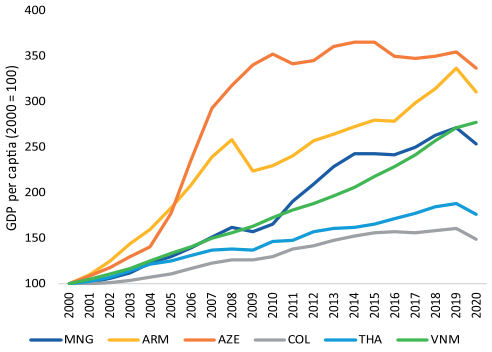
Real gross domestic product (GDP) per capita in Mongolia grew at an average rate of 5.4 percent per year between 2000 and 2019. This followed relatively poor growth during the 1990s, when GDP per capita contracted at an average of 1.1 percent per year (compound annual growth rate). Between 2003 and 2013, GDP per capita grew at an average rate of 7.4 percent per year. Annual per capita growth peaked in 2011, growing at 15.2 percent. Since then, real per capita growth has decelerated, averaging only 2.3 percent per year between 2014 and 2019 (figure 1.1, panel a). Overall, between 2000 and 2019, aside from Azerbaijan and Armenia, Mongolia's growth outperformed most of its standard comparator peers (figure 1.1, panel b) as well as its aspirational peers.[2]

Figure 1.1. Mongolia's rapid, volatile economic growth outpaced most standard comparator countries before 2014 but decelerated afterward

a. GDP per capita growth and GDP per capita



b. GDP per capita by country (Mongolia and peer countries)



Source: World Development Indicators (database), World Bank, Washington, DC (accessed September 2021), http://wdi.worldbank.org.
Note: GDP = gross domestic product; LHS = left hand side; RHS = right hand side.

[2] Mongolia's standard, aspirational, and high aspirational peers were selected following the Growth Identification and Facilitation Framework (GIFF) developed by Lin and Xu (2016). See box 1.1 for further information.

Box 1.1. Selection of Comparator Countries

Our approach for selecting comparator countries generally follows Lin and Xu (2016), with some adaptations. The methodology involved three steps.

The starting point was to identify potential standard comparators with a gross domestic product (GDP) per capita of up to 150 percent of Mongolia's, aspirational comparators with a relative GDP per capita of 150-250 percent, and high aspirational comparators with a GDP per capita of greater than 250 percent. In the next step, we narrowed down the selection in three ways.

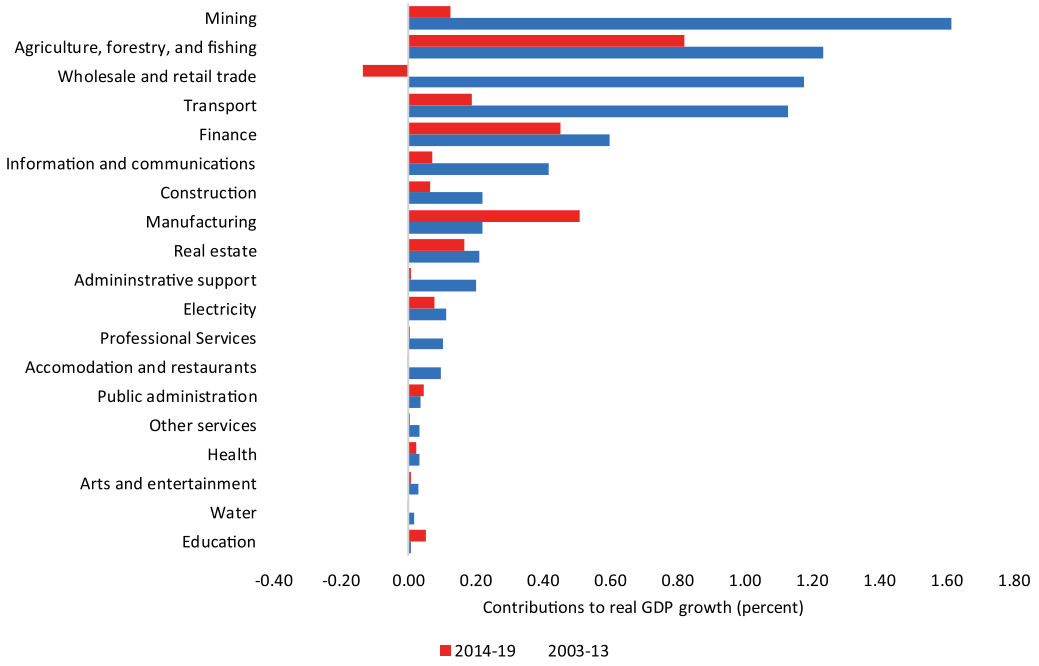
First, we eliminated slow-growth countries. Second, we carried out further analysis using competitiveness, human capital, export, and manufacturing indicators to develop profiles of potential comparators. Third, qualitative information was introduced to prioritize country characteristics similar to endowments and features that are important distinctions for Mongolia, such as an abundance of natural resources, a transitional economy, located in Asia, and a large youth population. Colleagues were also consulted at this stage.

The final 13 countries selected were Armenia, Azerbaijan, Colombia, Thailand, and Vietnam (standard comparators); Chile, Kazakhstan, Malaysia, and the Russian Federation (aspirational comparators); and Australia, Canada, Estonia, and the Republic of Korea (high aspirational comparators). Among them, Armenia, Australia, Chile, Estonia, and Thailand apply 19th ICLS standards in their labor force surveys, identifying employment as pay work done for pay or profit. These standards, adopted by the Mongolian Labor Force Survey in 2019, tend to result in lower employment rates and higher unemployment, though this impact is not significant in more advanced economies.[a] Eight of the 13 selected countries were comparators in the 2020 World Bank Country Economic Memorandum.[b]

Source: Betcherman and Jalil 2022.
Notes: a. See ILO (2022).
b. See World Bank (2020b).

The economic boom between 2003 and 2013 was driven primarily by mining, agriculture, and retail trade, and agriculture, manufacturing, and finance became the top three sectors that contributed most to growth between 2014 and 2019. Between 2003 and 2013, growth was driven mostly by the mining sector, which contributed over 1.6 percentage points (pp) to real GDP growth, followed by agriculture (1.23 pp) and wholesale and retail trade (1.17 pp; figure 1.2). During this period, the manufacturing sector contributed little to real GDP growth, adding only 0.2 pp, and falling behind transport (1.1 pp), finance (0.6 pp), and information and communications (0.4 pp). The subsequent years saw a collapse across most sectors; between 2014 and 2019, mining contributed just 0.1 pp to real GDP growth, contrasting with the previous years, and wholesale and retail trade negatively contributed by 0.1 pp. Growth between these years was mostly driven by agriculture (0.8 pp), manufacturing (0.5 pp), and finance (0.45 pp). Only the manufacturing sector contributed more to real GDP growth in the latter period than in the former.

Figure 1.2. Mining, agriculture, retail trade, and transport drove economic growth before 2014, and agriculture, manufacturing, and finance became the main drivers for economic growth after 2014



Source: National Statistics Office of Mongolia (NSO).

In addition to the COVID-19 pandemic, trade disruptions (notably with China) and the Russia–Ukraine war have brought huge downside risks to the economy. Due to the COVID-19 crisis in 2020, real GDP contracted by 4.4 percent, which was Mongolia's first sizable recession in over a decade. Contrary to much-anticipated post-COVID growth, the recovery in 2021 was weak (1.4 percent) and insufficient to make up for the previous year's losses, largely owing to COVID-19 trade disruptions with China, which hampered mining exports and import of vital inputs for domestic production (Nganou et al. 2022). The economy in 2022 is projected to grow modestly at 2.5 percent, reflecting lingering border frictions with China and the impact of the war in Ukraine (Nganou et al. 2022). The International Monetary Fund recently projected Mongolia's growth in 2022 to be much lower, at 1 percent, and the outlook is full of significant downside risks stemming from commodity price volatility, extended closures of Chinese borders, an escalation of sanctions on Russia, tighter global financial conditions, and the risk of a pandemic resurgence. Import disruptions from China and Russia are likely to hurt activity, and inflation is expected to remain high at 14.5 percent in 2022, reflecting global price increases (IMF 2022).

Demographics

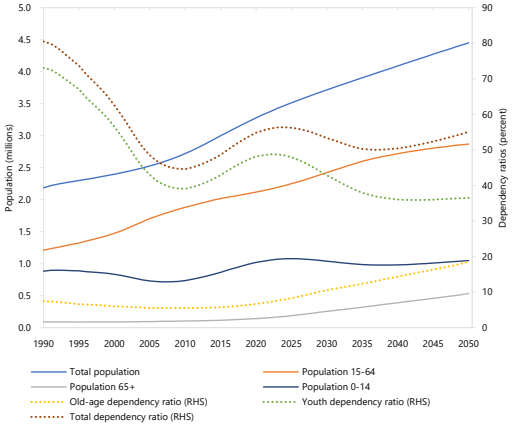
Mongolia has a small population and is one of the world's most sparsely populated countries. With a surface area of 1.6 million square kilometers and a

population density of only around 1.9 inhabitants per square kilometer, Mongolia ranks lower than only Greenland in population density. Mongolia's population grew from 2.18 million in 1990 to 3.29 million in 2021 and is projected to reach 4.4 million by 2050.

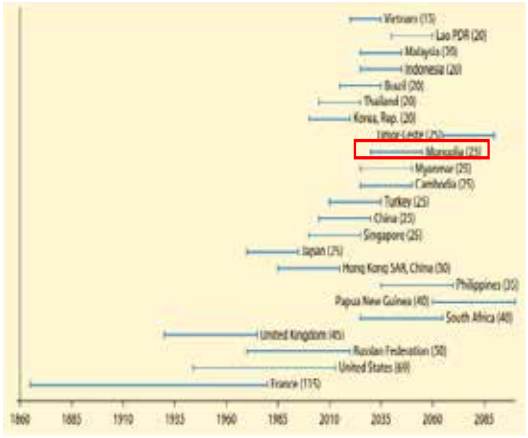
During the last 20 years, Mongolia saw significant urbanization along with demographic changes; the country could continue benefiting from a demographic dividend in the future. Between 2000 and 2020, the country's urbanization rates increased by more than 10 pp, from 57.1 percent to 68.7 percent, with about half (47.6 percent) of the population living in UB and 20 percent living in aimag (provincial) centers. Mongolia is now more urbanized than both the average country at its GDP per capita and most of its standard comparators. In terms of its age structure, Mongolia is a relatively young country. The total dependency ratio fell between 2000 and 2008 and then increased temporarily, reaching 0.55 for dependents over the working-age population in 2020 (in line with that of Organisation for Economic Co-operation and Development [OECD] countries), and will continue to decline until the 2040s. Nevertheless, its old-age dependency ratio is projected to rise (figure 1.3, panel a), and the country will age rapidly like other Asian countries; it will take only about 25 years for the aged population (65 and above) to double from 7 percent to 14 percent (figure 1.3, panel b). This transition took 45 years for the United Kingdom, 69 years for the United States, and 115 years for France.

Figure 1.3. Mongolia's population is still young but will soon start to age rapidly

a. Evolution of population and age dependency ratio



b. Years to move from 7 to 14 percent population share (65 years and older)



Sources: UN World Population Prospects; World Bank 2016.
Note: PDR = People's Democratic Republic; RHS = right hand side; SAR = Special Administrative Region.

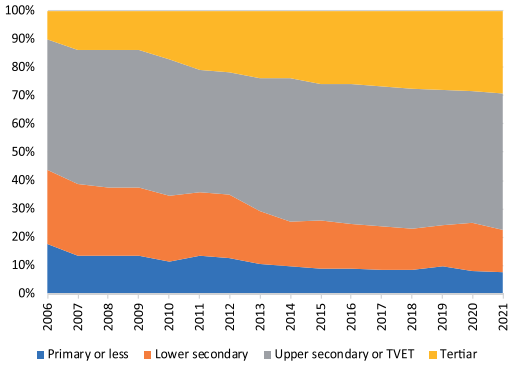
Human Capital

The level of educational attainment is high in Mongolia, although there are concerns about quality. In recent years, the working-age population has become increasingly educated (figure 1.4, panel a). Specifically, the share of the population ages 25 and older with a tertiary degree is now significantly higher for Mongolia (33 percent)

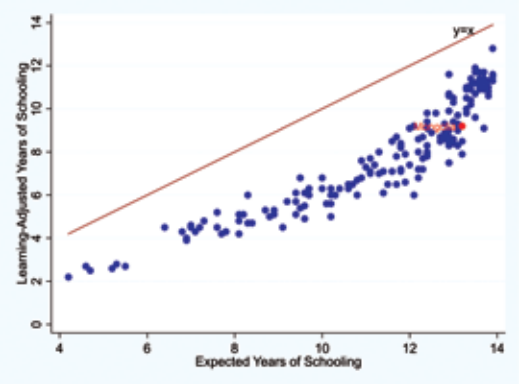
than in standard (16 percent) and aspirational (20 percent) comparator countries (World Development Indicators, 2017-20 data). The average years of schooling (ages 15 and older) in Mongolia is 9.1, which is higher than that of comparator countries such as Vietnam, Thailand, and Kazakhstan. It is also higher than the average in the East Asia and Pacific region (8.7 years) but lower than the average in the Europe and Central Asia region (11 years).[3] Yet, in 2018, out of the average expected years of schooling of 13.2, the number of learning-adjusted years of schooling is only 9 (figure 1.4, panel b).[4] This means that students lag in learning by 4 years compared to the number of years they attend school, even though Mongolia ranked 51st in the Human Capital Index,[5] higher than its income level (92; World Bank 2020a).

Figure 1.4. The population is well educated and increasingly so, but quality-adjusted years of schooling are lagging behind

a. Education levels among working-age population



b. Expected years of schooling and test score



Sources: Labor Force Surveys (2006-21); World Bank 2020a.

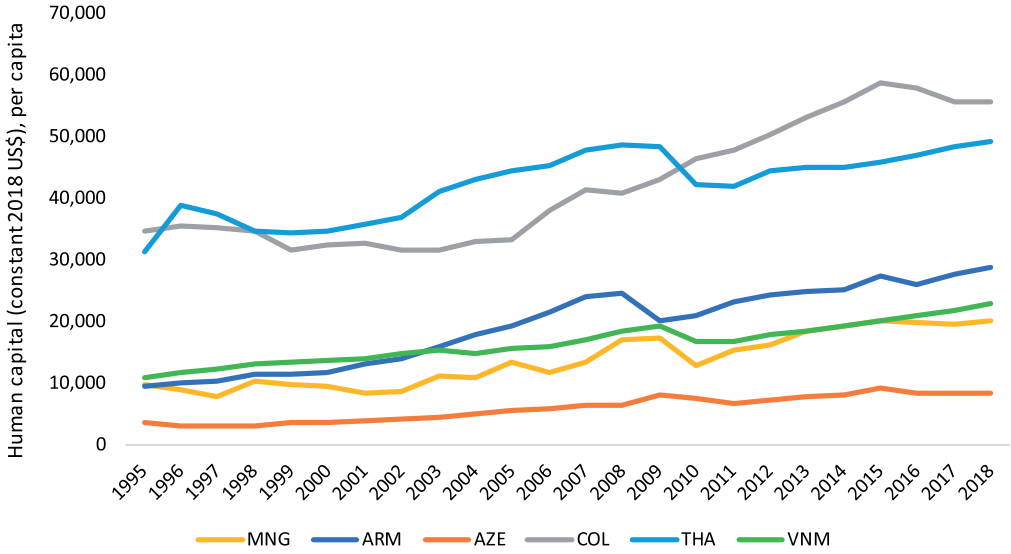
Mongolia ranks low in terms of human capital utilization, which points to potential demand-side deficiencies. Although the country performed well on the Human Capital Index, it does not make full use of this capital in its economy. Since the 1990s, Mongolia's human capital wealth-defined as the present value of future earnings for the labor force (World Bank 2021a)-has consistently ranked lower than most of its standard comparators used in this report, excluding Azerbaijan (figure 1.5). The contrast between the Human Capital Index and human capital wealth certainly provides a strong hint that there is deficiency on the demand side of the labor market, which merits further investigation.

[3] Average years of schooling data are from World Development Indicators (database), World Bank, Washington, DC (accessed January 2022), http://wdi.worldbank.org.

[4] Learning-adjusted years of schooling are calculated by multiplying the estimates of expected years of schooling by the ratio of most recent harmonized test score to 625, where 625 corresponds to advancement attainment on the Trends in International Mathematics and Science Study test. The methodology of constructing learning-adjusted years of schooling can be found in Filmer et al. (2018).

[5] See the latest Human Capital Index data here: https://www.worldbank.org/en/publication/human-capital#Index.

Figure 1.5. Mongolia has underperformed its peers in human capital utilization



Source: World Bank 2021a.
Note: Human capital wealth is defined as the discounted value of future earnings for a country's labor force. The measure of human capital wealth relies on estimations conducted using household surveys; calibration of the results is based on the share of labor earnings in gross domestic product in the national accounts. The approach is explained in detail in World Bank (2021a).

Poverty and Inequality

Poverty is not high in Mongolia relative to its peer countries, but poverty reduction has stagnated since 2016. Extreme poverty has been eliminated, and the national official poverty head count rate declined sharply from 38.8 percent to 21.6 percent during the economic boom in 2010-14 (Uochi 2020). Using the poverty line of US$5.5 per day (2011 purchasing power parity [PPP]), the poverty head count ratio in Mongolia was 27.1 percent in 2018. This number is not high compared with its peers[6] and is in line with its relatively low inequality and significant social transfers. However, due to the economic recession, the national poverty rate reversed up to 29.6 percent in 2016 and then decreased slightly to 28.4 percent in 2018. Although the COVID-19 pandemic has sharply slowed the pace of poverty reduction, the COVID-19 relief packages played an important role in preventing a rise in poverty, and the poverty rate further declined to 27.8 percent in 2020 (World Bank 2021b).

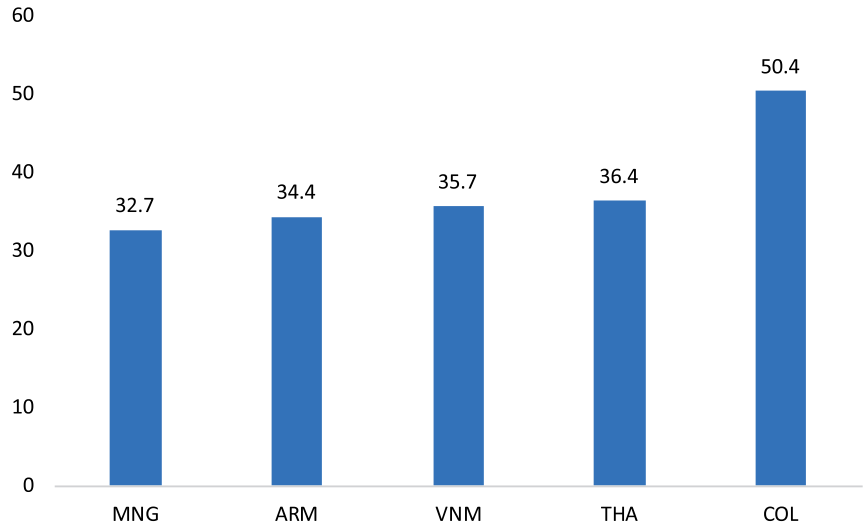
Poverty is increasingly an urban issue. Although poverty rates declined in both urban and rural areas between 2010 and 2020, the speed of poverty reduction was notably slower in urban areas. In 2010, nearly half of the rural population lived in poverty, but this share declined to 30 percent by 2020. During 2010-20, by contrast, urban poverty declined by 6.7 pp from 33.2 percent to 26.5 percent (Uochi 2022). The poverty gap between urban and rural areas declined from 16 percent in 2010 to 4 percent in 2020. By contrast, less inclusive consumption growth in urban areas was accompanied by

[6] The peers' poverty head count ratios are 44 percent in Armenia (2019), 29.4 percent in Colombia (2019), 6.2 percent in Thailand (2019), and 22.4 percent in Vietnam (2018).

stagnation in poverty, leaving the poverty rate unchanged at 27 percent from 2016 to 2018. The lack of progress in poverty reduction in urban areas was driven mainly by stagnant wage growth in the poorest population group, while strong growth in farm income, supported by rising livestock prices, together with the expansion of social protection programs, contributed to poverty reduction in rural areas. Sixty percent of poor people live in urban areas. The slower pace of poverty reduction in urban areas despite growth in the prepandemic years has become a source of concern and poses questions about how effective and equitable job creation, labor market, and social policies have been (Uochi 2020).

Inequality in the country has been stable and moderate. Inequality indexes in Mongolia have remained stable over time, with the Gini index slightly over 30 , which is moderate when compared with its standard comparator countries where the Gini for the 2018/19 is around 35 in Armenia, Thailand and Vietnam but as high as 50.4 in Colombia (figure 1.6). In recent years Gini indexes in Mongolia have increased in urban areas but decreased in rural areas, offsetting each other's impact (World Bank 2020b).

Figure 1.6. Inequality in the country is relatively modest



Source: World Development Indicators (database), World Bank, Washington, DC (accessed September 2021), http://wdi.worldbank.org.
Note: The chart shows Gini indices for 2018/19.

Investment

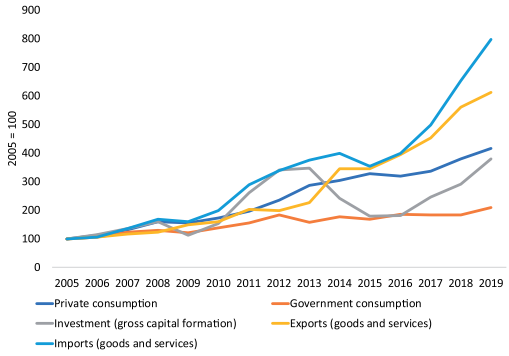
Investment greatly contributed to the boom between 2003 and 2013. Looking at real GDP by expenditure (figure 1.7, panel a), investment increased approximately 3.5 times between 2005[7] and 2013, growing simultaneously with the country's imports (approximately 3.7 times) and outpacing the growth of private consumption (2.9 times) and exports (2.3 times). Nevertheless, investment collapsed by 30.1 percent in 2014 and

[7] This is the year with earliest available data.

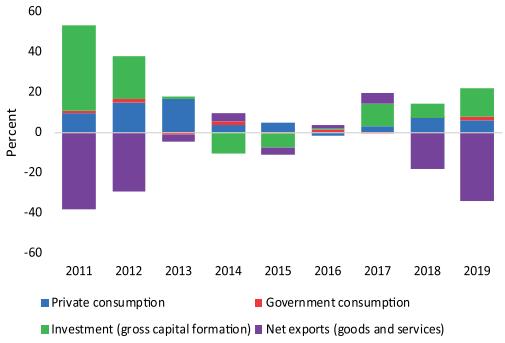
by 26.5 percent in 2015, almost returning to its 2010 levels.[8] Investment expenditure peaked in 2011, driving most of Mongolia's growth that year, when GDP per capita peaked (figure 1.7, panel b). Investment's contribution to real GDP growth then declined until its collapse in 2014. From 2015 onward, investment expenditure recovered, growing at an average rate of 27.7 percent per year between 2016 and 2019, thus doubling over the period.

Figure 1.7. Foreign investment drove the economic boom, but the model is not sustainable

a. Real GDP by expenditure (2005 = 100)



b. Real GDP growth decomposition by expenditure



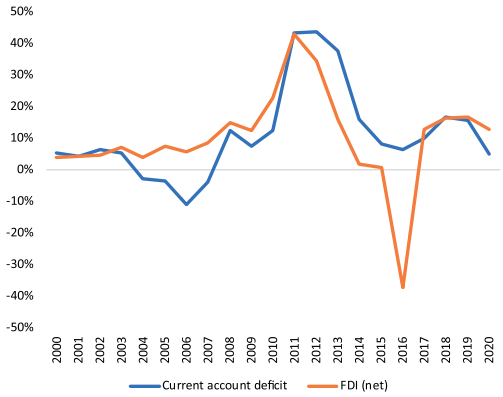
Source: NSO.
Note: GDP = gross domestic product.

The investment boom was mostly financed by foreign savings, in the form of foreign direct investment (FDI). The total investment in the economy consistently outperformed the total amount of national savings. Thus, the country attracted foreign savings to finance its boom, resulting in a larger current account deficit (figure 1.8, panel a). The FDI has been concentrated in the mining sector (figure 1.8, panel b).

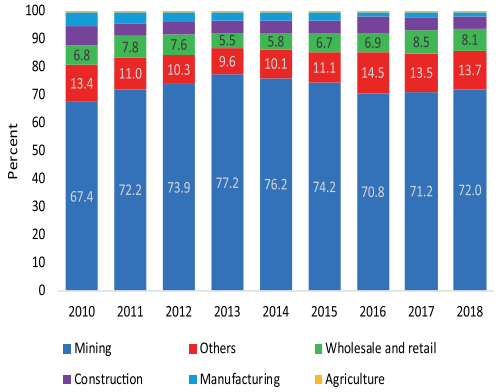
[8] The economic downturn in 2014-16 was mainly a result of declining commodity prices and slower growth in China.

Figure 1.8. FDI resulted in a large current account deficit and was concentrated in the mining sector

a. Current account deficit and FDI (net) (Percentage of GDP)



b. FDI stock by economic activity

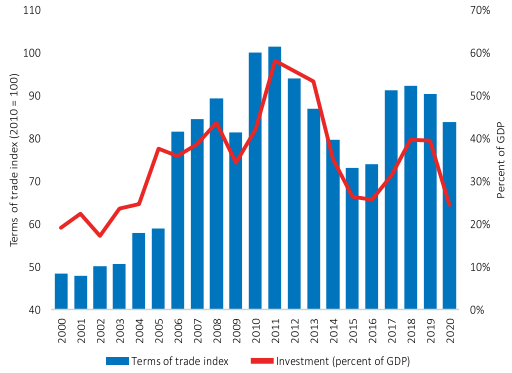


Source: World Bank calculations based on Central Bank of Mongolia, National Statistics Office of Mongolia, and International Monetary Fund (replicated from Mongolia's 2019 Article IV).
Note: FDI = foreign direct investment.

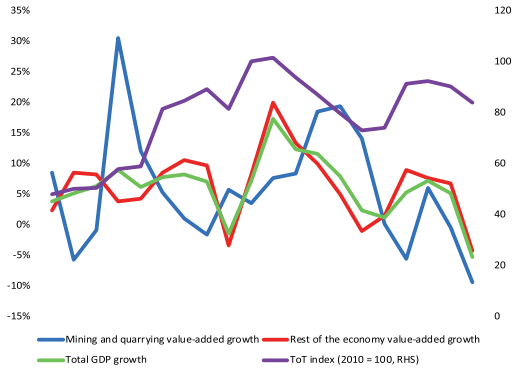
Mongolia's investment and FDI in the last 20 years seemed to be highly correlated with the country's terms of trade, bringing volatility to the rest of the economy. Investment, the key driver of economic growth, was mostly dependent on mining-related FDI, which is highly correlated to conditions in international markets and terms of trade (figure 1.9, panel a). Favorable terms of trade brought in FDI, which permitted increased absorption, imports, and a wider current account deficit. However, when terms of trade fluctuate, it can be an important source of volatility for the rest of the economy (figure 1.9, panel b).

Figure 1.9. Mongolia's investment and FDI seem to be highly correlated with the country's terms of trade, bringing volatility to the rest of the economy

a. Terms of trade and investment



b. Constant GDP growth by subsector and terms of trade



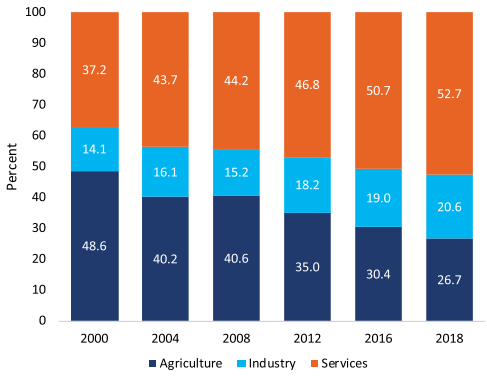
Sources: United Nations Conference on Trade and Development, International Monetary Fund, Central Bank of Mongolia, and National Statistics Office of Mongolia.
Note: GDP = gross domestic product; ToT = Terms of trade; RHS = right hand side.

Structural Transformation

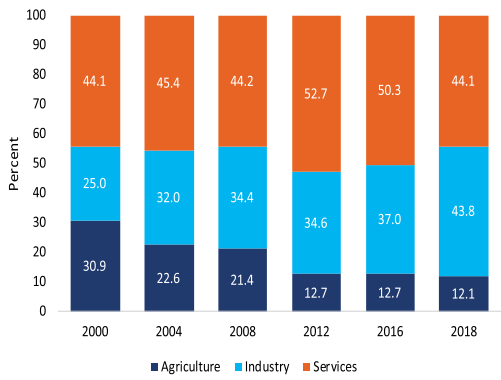
Structural transformation has been under way in Mongolia; the contribution of the agriculture sector to the economy has consistently fallen, although the value-added shares in industry and services did not follow a monotonic trend, reflecting the country's volatile economic performance. We observe a consistent decline in the shares of the agriculture sector in real GDP and employment (figure 1.10). Agriculture went from employing 48.6 percent of the labor force and comprising 30.9 percent of the country's value added in 2000 to 26.7 percent of employment and 12.1 percent of real GDP in 2018. Although employment shares in industry and services both increased, the behavior in value-added shares is less clear, reflecting volatility through the years.

Figure 1.10. The share of agriculture in employment and value-added shows a consistent decline, while the value-added in industry and services do not follow a monotonic trend

a. Share in total employment



b. Share in total value added



Source: World Bank Jobs Group Jobs and Structural Change Stata (JSCS) Tool, from World Development Indicators Database.

Productivity

Overall increases in labor productivity accompanied the transformation process and were a key contributor to economic growth. Average real GDP growth exceeded growth of both the labor force and employment during 2000-19. At least since 2003, increases in labor productivity, measured by value added per worker, have been the main contributor to economic growth (figure 1.11, panel a).

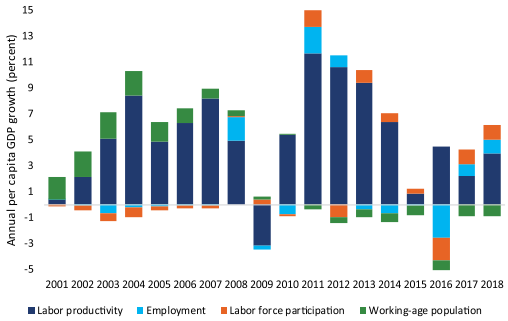
Labor productivity grew across sectors, and the agriculture sector saw the biggest gains. In the agriculture sector, the country almost tripled its level of labor productivity (figure 1.11, panel b), outperforming the rest of the economy and its structural peers. This was explained by both faster increases in agricultural value added and decreases in employment, especially during 2010-20.[9] In terms of levels, Mongolia's agricultural value added per worker ranks second in comparison with its structural peers.

[9] The contributors to the agriculture sector's productivity growth potentially include a rapid increase in the size of the animal herd after 2014 (WBG 2019) and the shrinking size of workers in the sector. According to the 2020 Labor Force Survey (LFS), over 95 percent of agricultural workers are employed in animal

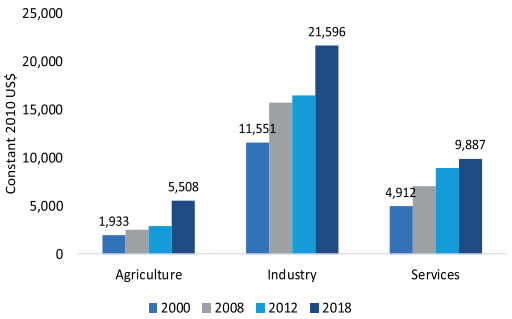
The industry and service sectors saw increases in both employment and value added per worker, although their levels of productivity are not necessarily high compared with Mongolia's structural peers. Employment in the industry and services sectors almost doubled, and labor productivity growth outperformed all of Mongolia's peers except Azerbaijan. In terms of levels, industry and services value added per worker were not particularly high, and came in third and fourth in comparison with its standard comparators, respectively.

Figure 1.11. Labor productivity has been the key contributor to economic growth and increased significantly across three sectors in Mongolia

a. GDP growth decomposition



b. Value added per worker by sector



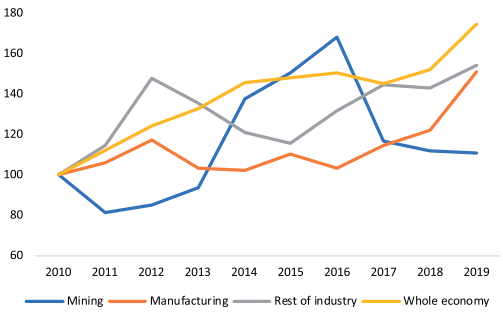
Source: World Bank and NSO.
Note: GDP = gross domestic product.

A closer look at the industry and services sectors during the last decade shows that finance and transport display above-average productivity growth, but mining and manufacturing have lagged. Subsector-level data show that mining value added per worker behavior mirrors the abovementioned volatility, and productivity growth in the manufacturing sector lags behind the rest of the economy (figure 1.12, panel a). For the services sector, whereas value added per worker growth in wholesale and retail trade-the biggest subsector in services in terms of employment-was mostly in line with the economy's average productivity growth, the finance and transport sectors surpassed it.

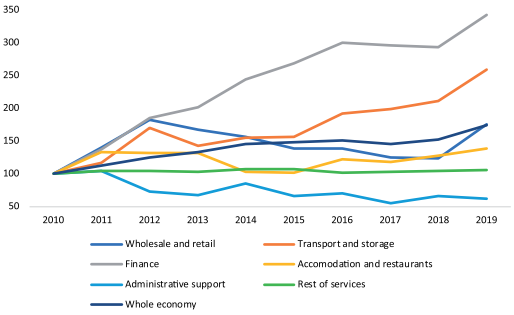
production, mostly raising cattle, sheep, and goats (International Standard Industrial Classification of All Economic Activities, Revision 4; industry code 014). Data from the National Statistics Office of Mongolia (NSO) also indicates that livestock production substantially increased between 2000 and 2020; gross livestock output (in local currency) has multiplied by a factor of more than 16.

Figure 1.12. Finance and transport have had above average productivity growth, but mining and manufacturing have lagged

a. Industry sector



b. Service sector

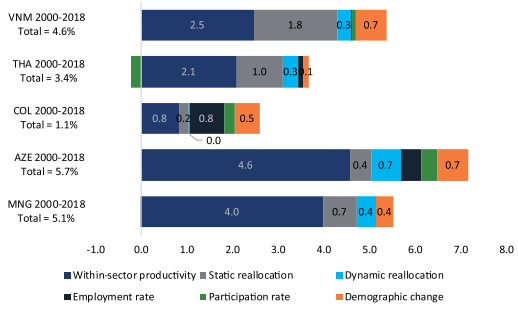


Source: NSO.
Note: The charts show value added per worker (2010 = 100) for a selected group of subsectors in the Industry and Service sectors, respectively.

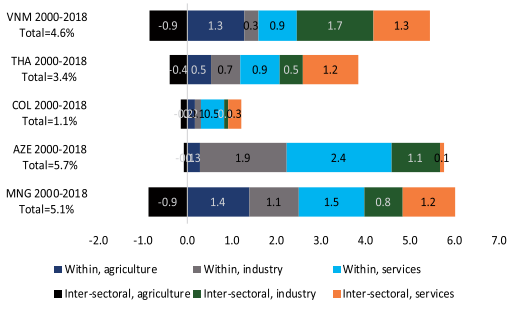
Between 2000 and 2018, the biggest gains in per capita value added came from labor productivity increases within sectors, although structural transformation did contribute to growth, mostly through the services sector. Growth in value added per worker is decomposed between a sectoral-level (within-sector) component and resource allocation (between-sector) component using a Shapley decomposition[10] (figure 1.13, panel a). In the case of Mongolia, we see that increases in labor productivity within sectors were the biggest drivers of overall productivity growth. This contrasts with some of its structural peers, such as Thailand and Vietnam, and reallocation contributions are in line with Azerbaijan. By further decomposing this indicator by major sectors (figure 1.13, panel b), we can see that most of the contribution from structural transformation components came from the services sector, which added approximately 1.2 pp to overall intersectoral reallocations.

Figure 1.13. Within-sector productivity growth was the biggest driver of overall productivity growth, and the major contribution from structural transformation (across the sector) came from the service sector

a. Decomposition of growth in per capita value added, by country



b. Contribution of change in productivity, by country and major sector



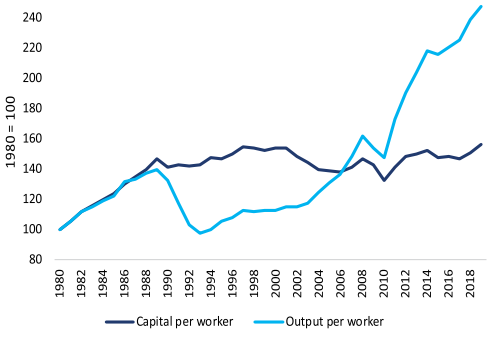
Source: World Bank and NSO.

[10] See Shorrocks (2013) and de Vries, Timmer, and de Vries (2015) for the methodology.

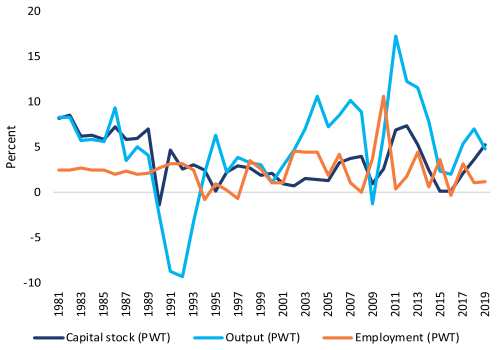
Since the early 1990s, Mongolia's capital per worker has only slightly increased (figure 1.14, panel a). Even if the capital stock did experience growth (by 2.8 percent per year between 2000 and 2019 and 3.7 percent per year between 2003 and 2013), employment was growing at similar or faster rates (figure 1.14, panel b). This contrasts with the growth of output per worker, which more than doubled from 2000 to 2019. Moreover, as discussed, because investment and FDI are mostly concentrated in the highly capitalized mining sector, relatively lower capital concentration was observed in the rest of the economy.

Figure 1.14. Capital deepening did not explain the increase in labor productivity

a. Capital and output per worker



b. Capital stock, output, and employment growth, 1980-2019

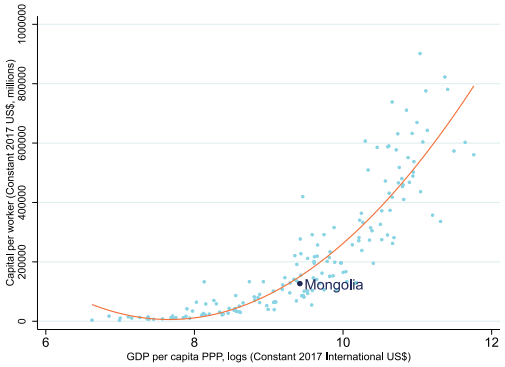


Source: Feenstra, Inklaar, and Timmer 2015
Note: GDP = gross domestic product; PWT = Penn World Table. Capital stock in panel b is in constant 2017 national prices, in million 2017 US$.

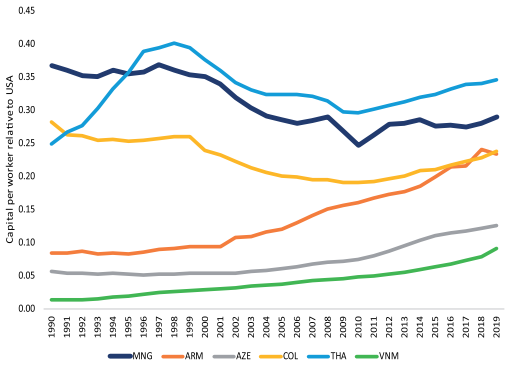
Capital per worker in Mongolia has been moving away from the technological frontier, whereas most of the country's peers are catching up. Even if capital and output per worker are in line with the country's level of GDP per capita and levels are not comparatively low (figure 1.15, panel a), capital per worker has grown the least among the country's standard comparators, moving away from the technological frontier (the United States; figure 1.15, panel b).

Figure 1.15. Capital per worker in Mongolia has been moving away from the technological frontier

a. Capital per worker and GDP per capita, countries 2019



b. Capital per worker relative to the United States, 1990-2019



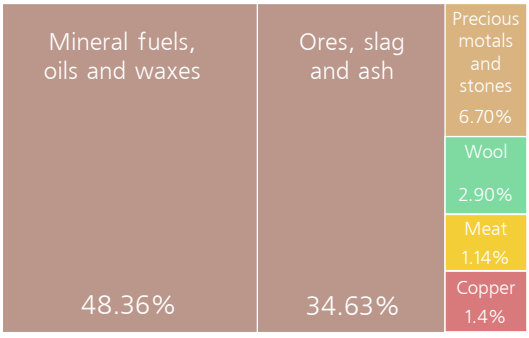
Source: Feenstra, Inklaar, and Timmer 2015.

Trade and Economic Complexity

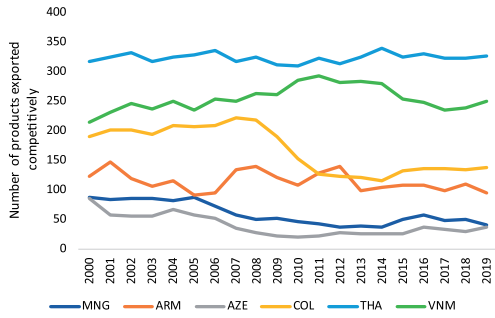
Mongolia's export basket mostly comprises mineral products, and it has become less diverse over time. Exports have been increasing but have become less diversified, with increased concentration on a reduced number of mineral products (figure 1.16, panel a). Already one of the least diversified countries in the world, Mongolia has had a reduced number of competitive export products since the mid-2000s, losing export diversity (figure 1.16, panel b)[11] and becoming "specialized" in a smaller number of products.

Figure 1.16. Mongolia's export basket is mostly composed of mineral products, and the country has been losing its export diversity

a. Mongolia's exports in 2019



b. Diversity of exports, 2000-2019

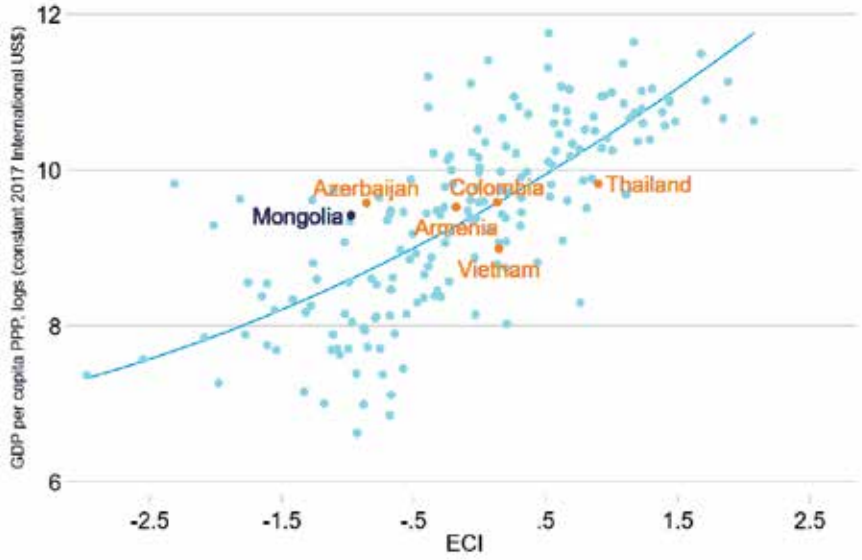


Source: Atlas of Economic Complexity (database), Growth Lab at Harvard University, Cambridge, MA (accessed September 2021), https://atlas.cid.harvard.edu/.

Mongolia has the lowest Economic Complexity Index (ECI) among its peers and ranks 113th out of 133 economies in terms of complexity (figure 1.17). The ECI is a measure of how diversified and sophisticated a country's export matrix is (see box 1.2). In Mongolia's case, the low agglomeration of know-how in the country, represented by an export basket mostly comprising low-complexity products and concentrated in the natural resources sector, can imply longer jumps into new sectors and pose relatively more challenges in its future diversification process (see box 1.2).

[11] *Diversity* refers to the number of products a country exports competitively (with a "revealed comparative advantage" more than 1).

Figure 1.17. Mongolia has the lowest ECI among its peers



Source: Atlas of Economic Complexity (database), Growth Lab at Harvard University, Cambridge, MA (September 2021), https://atlas.cid.harvard.edu/.
Note: ECI = Economic Complexity Index; GDP = gross domestic product.

Box 1.2. The Theory of Economic Complexity

The theory of economic complexity is based on the work of Ricardo Hausmann and Cĭsar Hidalgo.[a] The authors developed their theory to try to explain what drives differences in income per capita and productivity across countries and places. The authors argue that technology has three components: (i) *tools*, such as machines, hammers, and laptops, which can be transported through trucks, planes, or ships; (ii) *code*s, which are the set of instructions to operate the tools and which reside in books and manuals; and (iii) *know-how*, which is the ability to perform a task. Know-how, which resides in the brains of people, is harder to transport and to adapt to specific circumstances. Thus, individuals tend to specialize in just a few know-hows, so economies will need *collective* know-how, through the division of labor, to produce goods and services.

According to Hausmann,[b] the accumulation of know-how or tacit knowledge is a key driver of economic growth, and as know-how is embedded in the goods and services that people produce, it is possible to estimate its levels by observing what economies produce. Using international trade data, the authors constructed the Economic Complexity Index (ECI), a measure of how diversified and sophisticated a country's export matrix is. They find that the ECI is strongly associated with gross domestic product (GDP) per capita and that complexity also explains future economic growth. According to the authors, countries with a higher ECI than expected for their level of GDP per capita will tend to grow faster.

See Hausmann et al.[c] for further information on the theory and methodology of economic complexity.

Sources: a. Hausmann 2016; Hausmann and Hidalgo 2011; Hidalgo and Hausmann 2009; b. Hausmann 2016; c. Hausmann et al. 2021.

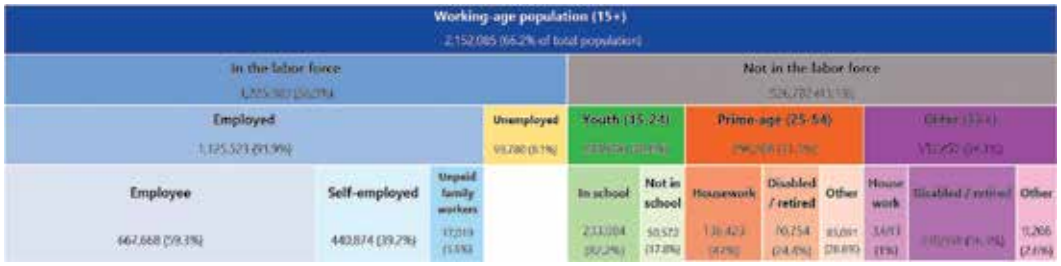
2. OVERVIEW OF THE LABOR MARKET SITUATION AND TRENDS

This section summarizes the labor market situation and trends. It examines the profile of the working-age population and presents the major labor market indicators. It also benchmarks aspects of Mongolia's labor market performance against the comparator countries. The analysis is based primarily on the Labor Force Surveys (LFSs; 2010-21), the Population Census (2000, 2010, and 2020), and the ILOSTAT database of the International Labour Organization (ILO) for benchmarking.[12]

As a starting point, it is important to keep in mind three characteristics of Mongolia's population that were discussed in the previous section: (i) it is still a young country but is starting to age, (ii) it has experienced a rapid increase in urbanization, and (iii) its level of educational attainment has risen significantly, although there are concerns about quality.

Figure 2.1 provides a bird's-eye view of the labor market. Based on LFS data for 2021, the figure shows that 56.9 percent of the working-age population is in the labor force. Of this active labor force, 91.9 percent is employed, with the rest (8.1 percent) unemployed. The majority of the employed (59.3 percent) are in wage jobs, and the remainder are either self-employed (39.2 percent) or are unpaid family workers (1.5 percent). We discuss these patterns of labor force participation, employment, and unemployment in the following paragraphs.

Figure 2.1. Overview of the Mongolian Labor Market, 2021



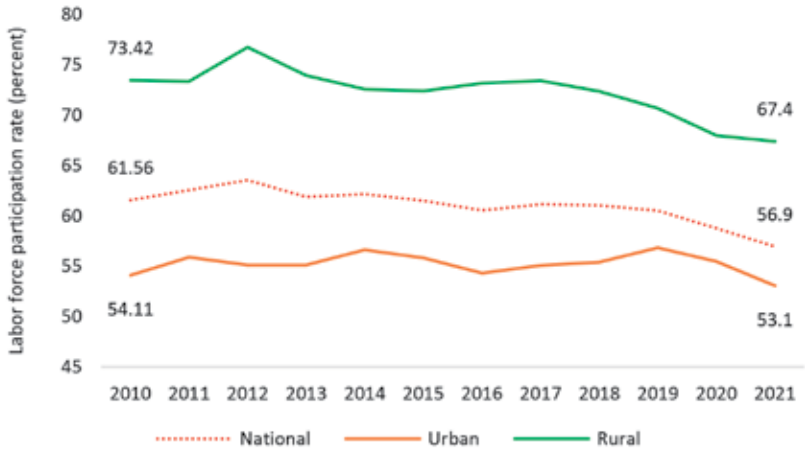
Source: World Bank estimates based on 2021 Labor Force Survey.

Mongolia has a relatively low labor force participation rate (LFPR), especially in urban areas. The national rate for those ages 15 and older in 2021 was 56.9 percent. Although this is close to the regional East Asia and Pacific average, it is lower than the rate for all but 1 of the 13 comparator countries (standard, aspirational, and high aspirational).[13] Moreover, labor force participation has been declining gradually over the past decade. Ongoing urbanization explains some of the decline because participation rates have been considerably lower in urban areas than in rural areas (figure 2.2). However, the gap between the two has narrowed over the past decade as urban rates have remained relatively stable whereas rural rates have fallen considerably, especially since 2017 (Avdeenko et al. 2022). Although Mongolia's rural LFPR is in the middle of the standard comparator group, its urban rate is lower than all 13 comparator countries (Betcherman and Jalil 2022). In fact, in most comparator countries, urban LFPRs tend to be higher than in urban areas.

[12] It is important to recognize the effects of COVID-19 on the labor market. Accordingly, we often discuss statistics for 2019 and 2020 or 2021 as well as decade averages. In any case, it should be noted that COVID-19 effects on the labor market were not really felt in a substantial way until the fourth quarter of 2020 (RILSP 2021).

[13] Only Chile had a lower LFPR (57.1 in 2021) according to ILOSTAT data for 2020 and 2021.

Figure 2.2. Labor force participation has been gradually declining and is especially low in urban areas



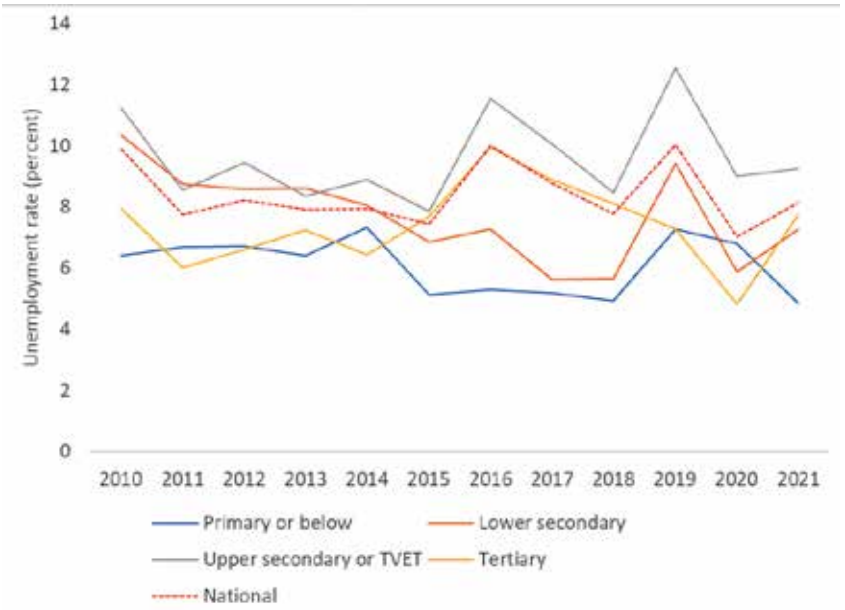
Source: World Bank estimates based on 2010-21 Labor Force Surveys.
Note: The chart shows labor force participation rates by location for the years 2010-21.

About half of all women ages 15 and older are not in the labor force, and this share has been growing. The LFPR for men was 65.2 percent in 2021 compared to just 49.9 percent for women. Moreover, male participation was stable between 2010 and 2021, but the participation of women declined by over 6 pp. This decline was driven by rural areas: nearly 70 percent of women participated in the labor force in rural areas in 2010, compared to just 61.4 percent in 2021. Inactivity is especially high for less-educated women. According to the 2021 LFS, less than 40 percent of women who had only up to a complete lower secondary education were participating in the labor market; among those with tertiary education, the rate was over 65 percent.

Mongolia is a relatively high unemployment country. During 2010-21, the national unemployment rate averaged 8.4 percent. In recent years, unemployment has fluctuated significantly; in 2021 the rate was 8.1 percent, down from 10.0 in 2019. These rates are higher than in all comparator countries except Colombia and Armenia. The unemployment rate underestimates the severity of nonemployment because a substantial number of Mongolians are not actively searching for work but are interested and available for work. When this group is added to the official unemployed, the "underutilization rate" was over 12 percent in 2020 (NSO 2021). Long-term unemployment is substantial, with about one-third of all unemployed workers searching for work for more than 12 months. Flows out of unemployment are low: LFS data from 2020 (which admittedly may include a COVID-19 effect) indicate that less than 5 percent of job seekers in any month will be working in the next month, with most of these working in temporary jobs (NSO 2021). Data from the 2020 LFS show that exit rates are lower than average for tertiary-educated workers, which could reflect a shortage of appropriate jobs for the well educated, mismatches between their skills profile and the requirements of available jobs, or queuing for better employment opportunities. In fact, the majority of job seekers see a shortage of available jobs as the main barrier to employment.

Unemployment is particularly high among young people and those with intermediate levels of education. The unemployment rate for youth (ages 15-24) was 25.3 percent in 2019 and fell to 19.2 percent in 2021 (Avdeenko et al. 2022). These rates are about 2.5 times the national rate, which is on the high side but not too unusual from an international perspective. What is unusual is Mongolia's unemployment patterns by education level. This rate has been highest for working-age individuals with secondary, especially upper secondary (including technical and vocational education and training [TVET]) education (figure 2.3). In most countries, especially transitional and higher-income countries, unemployment rates tend to fall with education (Betcherman and Jalil 2022).

Figure 2.3. Unemployment is highest for those with upper secondary education



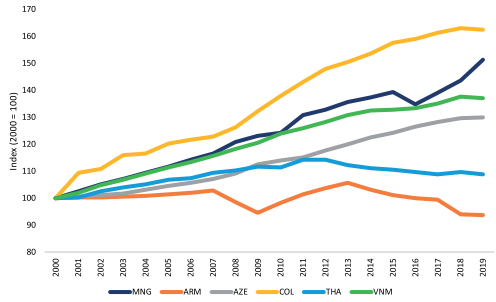
Source: World Bank estimates based on 2010-21 Labor Force Surveys.
Note: The chart shows the unemployment rate (percent) by education level for the years 2010-21.

Employment has grown substantially, with an increasing share of it being wage employment. Between 2000 and 2019, employment rose by approximately 50 percent, at a rate of 2.2 percent per year, greater than the country's working-age population growth (2.0 percent per year), population growth (1.6 percent per year), and most of its structural peers (figure 2.4). The share of wage employment in total employment rose by almost 10 pp, reaching almost 60 percent in 2020 and 2021.[14] Mongolia now lags behind only Armenia among its structural peers in the share of wage employment.

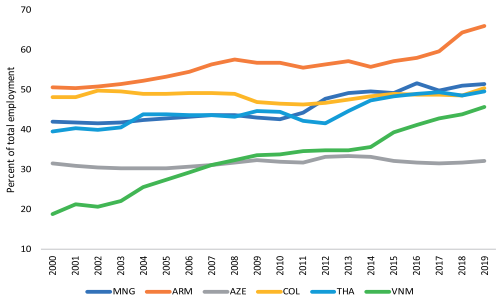
[14] We note a break in the series in 2019, however.

Figure 2.4. Employment has grown substantially in the country, with an increasing share of it being wage employment

a. Employed population



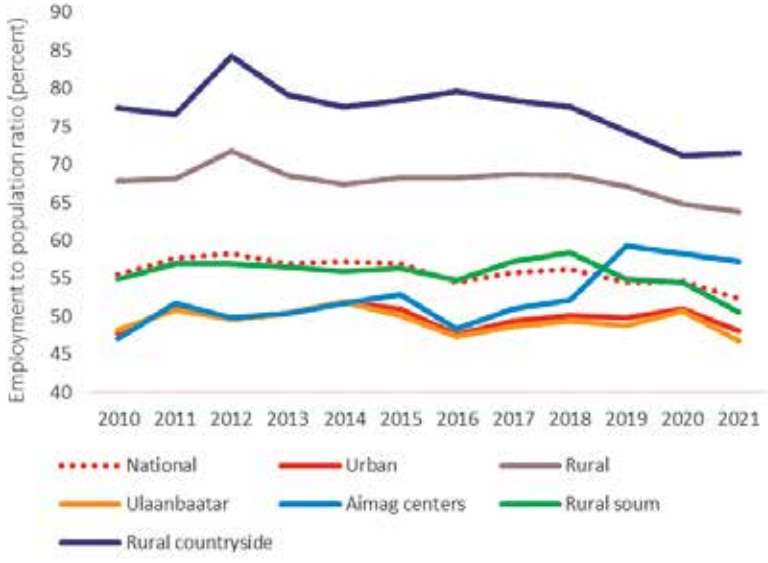
b. Wage employment



Source: National Statistics Office of Mongolia and World Bank Jobs Groups - Jobs and Structural Change Stata (JSCS) Tool.

Over the past decade, employment rates have been stable, with persisting differences by gender and location. From 2010 to 2021, on average, 55.9 percent of the working-age population was employed (Avdeenko et al. 2022). The employment rate has consistently been higher for men than for women, with the gap in the 10-12 percentage point range during the decade. Large differences also exist by location, with rural areas having higher employment rates than urban areas (63.8 percent compared to 48.0 percent in 2021). This reflects that although the economy is shifting in other directions, family enterprises in farming, especially animal husbandry, are still important. Though falling in the past decade, employment rates are particularly high in the rural countryside (figure 2.5).

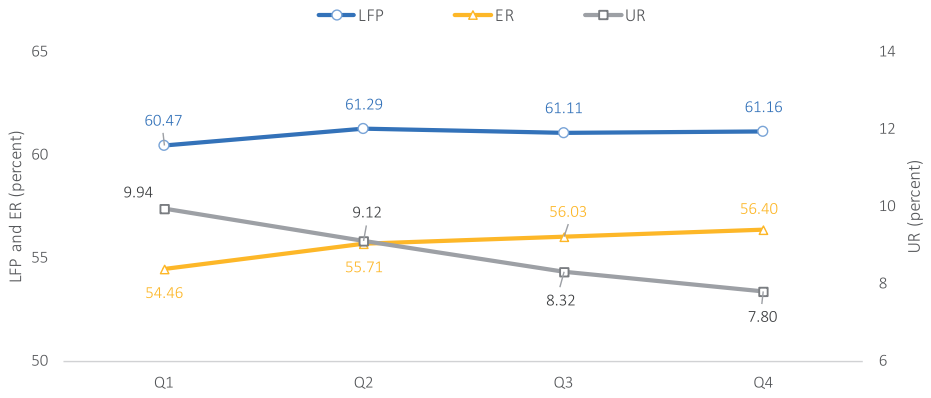
Figure 2.5. Employment differs significantly by location, and is highest in rural areas



Source: World Bank estimates based on 2010-21 Labor Force Surveys.
Note: The chart shows the employment to population ratio (percent) by location for the years 2010-21.

The Mongolian labor market is also marked by high seasonality, with employment peaking during the fourth quarter (Q4) of the year. The first quarter (Q1) of the year is marked by high unemployment and low employment; labor force participation, in contrast, remains stable throughout the year (figure 2.6). During 2015-19, on average, employment dropped by 4.5 percent between Q4 of each year and Q1 of the following year. By sector, activities of households as employers experienced the largest average drop in employment during this period (16 percent), followed by agriculture, forestry, fishing and hunting sector (11 percent). In general, the water supply, sewerage, waste management, and remediation activities sector also exhibits high volatility: on average, it experienced a drop in employment of 28 percent between the second quarter (Q2) and third quarter (Q3) during 2015-19.

Figure 2.6. Unemployment peaks during the first quarter of the year, when employment is also at its lowest

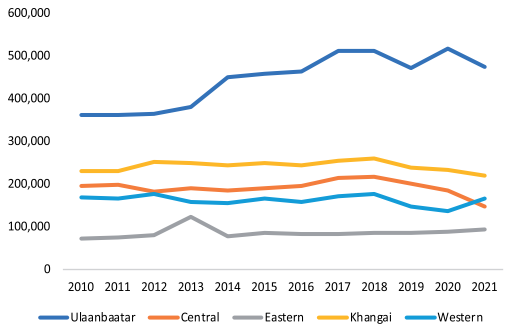


Source: World Bank estimates based on 2015-19 Labor Force Surveys.
Note: ER = employment rate; LFP = labor force participation; UR = unemployment rate. The chart shows average labor force participation, employment and unemployment rates per quarter during the 2015-19 period.

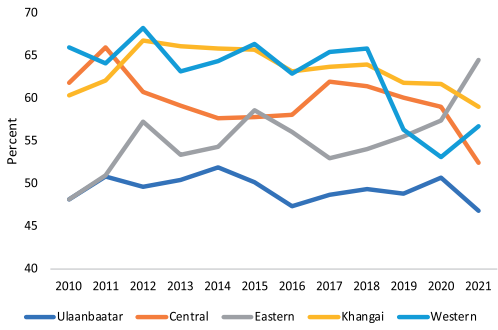
Most job growth has occurred in UB, but the employment–to–population ratio is also the lowest in the capital city. In 2021, there were approximately 476,000 employed people in UB, representing about 43 percent of total employment in the country, up from 35 percent in 2010. The number of jobs in UB rose by 31 percent during 2010-21; in comparison, the number of jobs in the other four regions of the country have remained relatively stable or fallen (figure 2.7, panel a). Nonetheless, the employment-to-population ratio is the lowest in UB, having oscillated between 46 and 52 percent during 2010-21. This means that job growth in the capital city has only kept up with population growth. The employment-to-population ratio hovers closer to 60 percent in Khangai and the Central and Eastern regions; the Western region experienced an important decline in the employment-to-population ratio between 2018 and 2020, where the ratio is now just 56.7 percent (figure 2.7, panel b).

Figure 2.7. Most job growth has occurred in UB, but the employment-to-population ratio is also the lowest in the capital city

a. Number of employed persons by region



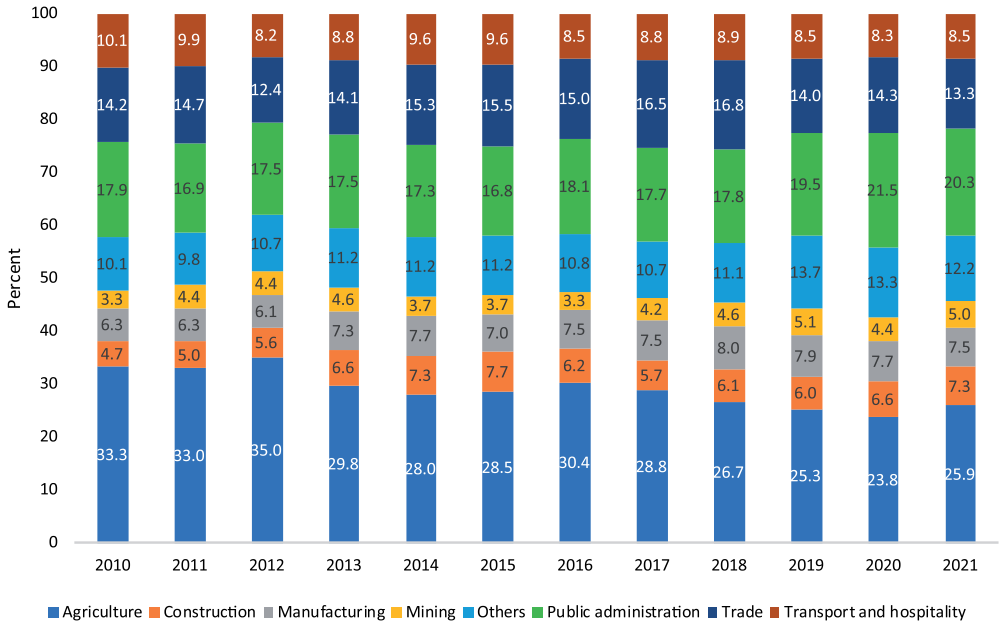
b. Employment-to-population ratio by region



Source: World Bank estimates based on 2010-21 Labor Force Surveys.

The composition of jobs has been evolving in terms of sector and type of employment. In 2010, agriculture accounted for 33 percent of employment; by 2021, this share had dropped to 26 percent (figure 2.8). There has been a gradual increase in employment in trade, the public sector, and other service sectors. It is notable that manufacturing has never accounted for more than 8 percent of employment over the period covered. Mining, although important economically, has always been a small employer. Another important shift in the composition of employment has been away from self-employment and toward more wage employment (Avdeenko et al. 2022).

Figure 2.8. The share of employment in agriculture has fallen significantly during the last decade



Source: World Bank estimates based on 2010-21 Labor Force Surveys.
Note: The figure shows employment distribution by industry.

The Mongolian labor market was negatively affected by the COVID-19 pandemic, as labor force participation and employment dropped significantly in Q4 of 2020, concurrently with the start of the second lockdown. During the first lockdown (Q1-Q3 of 2020), labor force participation and employment remained relatively stable, oscillating around 59 percent and 55 percent, respectively, according to the Labor Force Survey. In Q4 of 2020, at the start of the second, stricter, lockdown, both labor force participation and employment plummeted and reached their lowest point in Q1 of 2021 (54.9 percent and 50.1 percent, respectively; figure 2.9). In addition, the decreasing trend in unemployment observed until 2019 slowed in Q1 of 2020, and unemployment went up soon after.

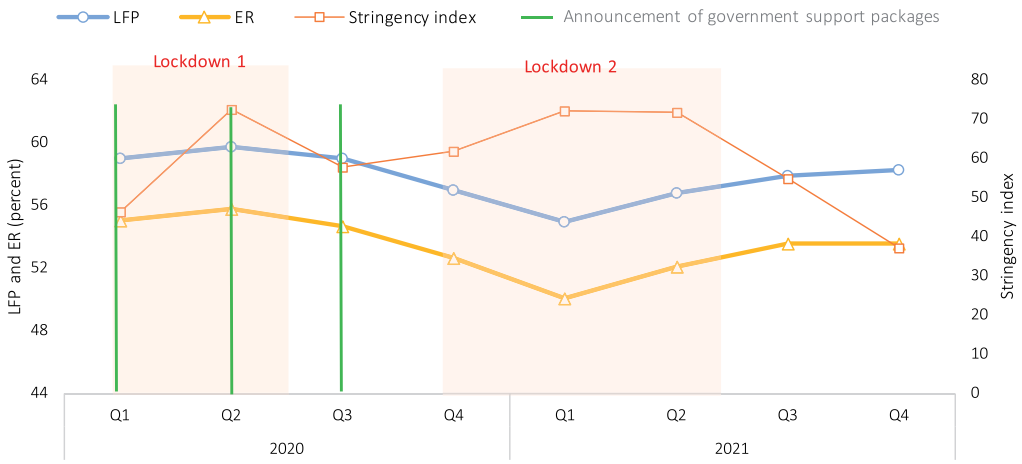
The lockdowns did not affect the labor market uniformly; there are important disparities by age, gender, education, location, type of employment, occupation, and industry. Among age groups, youth were most impacted in terms of job losses and unemployment. Women's employment was more affected than men's, partly explained by the fact that women are more likely to work in services sectors (public administration, education and health, personal services, hospitality) whereas men are more likely to work in industry sectors (mining, construction), and these sectors were affected at different points in time by the lockdown measures. In the same vein, workers in urban areas were more impacted by COVID-19 restrictions compared to workers in rural areas because more urban workers work in the affected sectors. Finally, employment of individuals with higher educational attainment declined during the second lockdown, whereas employment of individuals with lower educational attainment increased.

The recovery package and different allocations distributed to the population affected by COVID-19 helped cushion the impact of COVID-19 and restriction measures. There was a clear increase in the percentage of people reporting cash benefits or social welfare as their main source of income support, from 9 percent of the unemployed in Q1 of 2019 to 14 percent of the unemployed in Q2 of 2020 (Nganou et al. 2022). Simulations conducted by the World Bank suggest that the government's MNT 10 trillion recovery package may have saved between 168,000 and 230,000 jobs, or between 170,000 and 280,000 jobs if labor market seasonality is not considered (Nganou et al. 2022).[15]

Despite the mitigating effect of the recovery package, the labor market remained weak in 2021. Total employment fell by 5 percent between 2020 and 2021, representing a loss of 60,000 jobs (Nganou et al. 2022). Though the LFPR rose to 58 percent in Q4 of 2021, up from 55 percent in Q1 (Nganou et al. 2022), it has yet to recover to prepandemic levels of around 60 percent.

[15] The recovery package included tax relief measures, exemptions on social security contributions, interest subsidies on subsidized loans, a top-up of the Child Money Program, a top up on the social welfare pension, other allowances, a bonus for vaccination, and waivers on household electricity bill payments and a discount on the price of coal briquettes. Many of these support measures were still in place in 2022.

Figure 2.9. Labor force participation and employment were negatively affected by the second COVID-19 lockdown starting in Q4 of 2020



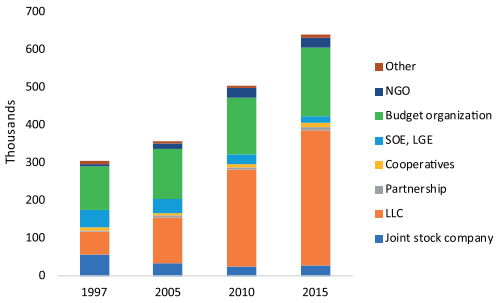
Source: World Bank estimates based on Labor Force Surveys (2019-21).
Note: ER = employment rate; LFP = labor force participation; Q = quarter.

Establishment Census[16] data that covers the formal sector firms show that firm-based employment increased significantly between 1997 and 2015 and was mainly driven by the expansion of the private sector (figure 2.10). The number of operating firms in Mongolia more than tripled between 1997 and 2015, from 17,000 to more than 55,000. Firm-based employment more than doubled over the same period, from 304,000 employees to 640,000. Since the late 1990s, employment in firms with limited liability companies increased by a factor of six, employing nearly 360,000 workers in 2015. Compared to the beginning of the observation period, employment in budget organizations increased by 60 percent, counting 183,000 workers in 2015. Although the employment share of budget organizations declined substantially, it remained significant at 29 percent of firm-based employment in 2015. Estimated at 20 percent of total employment, the size of Mongolia's public sector is higher than the global average of 16 percent and what is observed in some of the peer countries, but it is smaller than in other countries that underwent an economic transition from a planned to a market economy. The relevance of SOEs and local government enterprises declined significantly, from 15 percent in 1997 to 2 percent in 2015 (Gruen 2022).

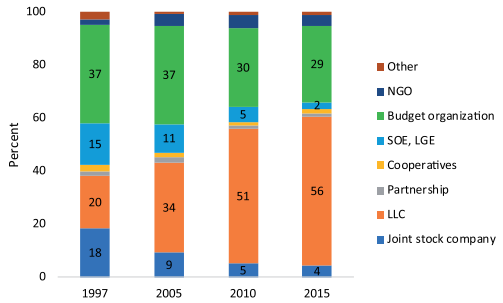
[16] The Establishment Census was initiated in 1991 and, since 2006, has been conducted every five years by Mongolia's NSO. The main objective of the Establishment Census is to obtain a full record of all establishments-that is, every business entity residing at a specific geographic location. When an unregistered entity that meets the requirement for formal registration is detected during field work, a process is set in place to register the business with the General Authority for State Registration. Firms that are registered with the business registry and covered by the Establishment Census are considered formal sector firms. Self-employed businesses that are not required by law to register as commercial entities are not included in the census and operate outside the formal sector. However, although firm surveys cover employment in the formal sector, not all employment in the formal sector are formal employment. In fact, the latest estimates suggest that informal employment is quite common in formal sector firms, and the within-sector share of informal employment varies largely across sectors (box 2.1).

Figure 2.10. Private sector employment became more important, and the combined employment share of budget organizations and SOEs declined significantly

a. Firm-based employment, by legal status of establishment



b. Distribution of firm-based employment, by legal status of establishment



Source: Establishment Census, Report (NSO 2016).
Note: LGE = local government enterprise; LLC = limited liability company; NGO = nongovernmental organization; SOE = state-owned enterprise. LGEs and SOEs are for-profit state-owned enterprises.

Box 2.1. Informal Employment in Mongolia

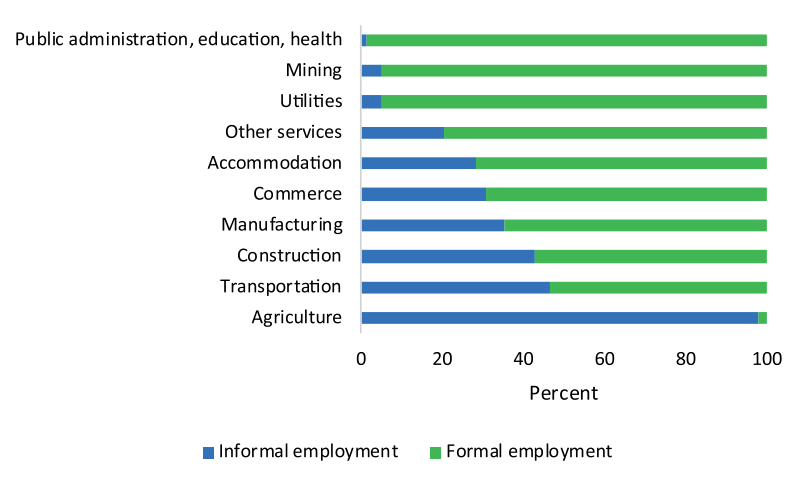
The informal sector represents an important part of the economy in many countries. It often plays a significant role in employment creation, production, and income generation. In countries with high rates of urbanization, the informal sector helps to absorb the expanding labor force in urban areas. In rural communities, informal employment is often the predominant type of work. Statistics on informality are critical to sufficiently describe the labor market and assess the quality of available employment opportunities.[a]

Since 2019, Mongolia's Labor Force Survey (LFS) has enabled the estimate of the extent of informality in line with the International Labour Organization approach:[b] After determining the *unit of production* (formal sector, informal sector, or household), the *nature of the job* is identified-that is, whether a worker is in formal or informal employment. Key indicators of informality are typically presented separately for the total economy and for nonagricultural activities, to highlight the relevance of informality outside the agriculture sector.

In Mongolia, the economy-wide share of informal employment was 41.2 percent in 2021. Informal employment is highly concentrated in the primary sector: more than one in two informal workers are engaged in agricultural activities (62 percent), many of them working as own-account workers in household market enterprises (self-employed). Excluding agricultural activities, the share of informal employment in total employment declines but remains significant, reaching 21.4 percent in 2021. Outside agriculture, informal employment is concentrated in trade (26 percent), construction (20 percent), and manufacturing and transportation (each approximately 15 percent).

The within-sector composition between formal and informal employment varies widely. Agricultural jobs are almost exclusively informal. In transportation, about half of the employment is informal; in manufacturing, one third are informal workers. Only in mining, utilities, as well as public administration, education, and health is the within-sector share of informal employment less than 10 percent (figure B2.1.1).

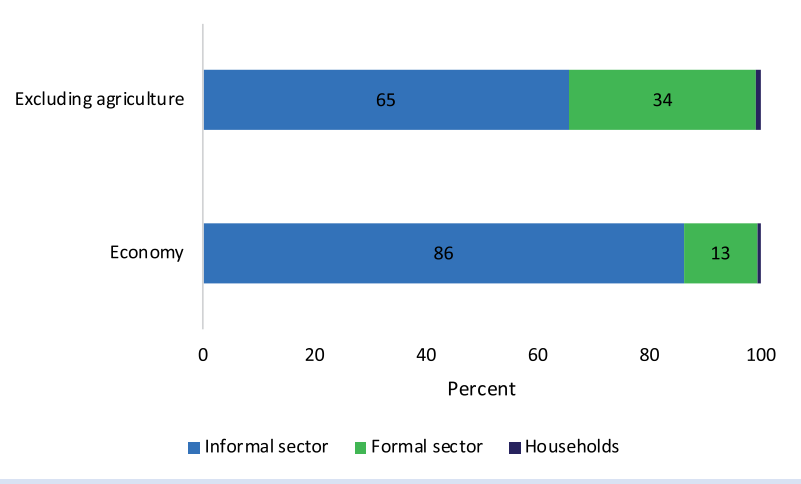
Figure B2.1.1: Share of Informal and Formal Employment by Economic Activity, 2021



Source: World Bank estimates based on 2021 Labor Force Survey.

Looking at the breakdown by type of production unit reveals important links between the formal sector and informal employment. Across the economy, more than 86 percent of informal employment happens in the informal sector, and about 13 percent of informal workers are hired by formal sector firms. When excluding agricultural activities, the share more than doubles, reaching 34 percent (figure B2.1.2). This finding suggests that many formal sector employers rely on informal workers, perhaps to better navigate fluctuations in labor demand and to increase operational flexibility. More research is needed to gain a better understanding of the links between formal sector firms and informal employment in Mongolia.

Figure B2.1.2: Distribution of Informal Employment by Production Unit, 2021

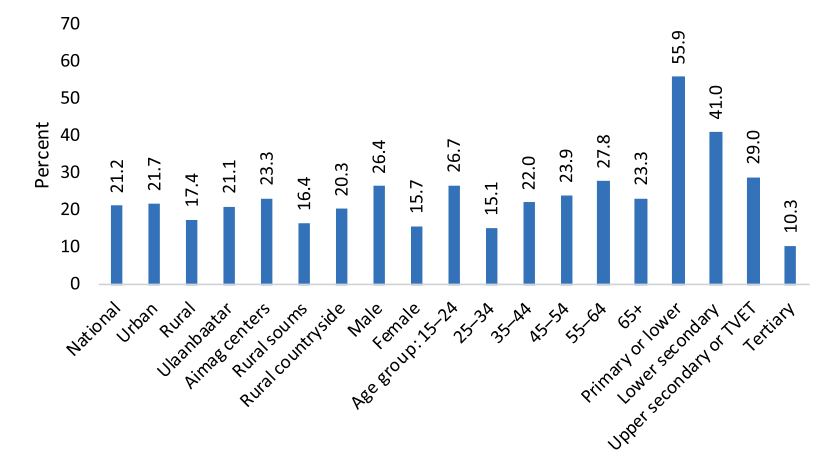


Source: World Bank estimates based on LFS 2021.

Looking at individual characteristics, if only nonagricultural work is considered, informal work is higher in urban areas, accounting for more than one-fifth of nonagricultural workers. Informal work is also higher among males and differs by age group.

The greatest variation in informal work is found by educational status: among those with a college education or higher, the share of nonagricultural informal work is only 10 percent, in contrast to nearly 30 percent of those with upper secondary education (including technical and vocational education and training); informality is even higher for those with lower educational levels (figure B2.1.3).

Figure B2.1.3. Non-agricultural informal employment by characteristic, 2021



Source: World Bank estimates based on LFS 2021.
Note: TVET = technical and vocational education and training.

Notes:

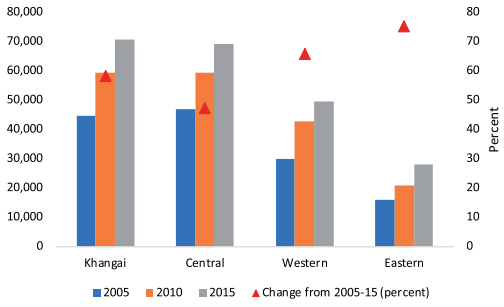
[a.] See also Indicator description: Informality - ILOSTAT.

[b.] Specifically, we apply the following definition to the LFS data. Firms and workers can be engaged in informal economic activities. The *informal sector* excludes production units that are either (i) government-owned (for example, state-owned enterprises and budget organizations), nongovernmental organizations, and international organizations; or (ii) private sector businesses that keep official accounts, are registered with authorities, provide benefits to workers, or are located at fixed premises, employing five or more workers. (Based on this definition, the informal sector also includes private households that exclusively produce goods for their own final use.) *Informal employment* includes (i) employees who are not protected by national labor legislation in their jobs (that is, they are not affiliated with social security schemes or entitled to paid annual leave and paid sick leave); (ii) own-account workers, members of producers' cooperatives, and employers who operate outside the formal sector as described above; and (iii) contributing family workers.

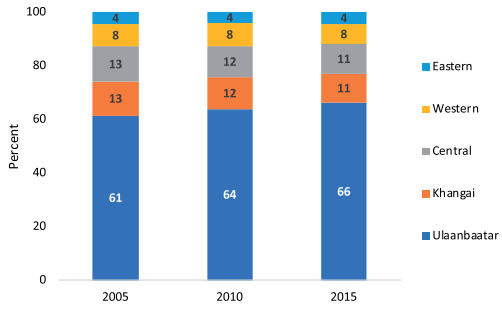
Firm-based employment increased across all major regions, but jobs are increasingly concentrated in the capital city. Job growth outside UB has been substantial, and there are signs that regions with traditionally fewer job opportunities could catch up to some degree. Over a decade, starting from a low base in 2005, employment in the Eastern and Western regions increased by 76 percent and 66 percent, respectively. These rates are higher than what was observed for Khangai (58 percent) and the Central region (47 percent; figure 2.11). Although job opportunities tend to be somewhat more evenly distributed across regions, the gap with UB has widened. The share of firm-based jobs located in UB increased from 61 percent to 66 percent between 2005 and 2015 (Gruen 2022).

Figure 2.11. Firm-based employment increased in all major regions, but the gap with UB is still widening

a. Number of firm-based jobs by region outside UB



b. Share of firm-based jobs by region



Source: Establishment Census, Report (NSO 2016).
Note: UB = Ulaanbaatar.

Wages have been rising over the past decade, though increases have been below labor productivity growth. The 2010-20 average annual growth in real wages (excluding self-employment) was 4.9 percent, and labor productivity grew by 5.8 percent annually. Wages were flat from 2013 to 2018; strong (14 percent) gains were observed in 2019, though this could be partly related to a break in the series.[17] There is a significant gender wage gap; on average, women wage workers earned 82.8 percent of what men earned between 2010 and 2020. There are also large differences in wages by location, with rural employees earning 78.7 percent of what urban workers earn. Within urban areas, wages are highest in UB. The distribution of wages was fairly constant during 2010-20, with the ratio of the 10th to the 90th percentile ranging from 27 percent to 33 percent.

Wage employment has increased in all wage quintiles, but low-paid jobs realized the biggest increase. Between 2010 and 2020, wage employment expanded at an annual rate of 4 percent; in total, around 207,500 wage jobs were added. Job creation was broad-based and increased in most sectors.[18] However, many of the new jobs are in sectors where the median wage is below the 2020 median wage of MNT 800,000 (about US$285) per month.[19] Nearly 60 percent of the jobs are in low-wage and/or often low-productivity sectors, including commerce, manufacturing, education, and health (figure 2.12). Sectors with an appreciable employment share creating higher-paying jobs include mining, construction, transportation and storage, and finance and insurance, among which only the last two sectors experienced above-average productivity

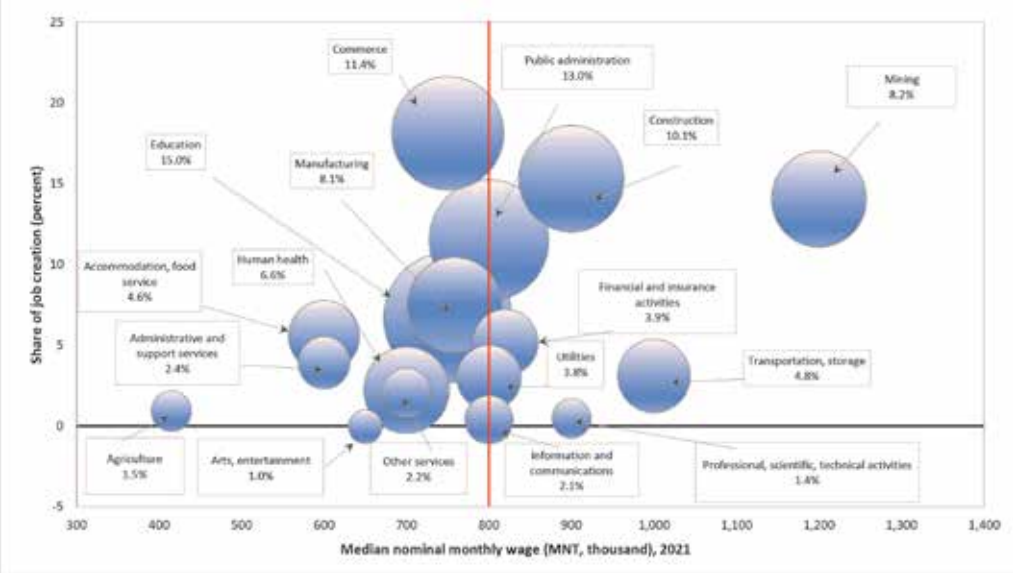
[17] There was a change in the way wage workers are identified in the 2019 LFS. Until the 2018 LFS, respondents were directly asked whether they were wage employees/interns/apprentices. For the 2019 and 2020 LFSs, an individual was defined as wage employed if she or he was working for someone else for a salary or for a business owned by nonhousehold members or working for a salary in a business owned by household members that was an independent entity. Before 2019, respondents self-identified as wage workers.

[18] When economic activity is measured at the one-digit level, only employment in professional, scientific, and technical activities (sector M) declined somewhat. Given the size of the sector, the relative impact of the contraction is negligible.

[19] For comparison, the lowest median wage of MNT 500,000 (agriculture) corresponds to about US$179; the highest sector-specific median wage of MNT 1,400,000 (mining) is equivalent to US$500. Exchange rate: US$1 = MNT 2,800 (average for 2020).

growth (see figure 1.10). However, the agriculture sector (especially the livestock subsector, see box 2.2) experienced high productivity growth, but it did not directly translate into wage employment. This is likely to be a reason behind the decoupling of wages from productivity as highlighted above: productivity gains did not generate enough high-wage jobs 2022 (Gruen 2022).

Figure 2.12. Low-paid jobs realized the biggest increase and job growth concentrated in the commerce, education, and public administration sectors

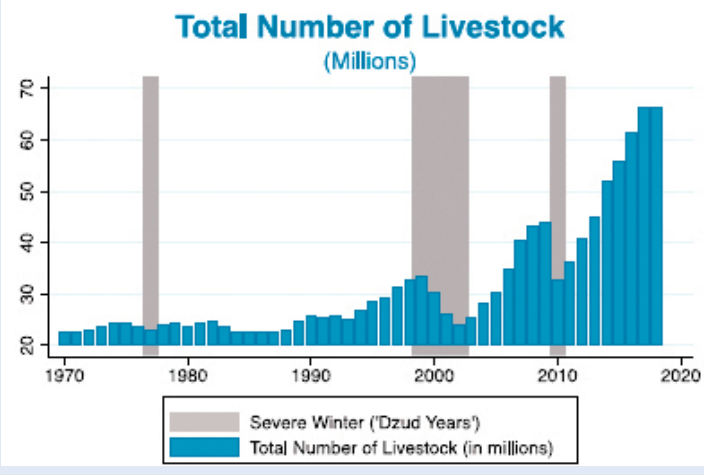


Sources: World Bank estimates based on Labor Force Survey series.
Note: Bubble size corresponds to the share of employment in 2020. The red line indicates the economy-wide median wage for wage employment in 2020. The "Other services" category combines other service activities with real estate activities, activities of households as employers, and activities of extraterritorial organizations.

Box 2.2. Livestock and Job Creation in Mongolia

Livestock is central to Mongolia's agriculture sector. In 2019, the agriculture sector contributed 10.8 percent of Mongolia's gross domestic product (GDP), and the livestock subsector accounted for 84 percent of agricultural output and around 25 percent of Mongolia's total employment. The livestock population has tripled since 1990 to about 70 million animals now (figure B2.2.1). The livestock sector became a driving force for per capita value-added growth in the agriculture sector in the past decade, but this growth did not translate into significant wage job growth (figure B2.2.1).

Figure B2.2.1. Total Number of Livestock

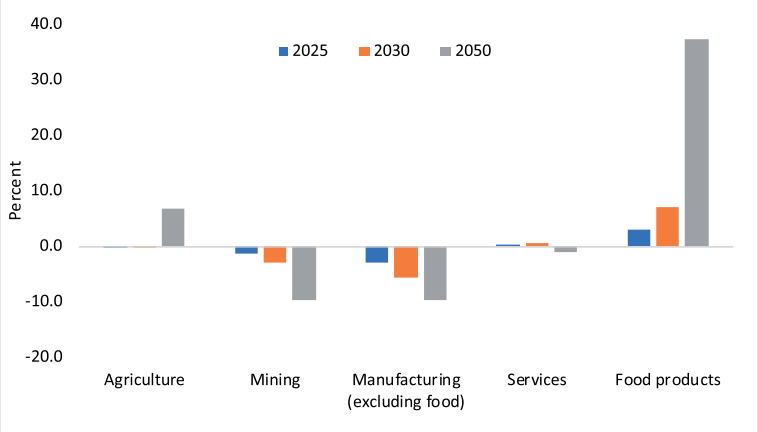


Source: IMF 2019.

Mongolia has a lot of potential to realize diversification and job creation by investing in the livestock sector and its downstream sectors. Given Mongolia's endowments-vast grasslands spanning 80 percent of Mongolia and proximity to large markets in Asia-Mongolia holds a comparative advantage in livestock production. The development of the livestock sector and its downstream sectors, such as cashmere processing and meat processing, can help diversify its economy and achieve significant job creation. A recent study by the World Bank suggested that there is huge untapped potential in meat and cashmere production in Mongolia, but there are still important logistical, financial, and regulatory challenges that need to be overcome to make these activities grow faster.[a]

Simulation results show that the labor market impacts of total factor productivity (TFP) growth in the food production sector are significant. The World Bank's dynamic computable general equilibrium global macroeconomic model (ENVISAGE) is employed to simulate the impacts of TFP growth in the food production sector by 5 percent annual growth between 2022 and 2035. Although TFP growth in food production does not seem to generate significant impacts on GDP growth (the GDP growth rate will be 0.1 percent higher during 2022-35), it will generate higher employment levels in the sector (38 percent increase in 2050 compared with the baseline), but also in the agricultural sector (7 percent increase in 2050 compared with the baseline), which provides its main intermediate inputs. The expansion of both sectors is made possible by other sectors (mainly mining and manufacturing excluding food) releasing workers.

Figure B2.2.2. Employment by Aggregate Sector, Percentage Changes with Reference to Baseline Values



Source: World Bank estimates based on ENVISAGE.
Source: a. WBG 2019.

Migration for work abroad provides benefits, and because flows are relatively small and often temporary, brain drain is not a serious concern. According to the 2020 census data, about 4 percent of Mongolians reside outside the country. This share has been relatively stable and is lower than the average for countries at a similar income level. Most migration is for study (34 percent) or work (32 percent), primarily in the Republic of Korea and Europe. Migration has obvious benefits; for example, remittances account for about 4 percent of GDP. However, there is a concern that it is leading to a brain drain that has negative consequences for the country's future development. This concern is supported by the fact that a large and increasing share of migrants are well educated: in 2020, almost half (46 percent) of working migrants had tertiary education. However, our analysis casts doubt on the brain drain concern. First, as noted above, the scale of migration is relatively small. Second, most migration is temporary; only 30 percent of migrants have been out of the country for more than five years. Third, many educated migrants take (temporary) lower-skilled jobs for which they are overeducated but are well paid by domestic standards. The migration of well-educated Mongolians seems to be motivated by a chance to accumulate income before returning home rather than permanently leaving the country to use their skills elsewhere. However, it is of concern that Mongolia's migration patterns seem to be driven by the lack of good jobs at home.

Internal migration has been continuous over the past 30 years, with most of the migrants moving to UB and benefiting from better labor market outcomes. In 2020, nearly half of Mongolians (48 percent) were living in UB, compared to 27 percent in 1991. In the meantime, the share of people living in urban areas other than UB decreased from 30 percent of the population to 21 percent from 1990 to 2020. Migrants moving to UB seem to have similar employment patterns (in terms of occupation, sector) as UB residents. These outcomes are typically better than the labor market outcomes experienced by residents outside UB. This suggests that there are economic efficiency gains due to internal migration.

3. MONGOLIA'S JOBS CHALLENGES

Our review of labor market trends does reveal progress, but there are important challenges facing Mongolia's labor markets. Aggregate employment has been growing, wages have been rising, and most job growth has been in wage employment in the private sector. However, the country has a range of important features that shape its jobs challenges. These include short-term factors, such as export restrictions due to COVID-19, to longer-term ones, such as economic diversification; from less dramatic trends, such as migration to work abroad, to more dramatic concerns, such as high youth unemployment; from challenges stemming from a single direct cause, such as labor market seasonality, to those of a structural nature, such as creating a more vibrant and diversified private sector, among others. In this section, we focus on longer-term, more dramatic, and structural challenges that relate to creating both a more vibrant labor market and a more inclusive one.

We highlight two challenges:

1. Creating more and better jobs, driven by a more vibrant private sector that is diversifying beyond the resource sector
2. Increasing inclusion by raising labor force participation for women, by providing more opportunities for young people, and by bringing more urban residents into the workforce.

Creating More and Better Jobs

Mongolia's overarching employment challenge is to create more and better jobs than have been created during the past decade. Stated simply, employment growth has not been strong enough. Although jobs have been created, the share of adults who are working has not increased. Unemployment has remained high-close to 10 percent in recent years. And, as we discuss later in this section, labor force participation has declined, especially in urban areas and for certain segments of the population, including women.

The job creation challenge must be met by a private sector that is more dynamic, innovative, and diversifying into new sectors. In all countries with strong employment records, most jobs are being created in the private sector. Thus, the overarching jobs challenge for Mongolia is to develop a more vibrant and innovative private sector and a public policy environment that enables it. There are several elements involved in this challenge. One is a macroeconomic policy that supports growth and stability. Another is a business climate that encourages investment and innovation. Finally, Mongolia has an additional element to address in terms of private sector development: structural change and diversification beyond the resource sector. Recent World Bank reports (WBG 2019; World Bank 2020b) have considered issues related to private sector development in detail. In this report, we focus more particularly on issues related to structural change and diversification and the implications for jobs in the future.

Structural change is a key driver of economic growth and for creating more and better jobs in the future. One way economies grow is when labor and other productive inputs move from lower- to higher-productivity sectors and locations. Historically, the process has been for countries to experience a decline in the relative size of the agriculture sector, an initial increase of the relative size of manufacturing,

and a continuous increase in the relative size of the service sector, which finally becomes the largest sector in the economy (Comin, Lashkari, and Mestieri 2021; Herrendorf, Rogerson, and Valentinyi 2013). Although this has been the traditional pattern of structural upgrading, there are questions now about whether recent trade and technology trends are affecting this pattern by limiting job creation possibilities for developing countries in manufacturing, which is referred to as "premature deindustrialization" (Rodrik 2015). This places services more centrally in the structural transformation process, at least in terms of employment (Nayyar, Hallward-Driemeier, and Davies 2021). In any case, this process of restructuring is accompanied by urbanization.

Structural Change Trends

Mongolia has been experiencing structural change over the past two decades, with agriculture becoming much less dominant in terms of both GDP and employment. Although there has been a lot of year-to-year volatility, structural changes have been evident in the longer-term sectoral trends as well as the ongoing urbanization (Tudela-Pye and Merotto 2022). In 2000, agriculture accounted for 31 percent of value added, but by 2018 this share had declined by more than half, to 12 percent. The change in employment has been similar in relative terms, from 49 percent in 2000 to 27 percent in 2018. During 2010-20, the employment share in agriculture consistently decreased, from 33 percent to 24 percent (figure 2.8). Which industries increased their employment shares? The relative gains have been diffuse, with small increases in mining, public service, education and health, and other services (specifically finance and real estate and administrative support; Avdeenko et al. 2022). Mining, though important economically (and even more so in 2020 than in 2010), has not accounted for more than a small part of employment (6-8 percent) over the decade. It is notable that manufacturing's employment share was never higher than 8 percent over the decade. Together, increasing employment in services and a stagnant and limited manufacturing sector could be potential symptoms of a resource-rich economy experiencing Dutch disease,[20] but the lack of growth in manufacturing jobs is also consistent with the premature deindustrialization hypothesis.[21]

Although most firms are small, employment is becoming more concentrated in larger firms, with a growing share of employment in UB. Firm-level data are an important source to fully describe how labor demand is being transformed. Unfortunately, the latest Establishment Census[22] available for this JD was in 2016, with data for 2015. However, this source does yield some important observations on how labor demand has been transformed, at least to that point in time (Gruen 2022). First, during 2005-15, UB accounted for an increasing share of employment reported by firms. Much of the growth nationwide was in service sector firms, and the increase in

[20] *Dutch disease* refers to the shrinking of the tradable goods sectors in a country in response to a large influx of income from a natural resource (or other sources, such as foreign aid).

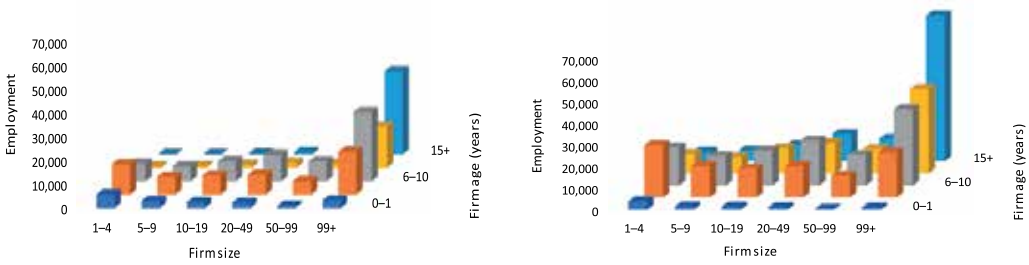
[21] Among standard comparators, only Vietnam has more than 30 percent of employment in industry.

[22] The main objective of the Establishment Census is to obtain a full record of all establishments-that is, every single business entity residing in a specific geographic location. The census covers all types of ownership (state, local government, private ownership by citizens of Mongolia, private joint with foreign [citizen], foreign), legal status (including SOEs and nongovernmental organizations), and sectors of economic activity. The census is conducted every five years, but the latest version, 2021, was not made available to the team.

employment was mainly driven by the private sector. Small firms dominate Mongolia's enterprise structure, but very few small firms seem to grow into larger firms that employ many workers. In 2015, only 4 percent of firms had more than 50 employees. Small firms are especially dominant in trade and services, but it is not clear how many actually create many jobs. In fact, according to the Enterprise Census, employment is increasingly concentrated in larger (100 employees or more) and older firms (figure 3.1).

Figure 3.1. Most firms are small but employment is becoming more concentrated in larger firms

a. 2006 b. 2016



Source: Establishment Census.

Are Jobs Getting Better with Structural Change?

When seen through an occupational lens, the structural changes faced by the Mongolian labor market seem to be associated with an upgrade in job quality. Job quality is a multidimensional concept, and measuring it can involve various indicators (see box 3.1). Employment has been shifting toward occupations typically considered higher quality (for example, managerial, professional, and technical) and away from lower-quality ones (for example, agricultural, crafts, and sales). Further evidence from a task analysis of occupations, following Acemoglu and Autor (2011), indicates that workers now require more advanced skills. Even when we exclude subsistence agricultural occupations, analytical tasks have become increasingly common in Mongolia's occupational mix in recent years. Compared to the distribution of occupations in 2000, occupations in 2020 were more intense in nonroutine tasks: cognitive, interpersonal, and social (Avdeenko et al. 2022). At the same time, physical tasks, both routine and nonroutine, have become less common.

Box 3.1. Measuring the Quality of Jobs

Since the early 2000s, Mongolia had realized impressive rates of job growth, but the country needs to continue on its path to generating sufficient employment opportunities for its (still) young population. The focus should be broadened from more jobs to *more and better jobs*, particularly because of the country's projected demographic trends.

There is ample evidence that job quality is important not only for the well-being of workers but also for a country's overall economic performance. Creating a positive and safe work environment, providing competitive benefits, and facilitating flexible work arrangements clearly matter for worker satisfaction. Workers who are content and work with a positive mindset often have higher levels of creativity, engagement, and efficiency. Thus, higher job quality can promote labor force participation, labor productivity, and economic growth.[a]

Although many would agree that job quality is a multidimensional concept, there is no standardized approach to how to measure the quality of jobs. Various frameworks for how to define and assess employment quality have been developed in the past, either tailored to particular countries or aimed at cross-country comparisons of job quality.[b]

What defines a good job? Beyond earnings, what other fundamental aspects of employment should be considered and how can these be operationalized? What thresholds should be used to separate high-quality from low-quality jobs? Should an aggregate index of job quality be calculated, or are the dimensions of job quality evaluated individually? These are some of the questions that need to be addressed when not only job growth but also the quality of employment is assessed.

Given the importance of labor income for the well-being of workers and households, income is a key dimension for assessing the quality of work. To determine high-quality jobs, individual earnings are often put in relation to the statutory minimum wage, a low-pay threshold, or the national poverty line. If a job's pay at least meets the monetary cutoff, it is considered a quality job. Acknowledging multidimensionality, several nonmonetary aspects of job quality are often included, such as whether a job provides benefits, security, safe working conditions, and career opportunities; whether it is the only job; the terms of employment; and whether the job was regulated by the national Labor Law.

Typically, the Labor Force Survey collects sufficient data to operationalize many of the broadly defined dimensions of job quality. Using individual-level data offers a number of advantages. First, when relying on annual surveys, job quality can be assessed on a regular basis and changes in job quality can be tracked. Second, sample sizes are typically large enough to estimate job quality for different types of workers and at the subnational level. Third, as the estimates are based on micro data, each worker gets a score, and job quality estimates can be correlated with sociodemographic characteristics (age, gender, or education) and job-related factors (industry, occupation, and public or private sector employment). Relevant dimensions that are not captured through the Labor Force Survey could be included at an aggregated level, such as the sector-specific incidence of accidents at work or work-related health problems.

The analysis undertaken for the Jobs Diagnostic highlights certain areas that could be relevant for a discussion on job quality in Mongolia. Wage levels, receipt of benefits, extent of informal employment, or use of the domestic labor force are critical aspects, impacting the quality of employment of individual workers but also affecting Mongolia's economic performance in general.

Typically, with economic development and rising incomes, more jobs will be of better quality. Yet existing empirical evidence suggests there is considerable scope for labor market and social protection policies to improve the quality of employment.

Sources: a. Achor 2012; Oswald 2015; Lyubomirsky 2005. b. International Labour Organization manual on concepts and definitions of decent work indicators; United Nations Economic Commission for Europe framework for measuring quality of employment; Organisation for Economic Co-operation and Development project on job quality, labor market performance, and well-being.

However, other evidence raises questions about whether good jobs are being created. The returns to education have been declining in recent years, after being stable or even increasing during the first half of the 2010-20 decade (Avdeenko et al. 2022). Although this will need to be followed for a longer period of time, declining returns to education could suggest that not enough good jobs are being created for the growing supply of well-educated workers. Moreover, according to the Barometer Survey and our analysis of unemployment undertaken using the LFS, job resignation is the most important reason for job vacancies, suggesting that workers may be dissatisfied with the quality of their jobs, specifically in terms of how they allow them to combine work with care responsibilities (the main reason for voluntary quits is related to personal/family reasons). Finally, results from the Barometer Survey indicate that employers are most often looking for soft skills (reliability, work ethic, positive attitude, and so on) rather than more technical or higher-level cognitive skills.

Possibilities for Diversification and New Sources of Job Creation

Diversification and creation of good jobs in new sectors is a major challenge for Mongolia. The dominance of the mining sector in production, investment, and exports has been a defining characteristic of the economy. Going forward, the structure of the economy will need to become more diversified, and this will be important for future job creation. The World Bank's latest Country Economic Memorandum proposed a policy agenda to support a process of economic diversification (World Bank 2020b). The government has identified a number of priority sectors or areas for future development in the recently released New Recovery Policy.[23] However, as discussed in section 1, this process of diversification will be challenging. Based on the economic complexity of its exports, Mongolia is currently one of the least diversified countries in the world and has become less diversified over time. This implies challenges for moving into new sectors because relevant productive "know-how" will be scarce (Hausmann 2016).

[23] These sectors and areas include the energy sector, value-added mining production, value-added heavy industry, modern agricultural production, and digital economy.

More insight into possible avenues of diversification can be gained by looking at the experience of comparator countries to identify potential sectors for economic upgrading and growth. The Growth Identification and Facilitation Framework (GIFF) offers a guide to potential growth sectors in a target country by analyzing the evolution of exports in countries with solid growth records and similar endowments but farther up the development ladder. The underlying idea is that the exports of these comparator countries can provide insights into sectors where the target country (Mongolia) may have potential comparative advantages. In applying the GIFF to Mongolia, comparator countries at different stages of development were identified using the method described in box 1.1. Two groups of these comparators have been used for this analysis of export trends. The first is the set of countries that have been classified as aspirational comparators—that is, at a slightly higher level of development as measured by GDP per capita (Chile, Kazakhstan, Russia, Malaysia). The first three have been particularly resource intensive, and Malaysia, although having some resources, also has a strong manufacturing sector. The second group includes two standard comparators (Thailand and Vietnam), which have been included because they are in the region and have a record of developing manufacturing.

Resource-rich comparators have shown little sign of diversifying out of resources in their exports (table 3.1). At the start of the analysis period (2001), Chile, Kazakhstan, and Russia all had a high concentration of exports in resources. This had not changed by the end of the period (2019). As shown in table 3.1, 40 percent of goods exports from Chile in 2001 were in copper, either processing or mining. By 2019, this share had increased to 55 percent, and mining had overtaken processing as the larger share. No sector outside mining or agriculture and fishing accounted for 5 percent or more of exports. Similarly, oil and gas has increasingly dominated exports in Kazakhstan, increasing its share from 56 percent to 67 percent. Iron and steel, which had been the major industrial export in 2001, saw its share of exports diminish by half over the period. Russia experienced little change in its major goods exports over the period, with oil and gas accounting for just over half both at the beginning and the end of the period (Betcherman and Jalil 2022).

Table 3.1. Resource-rich comparators have shown little sign of diversifying out of resources in their exports

Country	Category	Major exports in 2001 (% share)	Major exports in 2019 (% share)	Relevant observations on diversification
Chile	• Aspirational comparator • Resource intensive	• Mineral processing, especially copper (26) • Ore mining, especially copper (14) • Fish (8) • Fruit and nuts (7) • Wood (6) • Pulp (6)	• Ore mining, especially copper (29) • Mineral processing, especially copper (26) • Fish (8) • Fruit and nuts (8)	Dominance of mining and mineral processing throughout; in fact, concentration greater in 2019, due to more mining exports
Kazakhstan	• Aspirational comparator • Resource intensive	• Oil and gas (56) • Iron and steel (12) • Copper refining (8)	• Oil and gas (67) • Iron and steel (6) • Ore mining (5) • Copper refining (5)	Very high and increasing concentration on oil and gas
Russia	• Aspirational comparator • Resource intensive	• Oil and gas (52) • Commodities not elsewhere classified (12) • Iron and steel (6)	• Oil and gas (52) • Commodities not elsewhere classified (13)	Little change in export mix, with dominance of oil and gas
Malaysia	• Aspirational comparator • Partial resource intensive	• Electrical/electronic machinery/equipment (38) • Machinery (22) • Oil and gas (10)	• Electrical/electronic machinery/equipment (34) • Oil and gas (14) • Machinery (9) • Fats and oils, especially palm oil (5)	Exports oriented to manufacturing, though not increasing share Growth in some new sectors (iron and steel, plastics, aluminum, optical/photo)
Vietnam	• Standard comparator • Non-resource	• Fish (12) • Footwear (11) • Apparel, not knit (11)	• Electrical/electronic machinery/equipment (37) • Footwear (7) • Apparel, not knit (6) • Apparel, knit (6) • Machinery (5)	Dynamic increase in manufacturing exports, especially electronics; evidence of upgrading
Thailand	• Standard comparator • Non-resource	• Electrical/electronic machinery/equipment (20) • Machinery (17)	• Machinery (16) • Electrical/electronic machinery/equipment (14) • Vehicles (12) • Pearls (6) • Rubber (6)	Exports oriented to manufacturing; not major change but some evidence of upgrading with autos

Source: Betcherman and Jalil 2022, based on UN Comtrade data.

Among the three East Asian comparators, manufactured goods have been and continue to be the major exports in Malaysia and Thailand, and they have grown substantially in Vietnam. In 2001, electrical and electronic machinery and equipment and nonelectric machinery were the major exports, especially from Malaysia and Thailand. In 2019, these products were still important in Malaysia, though their export shares had declined. There were some other industries with substantial growth in exports over the period, including iron and steel, plastics, aluminum, and optical/photo equipment, but their export shares remained small (less than 5 percent). The shares of electrical and electronic machinery and equipment and nonelectric machinery were similar in 2019 and 2001 in Thailand, although there was some evidence of upgrading with the growth of vehicle exports over this period. Vietnam experienced significant shifts in its exports, particularly with the emergence of electrical/electronic machinery and equipment as the major export sector in this period. The Vietnam case probably offers the most insights about upgrading and structural change for Mongolia. However, Mongolia does face constraints due to its geography and low population density that will affect diversification options (see box 4.1 in the next section).

Increasing inclusion in the labor market

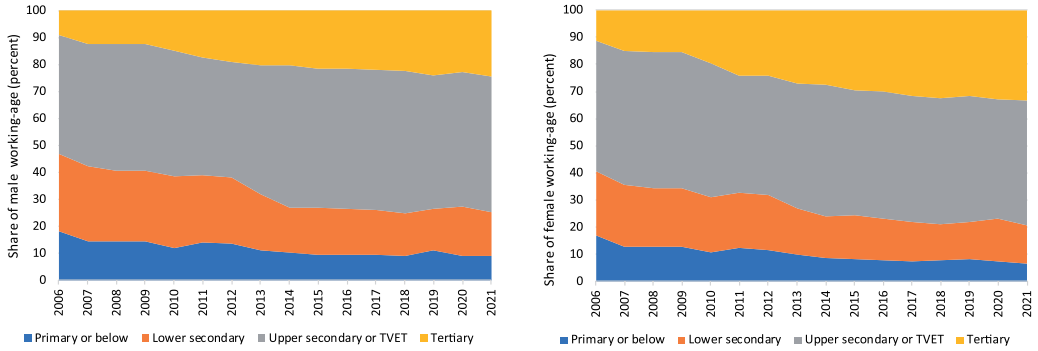
In addition to the job creation challenge, Mongolia needs to improve access to employment opportunities, especially for certain groups. This challenge of inclusion begins with the aggregate LFPR which is relatively low compared to benchmark countries, and which declined by almost 5 pp between 2010-21. Analysis of labor force participation trends highlights three categories with low rates: women, urban areas, and those with secondary education. An additional aspect of the inclusion challenge concerns the difficulties young people face in transitioning into the labor market.

Female Participation

Female participation is low, especially for the less educated, and participation has been falling. Although Mongolia's female LFPR is average for countries at a similar level of GDP, there are various reasons to be concerned. It is lower than the female participation rate in the other comparator countries. Moreover, as noted, the male and female participation rates differ by 15 pp, and there has been a downward trend in the female rate over the past decade. Participation rates are especially low for less-educated women; they do increase sharply with education. It might be expected that female participation will naturally increase in the future because young women are becoming more educated, more so than men (figure 3.2). However, contrary to that trend, female participation rates have been declining across all educational levels, including among those with tertiary education (almost 1 pp per year between 2010 and 2020; Avdeenko et al. 2022).

Figure 3.2. Women's educational attainment is now significantly higher than that of men

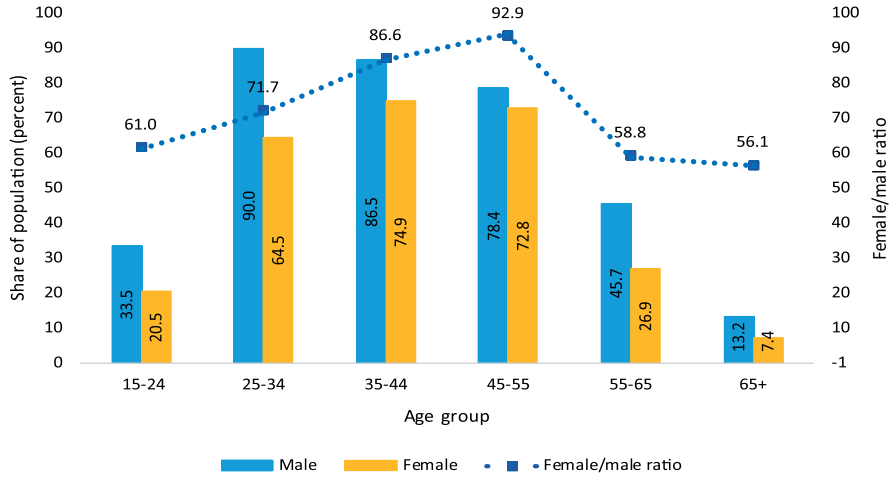
a. Males b. Females



Source: World Bank estimates based on the Labor Force Surveys.

The LFPR for women varies significantly over the life cycle. Figure 3.3 shows how the female/male ratio in participation rates varies with age. The female/male ratio is especially low during childbearing and child-rearing years before peaking in the 44-55 age group; at this age, women's LFPR also peaks, though for men it peaks earlier (in the 35-44 age group). After age 55, participation rates decline sharply for both genders, but more significantly for women, given their earlier retirement age of 55 (men retire at age 60). The high level of involvement in caregiving is an important factor when considering the labor force participation for women. Regression analysis shows that the presence of children ages five and younger is associated with a lower LFPR of 8 percent in urban areas; the effect is much lower in rural areas (around 2 percent; Avdeenko et al. 2022). When they work, women spend on average five hours more a week on child care than men; in contrast, working men spend five more hours in employment than women. Among those not employed, women are more likely than men to have left their last job voluntarily as opposed to being laid off (NSO 2021). Most people who voluntarily left their jobs did so for personal/family reasons, according to the 2020 LFS, and almost half of those with personal/family reasons said they had to take care of school-age children; another 20 percent looked after elderly or other family members (NSO 2021).

Figure 3.3. The female/male ratio of labor force participation is lowest for youth and those over age 55



Source: World Bank estimates based on the 2021 Labor Force Survey.

The low LFPRs for women could also reflect their lower wage earnings compared to men. During 2010-20, on average, female employees (not self-employed) earned about 17 percent less than men;[24] moreover, this wage gap grew over the period (Avdeenko et al. 2022). Regressions on the age group 15-45, controlling for standard human capital variables, including education and also hours worked, find that the wage gap grows from 17 percent to 21 percent (Avdeenko et al. 2022). This reflects that women, on average, are better educated than men. At an aggregate level, at least, it does not seem that occupational segregation is a significant factor in the large gender wage gap. According to census data, in fact, a greater proportion of women than men are employed in managerial, technical, and particularly professional occupations. However, when the analysis is further disaggregated, there is some evidence of occupational segregation. Within these broad occupational categories, women and men appear to be doing different things. For example, among professionals, women are overrepresented among teachers whereas men dominate among engineers and architects; the gender wage gap within the professional category is 20 percent. Compared to men, women also work in different sectors, with a disproportionate share working in public administration, education and health (where wages are low) and a relatively low share working in the mining sector (where wages are high). When considering both sector and occupational differences, the result is a halving of the unexplained portion of the gender wage gap.

Urban Participation

Mongolia's low urban participation rate is a growing concern as the country continues to urbanize. We have already noted the 10 pp increase between 2000 and

[24] According to the NSO's 2019 Labor Force Survey report, the gender wage gap in 2019 was 6.7 percent. This includes all employed persons (including self-employed) and also takes into account hourly wages. Our estimate excludes the self-employed and takes into account monthly wages.

2020 in the share of the population living in urban areas. This locational shift poses a challenge because participation rates are much lower in urban areas than in rural ones (figure 2.2). For women, the urban participation rate was only 46 percent in 2021. Moreover, the labor force in urban areas is more likely to be unemployed than it is in rural areas: 9.5 percent compared to 5.4 percent in 2021. During that year, only 48 percent of the working-age population in urban areas was employed. It is true that urban wages are higher (17 percent in 2020), but 6 out of 10 poor people live in urban areas (Uochi 2020).

Participation of Those with Secondary Education

Low participation levels and other indicators suggest that people with a secondary education face particular difficulties in the labor market. The LFPR varies significantly by education level. In 2021, those with a tertiary education had an LFPR of 70.1 percent. In contrast, the rate for those with a lower secondary education was only 42.3 percent. Unemployment is highest for those with a secondary education, particularly upper secondary (an average unemployment rate of 9.6 percent from 2010 to 2021; Avdeenko et al. 2022). Unemployment levels for those with primary and tertiary educations have been much lower. Mongolia's unemployment pattern by educational attainment is unusual, characterized by an inverted U shape, with the unemployment highest among workers with an intermediate level of education. In most countries, especially transitional and higher-income ones, unemployment rates tend to fall with education (Betcherman and Jalil 2022).

The Transition of Young People into the Labor Market

The transition of young people into the labor market is particularly important in Mongolia. The country has a large youth cohort, and it has invested significantly in educating its young people. We have already noted that Mongolia's demographic window is still open, which creates opportunities for both youth and the economy as long as job creation and productivity increase. Employment prospects for young people should be favorable since most secondary school graduates now go on to postsecondary education. Among 15- to 34-year-olds, 31.5 percent had college education or higher in 2020, up from 17 percent in 2000. in 2020-should create the conditions on the supply side for this to occur.

Yet for many young people, the transition is not going well. It can be difficult to interpret standard labor force statistics for youth (15-24 years of age) because many are still in school and/or forming families. Keeping this in mind, the youth age group in Mongolia has low LFPRs and high unemployment. The youth LFPR has been declining for much of the past decade and was 26.9 percent in 2021. In part, this is due to increasing education among young people. But participation for the less educated is especially low: in 2021, the rate for those with lower secondary education (10 percent) was less than half that of young people with upper secondary education (28.2 percent), and those with college or more participated at a rate of 66.9 percent (Avdeenko et al. 2022). The unemployment rate for youth in 2021 was 19.2 percent, almost three times the national rate. It was over 20 percent from 2016 to 2019. Although youth unemployment is higher

than adult rates in almost all countries, it tends to be closer to double rather than triple. Mongolia's youth unemployment rate is also higher than in comparator countries in the East Asia and Pacific region or at similar income levels (Avdeenko et al. 2022). Youth unemployment is also high in Mongolia compared to its structural peers (except for Armenia).

About 18 percent of young people are not in education, employment, or training (NEET). The NEET rate is of interest for analyzing youth and the labor market because it includes young people who not only are not working but also are not investing in their future employment prospects through education or training. Higher NEET shares in the youth cohort may reflect low employment rates, low numbers building the skills for their future employment, or both. The NEET rate in 2021 was 18 percent, up 1.4 pp from 2011 even though more young people are now staying in school longer. Women, especially those with children, and the college educated have above-average NEET rates (Avdeenko et al. 2022).

Although the youth employment situation is most unfavorable for those with less education, it is also a concern for well-educated young people. The unemployment rate for 15- to 24-year-olds who are college educated has been above 20 percent for most of the past decade and was as high as 30.5 percent in 2016. NEET rates among youth are highest for the college educated: 34.3 percent in 2021-about double the overall rate-but this is partly because youth ages 15-24 with lower education levels are still in the human capital accumulation stage, whereas the college educated have, for the most part, concluded their studies. Among college-educated young women, the rate was 48.1 percent, mainly explained by low labor force participation, though unemployment is also high. An important question is whether these high NEET rates, and other unfavorable indicators, for well-educated young people reflect a shortage of good jobs (perhaps combined with unrealistic expectations on the part of educated youth), skills that are mismatched with the needs of the economy, or intermediation problems in the labor market. This will be addressed in section 4. However, well-educated job seekers have reported the shortage of jobs as a barrier (NSO 2021).

4. WHAT IS CONSTRAINING MONGOLIA FROM HAVING A MORE VIBRANT AND INCLUSIVE LABOR MARKET?

Sections 2 and 3 highlighted some of the challenges Mongolia is facing in terms of job creation, job quality, and the participation of specific groups, particularly women and young people. Potential constraints on the demand side, the supply side, and in the functioning of the labor market are considered in this section. These constraints are associated with the two challenges identified in the previous section. On the one hand, creating more and better jobs can clearly be hindered by constraints on the demand side; yet on the other hand, ensuring a qualified labor force and better functioning of the labor market can also help create jobs and can have particular benefits for groups that are not fully able to access the labor market.

Demand-Side Constraints

Our evidence suggests that demand-side constraints are important for understanding Mongolia's jobs challenges. Job creation can be limited by factors related to labor demand. In this subsection, we consider evidence of likely constraints stemming from the demand side. These include the incidence of discouraged workers, lack of high-skill jobs for the well educated, and low aggregate return to human capital investments. We then dive deeper, focusing on business climate constraints to growth and job creation and the limitations Mongolia faces in creating jobs in new sectors. This discussion adds to discussions already included in the World Bank's recent reports on economic development and diversification (World Bank 2018, 2020b).

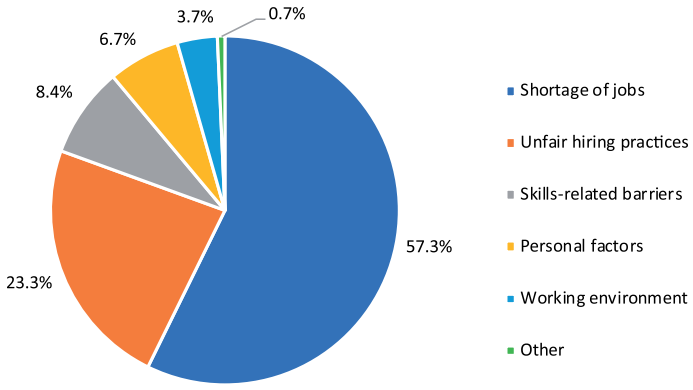
Evidence of Demand-Side Constraints

Discouraged Workers

Mongolia's unemployment rate underrepresents the true extent of nonemployment. This is partly because of the number of potential workers who are outside the labor force-often because they feel there are no available jobs-but who are interested in working. A significant share of the working-age population that is classified as inactive (13.7 percent) would be interested in working but is not working for various reasons (NSO 2021).[25] Among these individuals are discouraged workers-that is, persons not seeking employment because of a belief that there is no work available. There can be various other reasons for joblessness, including unrealistic expectations on the part of job seekers. However, our analysis finds that most jobless people have realistic labor market expectations: formal education levels are largely appropriate for the aspired occupational tasks, and average wage expectations are in line with actual wages (Gruen 2022). According to a special 2020 Labor Force Survey module on joblessness, 57 percent of unemployed respondents cited a shortage of jobs as the dominant barrier to finding a job (figure 4.1). This factor was particularly dominant outside UB: among the unemployed in rural areas and provincial centers, it was cited by 76 percent and 70 percent, respectively.

[25] This represents the potential labor force (that is, individuals who were not actively seeking employment but were available during the last week and wanted employment), or 8.1 percent of the inactive as well as willing non-job seekers (persons not in employment who want employment but did not seek employment and were not currently available [ILO 2013]), or 5.6 percent of the inactive.

Figure 4.1. The unemployed cite a shortage of jobs as the main barrier to finding a job

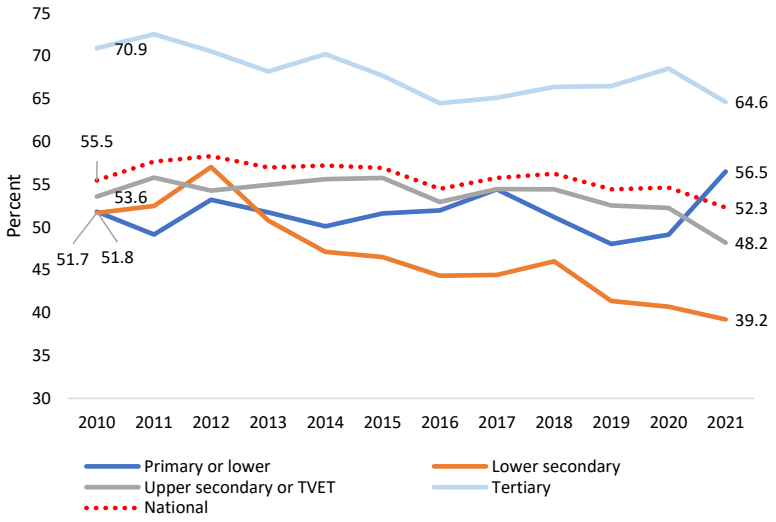


Source: NSO 2021, based on 2020 Labor Force Survey nonemployment module.
Note: The chart shows the answer to "What is the most important barrier for you to find a job?".

Job Quality and Employment of Well-Educated Workers

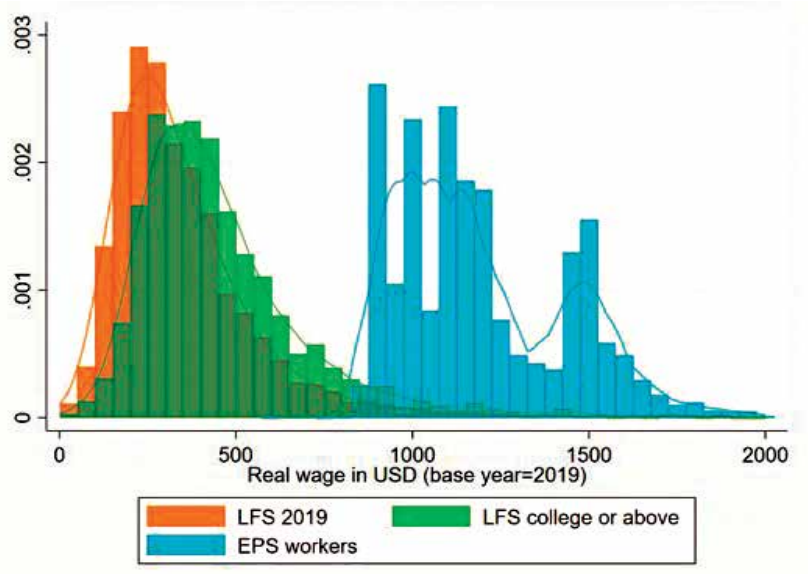
The economy has not been able to generate enough high-skill jobs for the increasingly well-educated population. The gap in employment between high- and low-educated workers is widening over time. Whereas the employment rate has been falling steadily for individuals with lower secondary educations, it has been fairly constant for those with primary educations and below as well as for the better-educated groups (figure 4.2). At the same time, as we have noted, the occupational structure has been shifting to higher-skill jobs when viewed through an occupations lens. But other evidence raises questions about whether higher-skill jobs are being created in adequate numbers. Estimates based on Mincer earnings functions show that the wage premium for both those with an upper secondary education and those with a tertiary education is significantly lower now than it had been in 2017. Although this will need to be followed for a longer period of time to see if the trend continues, declining returns to education suggest that the supply of well-educated workers is outstripping the demand for their skills. It may be that workers with higher levels of education are competing for lower-paid jobs normally held by those with intermediate education. Consistent with this possibility, wage data from the Employment Permit System (EPS) program (temporary migration to Korea) suggest that, increasingly, college-educated Mongolians are applying for low-skilled positions in Korea because the wages offered are well above what they could get at home (figure 4.3). Indeed, job creation in Mongolia over the past decade has been disproportionately in low-wage jobs: as reported in section 2, 60 percent of new jobs are in low-wage sectors. Then there are the low and declining participation rates and relatively high unemployment rates for those with a secondary education. One reason could be that those with a tertiary education have been taking jobs normally held by those with intermediate education who, as a result, may be facing downward wage pressure or may be competing for even lower-skill and lower-paid jobs.

Figure 4.2. The economy has not been able to generate enough high-skill jobs for the increasingly well-educated population



Source: World Bank estimates based on the Labor Force Survey.

Figure 4.3. Wages for EPS workers are significantly higher than those of all workers in Mongolia, even if they are college educated



Source: Employment Permit System data set and Labor Force Survey.
Note: EPS = Employment Permit System; LFS = Labor Force Survey. Data are adjusted for purchasing power parity.

Low Aggregate Return to Human Capital Investments

Despite its achievements in education, human capital is adding only a very small amount to Mongolia's economic wealth. The uniqueness of Mongolia stems from being extremely rich in natural resources and having a relatively small population with good educational

attainment and a history of dependency on foreign savings for capital investment. That unique pattern is reflected in the "wealth of nations" concept (Lange, Wodon, and Carey 2018). The basis for this concept is that the wealth of a country derives from the value and use of its natural capital, human capital, and produced capital (physical capital and land). Mongolia stands out in terms of how much of its wealth is from natural capital (about two-thirds) and how little from human capital (about one-quarter, compared to about two-thirds for the average country). If we look at comparator countries with similar levels of natural capital per capita (Azerbaijan, Canada, Chile, Kazakhstan, and the Russian Federation), only Azerbaijan has less human capital per capita than Mongolia. The Russian Federation and Kazakhstan have 4 times as much, Chile has 7 times, and Canada has 35 times. The measure of human capital reflects not just the amount of education but also the expected earnings gains associated with that education. Mongolia's low human capital contribution to wealth suggests that the economy is not creating opportunities to exploit its human capital investments.

This evidence suggests that there are constraints associated with the demand side of the labor market. In the following subsections, we look further into what is constraining labor demand, including issues related to the business climate and barriers Mongolia faces in creating jobs in new sectors.

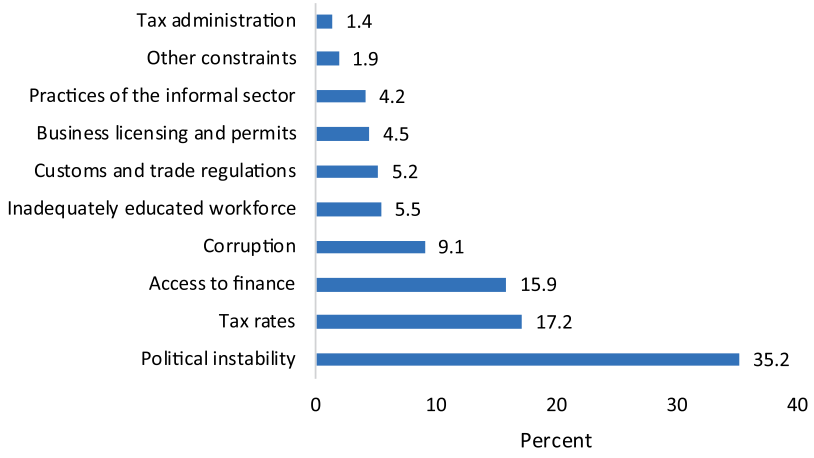
Constraints in the Business Climate

Overall, despite some advances in the business environment, private investors still perceive Mongolia as a high-risk environment (World Bank 2022b). Business environment issues frequently cited include political instability, tax rates, access to finance, corruption, labor skills, custom and trade regulations, the business license and permit process, competition from the informal sector, and tax administration.[26]

A plurality of employers see Mongolia's political environment as the most important obstacle to doing business. Based on the latest Enterprise Survey round for Mongolia in 2019, more than one-third of (nonagricultural) employers consider the country's political instability to be the biggest obstacle to doing business (figure 4.4). Although concerns regarding the political situation had been voiced in the past, its significance for Mongolia's labor demand has risen sharply since 2013.

[26] Although geographic constraints (aside from domestic transport) are not included in enterprise surveys, they can pose significant challenges to business development. Being the least dense country, landlocked between China and Russia, and affected by various environmental shocks, Mongolia faces unique geographic constraints. See box 4.1 for a discussion of the implications of these constraints on economic diversification.

Figure 4.4. Employers view political instability, tax rates, access to finance, and corruption as the main constraints to Mongolia's business environment



Source: World Bank Enterprise Surveys, Mongolia 2019.
Note: The "Other constraints" category includes labor regulations, transport, access to land, electricity, courts, crime, theft, and disorder.

The relatively high share of employers concerned about the political environment likely reflects the need for greater stability in the policy and regulatory environment. Firms base their decision to invest, expand, or diversify on the perceived view of the investment and business climate, the specifics of the regulatory framework, and the government's performance. Frequent changes or adjustments to business-relevant legislation and repeated restructuring of key ministries-with main contacts being transferred to other departments-are likely to result in delayed or discontinued (approval) procedures, greater uncertainty, and reduced transparency, all of which deter growth (Gruen 2022).

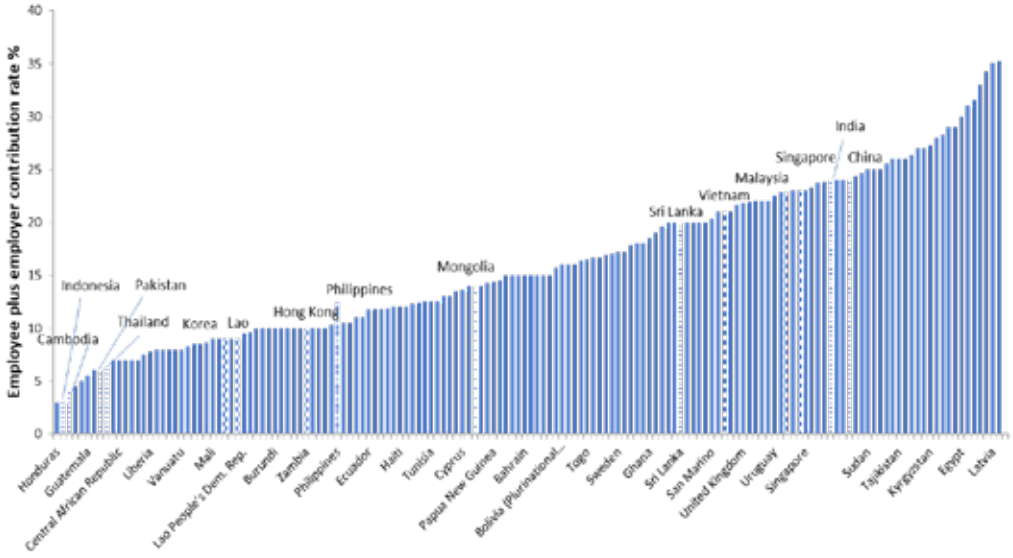
After political instability, tax rates and access to finance are the most important constraints to Mongolia's business environment. Around 16 percent of companies see either tax rates or access to finance as their biggest constraint. This perception differs among different types of firms. More than one-third of young enterprises and more than one-quarter of firms with foreign ownership report that tax rates are their biggest constraint. Access to finance is the top obstacle for manufacturers and exporters and also one of the top obstacles for SMEs.

In fact, Mongolia's statutory tax rates have been low by international standards (World Bank 2018). The corporate income tax (CIP) rates, the personal income tax (PIT) rate, and the value-added tax (VAT) rate in Mongolia are low compared to international rates.[27] As a component of the broader tax system, the pension insurance contribution

[27] The CIP rate is 10 percent on the first MNT 5 billion and 25 percent on excess profits thereafter. The PIT rate and VAT rate both have been 10 percent since 2007.

rate in Mongolia is not particularly high (figure 4.5).[28,29] yet significant part of the costs of pension benefits come from a state subsidy which also has to be financed.

Figure 4.5. Contribution rates for pensions in Mongolia lie on the lower end in comparison to the rest of other Asian countries and across the world



Source: World Bank, forthcoming.

Nonetheless, some inconsistency in tax treatment and some tax exemptions may affect certain groups of employers that were captured by the survey. One major disincentive to developing the mining sector- from a foreign investor's perspective-is the inconsistent taxation of companies operating in the extractives business and the broad discretionary power of the tax authority,[30] which brings high risk to potential investors (World Bank 2022a). Also, it appears that a simplified corporate regime is provided for small businesses in the Corporate Income Tax Law,[31] which was reported to have an impact on enterprise growth. This exemption regime may further create an uneven playing field for formal enterprises, which may explain why competition from the

[28] Pensions and other social insurance contributions are mandatory for all workers with employment contracts, regardless of the size of the firm. The pension insurance contribution rate is 8.5 percent of covered wages for both employers and employees for a total of 17.0 percent. There are additional mandatory social and health insurance contributions: (i) health insurance (contribution rate 4.0 percent); (ii) unemployment insurance (contribution rate 0.4 percent); (iii) maternity and family insurance (contribution rate 1.8 percent); and (iv) work injury and accidental injury insurance (contribution rate 0.8-2.8 percent). There is a voluntary pension scheme for workers who do not have employment contracts. The voluntary pension scheme has a contribution rate of 12.5 percent of reported wages. A common convention is for workers in the voluntary scheme to report wages at the minimum wage, though this often is increased five to seven years before retirement.

[29] The comparisons do not include the effects of floors or caps on covered wages, which can be material. It is also important to note that most former Socialist countries have relatively high contribution rates, in part due to the so-called legacy cost of providing promised benefits for retirees, some of which accrued during an earlier era.

[30] As a result of the implementation of requirements relating to a change in beneficial owner, the tax authority has broad discretion over the taxation methodology for businesses looking to encourage investment over a 30 percent threshold. This methodology, for example, can include a 10 percent tax on aggregate exploration expenditure even if such expenditure has not resulted in finding a deposit for development (World Bank 2022a).

[31] A 1 percent corporate income tax can apply to entities with revenue of up to MNT 300 million, and a 90 percent tax credit can apply to entities with revenue of up to MNT 1.5 billion.

informal sector was considered a main constraint for some. It is also observed that no special tax regime is provided for young businesses, which are usually robust contributors to jobs but are vulnerable (Merotto 2018).

Access to finance is a key barrier for SME development. The major constraints for SMEs to borrow from banks are high interest rates (approximately 1.5-2.5 percent per month), short-term maturity (maximum maturity is 48 months), and strict collateral requirements (200 percent of the value of loans in 99.7 percent of cases, which reflects the deep distrust shown by financial institutions; Morgan and Yoshino 2021). The World Bank was involved in developing the basic infrastructure-the Law on Tangible and Intangible Movable Property Pledge-that went into effect on March 1, 2017, to enable lending based on movable properties. However, the current size of the movable asset finance market is still small. Meanwhile, the availability of credit reporting services in Mongolia is limited, which is considered an important basis for scaling up SME financing.

Obtaining business permits and licenses can be burdensome and lacks transparency. This process adds uncertainty and additional costs to business operations, and it can also be used to serve vested interests or present opportunities for bribery. Business permits and licenses are often used by the government as revenue-generating instruments, but this is not in line with good practices, which anticipate that licenses are used only as regulatory instruments.

Box 4.1. Overcoming Mongolia's Geographic Constraints

With only 2.1 people per square kilometer (km^2), Mongolia is the least dense country in the world. This creates unique demographic and geographic constraints for the country. In addition, half of Mongolia's small population of 3.3 million is concentrated in the capital city, Ulaanbaatar. The rest of the population is scattered in small urban centers (mainly Erdenet and Darkhan) and among large steppes that cover a territory of 1.6 million square kilometers, an area larger than France, Spain, and Italy combined. In addition, Mongolia is landlocked (between China and Russia), exposed to cold winters (known as *dzuds*, or deadly winters), and faces land degradation resulting from overgrazing, deforestation, soil pollution from mining, and climate change. Although already more than 68 percent urbanized, Mongolia has yet to achieve a significant structural transformation and remains a resource-based economy that is not integrated in world markets. Rather, it trades predominantly with its two giant neighbors, mostly exporting minerals to China and importing refined petroleum, iron railway products, and wheat from Russia.

Given these geographic constraints, what is the potential of Mongolia to engage in a trajectory of economic diversification and productivity growth?

Lessons from economic history in the developed world show that urbanization has been the driver of industrialization because cities generally offer the enabling environment for the development of manufacturing and services: local labor, financial services, and the presence of infrastructure for production and trade to other cities and the rest of the world. Cities trade with one another, which allows for both local specialization and diversification (as cities may first specialize in specific industries before diversifying after reaching a certain size).

Importantly, the increase in urban population also makes cities more productive places thanks to increasing returns to scale, or "agglomeration effects": as cities grow, firms can more efficiently find workers (thanks to labor pooling and matching), links between customers and suppliers are strengthened, and knowledge creation and exchange among firms is facilitated. Estimates of the strength of agglomeration effects-which can be measured by the elasticity of wages with respect to city size-are lacking for developing countries, but economists believe they are likely to be greater than in developed countries. In the case of Colombia, for instance, Duranton finds agglomeration effects of about 5 percent, implying that a doubling of city size results in a 5 percent increase in labor productivity.[a] Such elasticities are even greater for Chinese and Indian cities. Whether agglomeration effects occur in the informal sector, however, is unclear.

At present, the conditions to address Mongolia's geographic constraints to stimulate structural transformation and agglomeration-led growth do not seem to be in place. First, transport infrastructure and the resulting connectivity among regions are poor: Mongolia only has 1 km of road per 100 km^2 of land, which is 10 times less than Australia, a country that is only marginally denser in terms of the population-to-land area ratio. This contributes to very high logistics costs, which represent 30 percent of gross domestic product,[b] curbing trade and likely preventing economic diversification. Although, surprisingly, Mongolian firms in Enterprise Surveys do not report transportation as one of the main constraints they face, improving connectivity would seem an important requirement to accelerate structural transformation at the scale of the country.

Second, despite the noticeable construction boom in Ulaanbaatar, the city has faced spatial development challenges that might have reduced the opportunity to leverage urban density for economic growth (as evidenced by the stagnant urban wage growth and lack of high-wage job creation in Ulaanbaatar, discussed in other sections of this report). This could be due to the "push" rather than the "pull" nature of migration to Ulaanbaatar following the post-Soviet era privatization of collective farms and cattle; land desertification, exacerbated by the mining boom; and the cold winters that have fueled massive rural-urban migration of the nomadic population to the city. Importantly, the city has faced difficulties planning for the ensuing spatial expansion, leading to the development of sprawling informal settlements of *gers* (portable tents used by nomads) on the outskirts of the city and that now host about 60 percent of Ulaanbaatar's population. Living conditions are difficult in the ger area due lack of infrastructure services, the absence of paved roads, and high levels of air and groundwater pollution (mostly from coal stoves and informal sanitation), resulting in Ulaanbaatar being one of the most polluted cities in the world. Many ger area residents are unemployed, which calls for policies to address the disconnect of these settlements from the rest of the city where economic activities are located and jobs likely to be created.

The way forward-in addition to the policy mix presented in this report-requires improvements in connectivity and mobility at different spatial scales, a recommendation that applies to most resource-rich countries, which tend to insufficiently invest in infrastructure, which in turn curbs structural transformation processes.[c] In Mongolia, however, because of the small population and the very large distances between cities, the benefit-cost ratio of massive transportation investments is not high enough to sustain improvement of the whole transport network.[d]

Instead, the country could focus on strengthening transport corridors for economic diversification—especially in areas where mining coexists with other industries—and ensuring better access of Ulaanbaatar to the rest of the world (for instance, through better connection to its international airport in the Khushig Valley).

These selective and spatially targeted infrastructure investments would improve regional connectivity, allow goods to be traded, and facilitate the diversification of the economy (in the livestock sector, tourism, services, and renewable [solar and wind] energy). All areas could also benefit from ongoing efforts to develop digital connections.

Finally, urban planning will probably have an important role to play in addressing low-density sprawl and congestion in Ulaanbaatar, including through low-income housing policies and the provision of infrastructure services.

Sources: a. Duranton 2016; b. World Bank 2020c; c. Alsharif, Bhattacharyya, and Intartaglia 2017; d. World Bank 2020c.

Constraints in Creating New Sources of Labor Demand

Mongolia must overcome barriers to diversify employment and create jobs in new sectors. As noted, comparators with endowments similar to Mongolia's have had difficulty diversifying exports, especially beyond the resource sector.[32] The best examples of comparators with manufacturing exports, and signs of upgrading, have been Malaysia, Thailand, and Vietnam (Betcherman and Jalil 2022). These countries have developed strong manufacturing export sectors, initially in labor-intensive products and eventually moving into higher value-added ones. However, the key comparative advantages in these sectors are a large labor force and competitive wages, neither of which characterize Mongolia. So the country will need to pursue diversification/upgrading strategies that are different than those followed by its regional comparators. A further challenge comes from the high and increasing concentration of exports in a few mineral products and the resulting low Economic Complexity Index cited earlier (Tudela-Pye and Merotto 2022). Hausmann (2016) argues that the accumulation of know-how or tacit knowledge, which is embedded in goods and services produced and traded between countries, is a key driver of economic growth. In Mongolia's case, the low agglomeration of know-how can imply longer jumps into new sectors and pose relatively more challenges for future diversification.

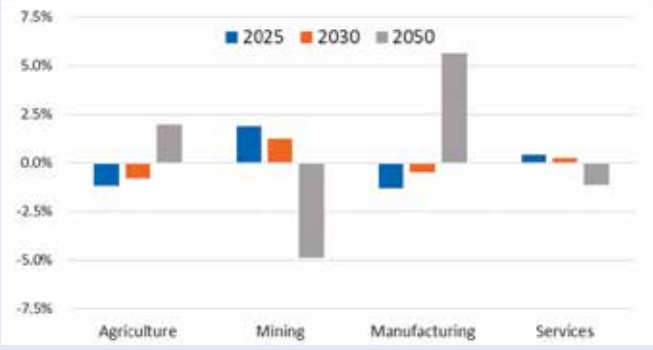
[32] The export of the resource sector itself can be affected by the global green transition, which may generate direct and indirect impacts on the labor market in the country (see box 4.2 for a simulation analysis).

Box 4.2. The Global Green Transition's Labor Market Implications in Mongolia

The recent Country Economic Memorandum[a] estimated the effect of China's clean energy transition on Mongolia's export and gross domestic product growth. Basically, the model assumes that a global transition to low carbon would affect the Chinese demand for Mongolian thermal coal, used in electricity generation, and coking coal, used in energy-intensive manufacturing sectors. The impacts on sectoral employment were estimated using the same computable general equilibrium model, ENVISAGE, and the same assumptions. The benefit of using this model is that it captures the direct effects of these policy shocks as well as the general equilibrium (indirect) effects that stem from the complex economic interrelationships among several economic agents (such as households, firms, and governments), economic activities, and several countries (through trade and investment relations).

Figure 4.2.1 shows the employment impacts of declining coal exports to China, which seem to be modest. The export demand of coal is mainly affecting the mining sector, and employment there follows the initial increase and steady decrease that is simulated in this scenario. By 2050, the employment in the mining sector is expected to be reduced by around 5 percent compared with the baseline model. This lower share of workers in mining is compensated by higher shares in manufacturing jobs and to a lesser extent in agricultural jobs.

Figure 4.2.1. Employment by Aggregated Sector, Percentage Changes with Respect to Baseline Values



Source: World Bank estimates based on EVISAGE.

Obviously, this simulation only captures the impacts of declining coal exports to China, and the impacts of the global green transition on the labor market can be far more complicated. External demand shock aside, the adaptation of green technologies and practices is a transformative process that will restructure the patterns of production and consumption across industries and, in turn, give rise to changes in employment and its composition. Multiple factors, including policy (goal and design), technology (availability and cost), incentive and behavior (firms and consumers), and governance (capacity and enforcement) will affect the speed and depth of the green transition in a country. The mechanisms of green policy interventions could result in either job destruction (job losses in the sectors with high carbon intensities or large environmental footprints) or job creation (job gains in the emerging green sectors, such as the renewable energy sector) to produce products and services that promote environmental protection and quality.

The net effect is a product of job destruction and job creation and will require separate studies to investigate further.

Sources: a. World Bank 2020b.
Note: In 2023, China's demand for thermal coal and coking coal used in energy-intensive manufacturing activities initially rose by 35 percent, followed by demand changes that are 2.5 percentage points lower than the year before.

Supply-Side Constraints

Different factors associated with labor supply could potentially constrain employment, both overall and for specific groups. These could be related to skills (skills deficiencies and skills mismatches), meaning workers do not have the skills required for existing or potential jobs, or to workers not being available due other demands on their time or because of policy-created work disincentives.

Evidence of Skills Constraints

A workforce that does not have adequate levels of skills, or is not skilled in the areas needed by the economy, can constrain job creation, productivity, and competitiveness, which, in turn, can affect the ability of firms to create jobs. As a starting point, skills might not be expected to be a binding constraint in the labor market because of the positive trends in educational attainment in Mongolia. However, we have already noted concerns about quality. What does other evidence indicate about whether skills might be a constraint? Certainly, a message from our consultations with government ministries and the private sector was that skills gaps were an issue. Analysis by the Ministry of Education and Science points to significant mismatches between the fields being pursued in the higher education and training systems and current and future labor market needs. The research undertaken for this JD leads to mixed conclusions: although the skills gap may not universally constrain job creation, it likely does so in dynamic, strategic sectors; also, a significant share of graduates are not equipped with the skills the labor market requires.

Some firms report skills as a major problem in their operations, though most do not. According to the 2019 World Bank Enterprise Survey, 11 percent of responding firms identified an inadequately educated workforce as a major constraint (slightly below the regional average of 12 percent).[33] The surveyed firms also seem willing to upgrade the skills of their workers as needed: 75 percent reported that they offer formal training programs, compared to the regional average of 66 percent. Additional evidence from enterprises comes from the 2019 Barometer Survey, which has a sample of 3,600 firms in the private sector. Employers were asked to identify the major problems they faced in hiring new workers. The most common barrier cited was a lack of work experience (25

[33] The survey included 360 firms representative of the formal, nonagricultural private sector. The summary report is available at https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country-profiles/Mongolia-2019.pdf.

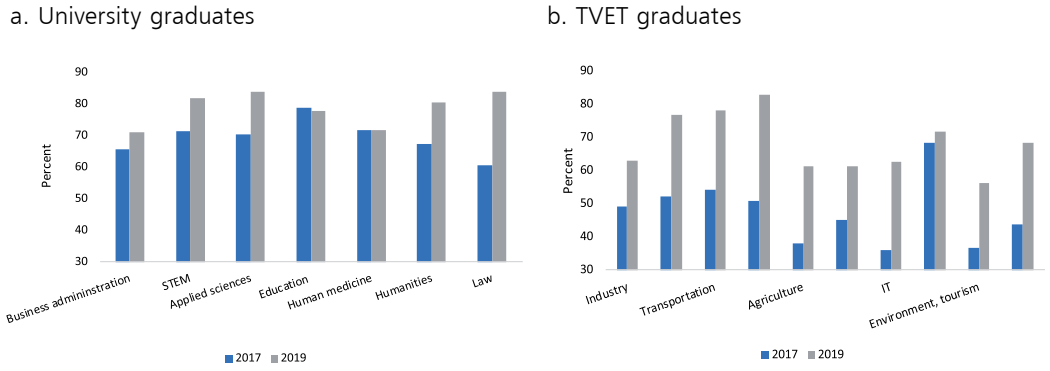
percent of employers); this could be interpreted as a skills-related constraint, though not directly related to education. This was followed by 20 percent of employers who stated that lack of skilled workers is one of the main obstacles for their operations. Seventeen percent also identified skills mismatches as a problem in hiring (NSO 2021).

Surveys of recent university and TVET graduates show some evidence of skills mismatches. There is some evidence of horizontal skills mismatches: according to the 2017 Graduate Tracer Study survey by the Research Institute of Labor and Social Protection (RILSP; panel data for 2017-19), about one-third of recent graduates who are employed report they are not working in the profession for which they studied or trained. Further, 30 percent of recent graduates feel either over- or underqualified for their job, suggesting vertical mismatches in the labor market. The share of graduates with either vertical or horizontal on-the-job mismatch is 46 percent one year after graduation; it remains high three years after graduation (40 percent). Graduates also feel they lack socioemotional skills, which, in turn, are also the type of skills most demanded by employers.

Many graduates take a long time to transition to employment, and this is especially the case for TVET graduates. The 2017 Graduate Tracer Study survey also found that one year after graduation, only about half of TVET graduates were employed, and this was the case for about two-thirds of university graduates. Three years after graduation, employment rates do increase for both groups, but a substantial share of graduates were still not employed, and this share was especially large among TVET graduates (around 35 percent, compared to 22 percent among university graduates).

Graduates' field of study plays an important role in how fast they transition to work. University graduates in education and health are among those with the best chances of finding employment within 12 months after graduation. Although their employment rates remain largely unchanged in later years, for graduates of other fields, the chance of finding work increases over time-significantly for some study fields, including law; applied sciences; and science, technology, engineering, and math (figure 4.6, panel a). Three years after completing their studies (in 2019), business administration and medicine graduates have the lowest employment rates (about 70 percent). For TVET graduates, those trained in mining, transportation, and construction-the sectors that experienced growth-have better chances of becoming employed over time than graduates from other fields (figure 4.6, panel b). Significant employment variation by field of study, especially among TVET graduates, may imply an oversupply of graduates in certain fields or that the quality of training provided may not be meeting the needs of employers.

Figure 4.6. Employment rates of graduates vary by professional field



Source: RILSP Graduate Tracer Study, survey round 2017.
Note: IT = information technology; STEM = (natural) science, technology, engineering, and math. "Other" includes professions in education; arts/culture; finance, business, and trade; and energy.

Reasons for nonemployment among TVET and university graduates are primarily related to having not found a job, but almost one-fifth mention that they could not find a job in their matched profession. Notably, about 20 percent of nonemployed university graduates and 10 percent of TVET graduates ascribed their nonemployment to personal reasons-that is, they were not available for work. But about 30 percent of nonemployed university graduates and 40 percent of TVET professionals reported they could not find a job, and an additional 17 percent reported they could not find a job that matched their profession, which suggests insufficient demand for their (possibly obsolete) skills.

Employment and wage outcomes by education provide a mixed picture of whether skills are a major constraint to job creation. Another indicator of whether skills may be a constraint is the difference in labor market outcomes by education. Small differences would suggest that education is not associated with significantly higher skills or the skills are not those in demand in the labor market. When we look at employment rates, it is clear that attaining a tertiary education is an advantage; in 2020, the employment rate for this group was 68.5 percent, compared to 54.6 percent overall. There is also a positive return to college education; in 2020, the average wage premium for the college educated was 23.9 percent relative to upper secondary education, although the premium has been falling since 2017, especially for men.

The advantages enjoyed by the better educated could indicate that this group is offering higher-level skills that the labor market needs, or it could be that the higher level of education is simply a signal that gives these graduates a competitive advantage over the less educated in accessing jobs that may not require higher education. According to the Graduate Tracer Study survey, about 15 percent of graduates believe they are overqualified for the jobs they hold, which is roughly the same share as those who feel they are underqualified. The decline in education premia (which also pertains to upper secondary [including TVET] versus less education) in recent years could be a supply-side story because it could suggest a decline in the skills that education is producing. However, it also could be a demand-side story because the economy may not be generating high-skill jobs at the rate that the educated labor supply is increasing.

Skills gaps could constrain future job creation in strategic sectors. There are concerns in the government that the supply of skilled workers could be an issue in selected industries identified as priorities for future diversification in Vision 2050 and the New Recovery Plan.[34] The Ministry of Education and Science estimates that 39,000 engineers and technicians will be required for major projects over the next five years, which is well in excess of the pipeline being supplied by the education and training system. More disaggregated analysis of the projected occupational/skill needs of these sectors and projects would need to be undertaken to assess whether the supply of skills would be a potential constraint.

Issues in the Skills Development System

Looking further into the existing skills development system, there are clear needs to better prepare young people for the emerging needs of the labor market.

Mongolian TVET provision has become more diversified with ease of entry for private providers, but there are still areas for improvement to meet the needs of the labor market. Currently, nearly 40 percent of TVET institutions are nonstate actors, and half of all TVET institutes (75) are located outside of UB, thus providing greater geographic coverage. Mongolia has implemented a series of measures over the past decade to improve its TVET system. These include efforts to engage employers in TVET school committees, introducing a competency-based approach and an external assessment system, establishing professional/skills councils for some occupations, increasing the accessibility of marginalized groups through adult training, and establishing a monthly stipend for TVET students[35] (since 2013) to promote enrollment. However, improvements in the application of quality assurance and advancing competency-based curriculum have been slow; more partnerships between educational institutions and the private sector are needed, and the TVET financing mechanisms need to be adjusted to foster relevant and quality training.

Higher education provision in Mongolia has also become more diverse (though still concentrated among six state-owned universities), and lately it has been moving toward consolidation and research-intensive education. Nearly three-fourths of higher education institutions (HEIs; a total of 95 in 2021) are private or nonstate/nonprofit educational establishments. Three Japanese *kōsens*, or technical schools, a new type of professional higher education provider, have been functional since 2014. However, nearly half of higher education enrollment is in the top six state-owned universities. The policy on building an alliance of six major state-owned universities is being pursued with the aim of creating internationally competitive research-intensive universities. Similarly, consolidations and some forms of collaborative partnerships among privately run institutions have been occurring for the last decade.

But higher education institutions have few performance incentives. Higher education provision is fully dependent on payment from students; there is no financial allocation from the state for state-owned HEIs, except for institutions of defense and

[34] These sectors are value-added manufacturing of minerals-based products, agro-processing, construction materials, light and food industries, transportation, logistics networks, IT, tourism, and creative industry.

[35] In 2020, the size of the monthly stipend was increased to MNT 200,000 from MNT 100,000 in 2019 and MNT 70,000 in 2013.

law enforcement.[36] There are also no incentive mechanisms for performance. Moreover, tuition rates are controlled by the state, whose representatives comprise a majority (51 to 60 percent of voting members) in the governing boards of state-owned institutions. To compete for students, non-state institutions are forced to charge rates that can compete with state-owned institutions, which keeps tuition rates in universities lower than the fees of private kindergartens. The government's financial aid targets students (through grants and low-interest special loans),[37] and most of the state financial aid channeled through the Education Loan Fund is directed to support those few who are admitted to prestigious foreign universities. There are some positive developments: a quality assurance system in HEIs is being developed, special units to lead and perform compliance with quality requirements are currently being established, and more institutions have started aspiring to international accreditation.[38]

The state–controlled and highly rigid admissions practices do not allow for the recognition of prior learning and constrain the transition pathways from TVET into higher education.[39] College entrance is subject to standardized exams run by the Education Evaluation Center, a subsidiary of the Ministry of Education and Science, and the standardized exam scores are the only criteria for admission to HEIs. This implies that the pathways for TVET graduates to higher education are constrained, and this may contribute to reducing the image of TVET education. There is no record on established best practices in university-industry link programs except in a small number of institutes that belong to a single cluster.[40]

What Is Constraining Some Workers from Joining the Labor Force?

Job creation can be constrained if some workers do not join the labor force because of other responsibilities or because of financial disincentives to work. This situation could occur where policies, such as those related to social welfare, create work disincentives. In addition, other responsibilities (such as caregiving) can make labor force participation difficult or costly. The latter may be especially relevant for the labor supply of women because they tend to face the brunt of care responsibilities in the household. However, their reservation wages may also be more affected by social welfare receipt because men are more often relegated to the role of breadwinner within the household.

[36] For the 2021□22 academic year, average annual tuition was US$897 for a bachelor's degree, US$712 for a master's degree, and US$972 for doctoral students (the average per credit charge, respectively, was US$29.56, US$31.55, and US$47.00). Support from domestic companies and private individuals is negligible.

[37] To 1.12 percent of students in undergraduate degree programs, 0.98 percent of students in master's degree programs, and 0.64 percent of doctoral students.

[38] By such prestigious bodies as the Accreditation Agency for Study Programmes in Engineering, Informatics, Natural Sciences and Mathematics, the Accreditation Board for Engineering and Technology, and the Accreditation, Certification and Quality Assurance Institute. In the search of adoptable international best practices, the Mongolian University of Science and Technology (MUST), the National University of Mongolia, and the Mongolian University of Livestock Sciences have joined international peers to adopt the Conceive-Design-Implement-Operate approach.

[39] Mongolia is already a signatory of the Asia-Pacific Regional Convention on Mutual Recognition of Academic Credentials and Degrees.

[40] Relationships established between the Erdenet Mining Corporation and the Erdenet Institute of Technology and between the Railway Authority and Railway Institute are the exceptions. The ongoing sponsorship of geoengineering program development at MUST by the Oyu Tolgoi mine is expected to pave the way for a new form of industry-academia collaboration.

Social welfare programs in Mongolia represent a relatively significant public expenditure, with benefits concentrated on families with children. In 2020, the country counted 14 different social welfare programs that delivered 46 cash or in-kind benefits (Posadas and Vandeninden 2020). In 2016, social welfare spending represented 2.52 percent of GDP compared to an average of 1.64 percent in lower-middle-income countries (World Bank 2020b). According to the 2018 Household Socioeconomic Survey (HSES), the vast majority of households (87 percent) receive at least one form of social assistance, and this is the case for almost all households in the bottom 20 percent of the income distribution. Households with children, where working-age individuals are likely to be, are eligible for multiple benefits and, on average, received benefits from 3.95 programs (Fraikin 2022). For example, a family with four children could be entitled to the following benefits: (i) the Child Money Program, (ii) the Mother Hero benefit (as a mother of four or more children), (iii) the monthly benefit for a mother/father (not working) and looking after a child under age three, and (iv) the Food Stamp Program (if the household qualifies according to the proxy means test).

Data from the 2018 HSES show that a multiplicity of benefits significantly increases the average benefit amount received. On average, households that received only one social benefit received about MNT 23,000 per month (about US$8), compared to about MNT 113,000 (about US$40) per month for households that received at least three benefits, or about one-third of the minimum monthly wage.[41] Notably, in 2020, in response to the COVID-19 crisis, some benefit amounts were increased significantly. This means that current benefit receipt, especially among households with children (given the fivefold increase in the monthly benefit amount per child allotted under the universal Child Money Program, from MNT 20,000 [about US$7] to MNT 100,000 [about US$35]) is currently significantly higher.

Welfare benefits are negatively correlated with labor force participation, particularly for women; however, it is difficult to disentangle the effect of having to care for children from that of benefit receipt. Econometric analysis, based on the 2018 HSES, and controlling for individual and household characteristics, found that social welfare benefits are associated with lower LFPRs, with this association being of larger magnitude for women, especially those receiving multiple benefits.[42] The programs with a significant negative association with female participation were the maternity and young child allowance, the caregiver allowance, and the Mother Hero benefits. In contrast, certain programs, including the Food Stamp Program, social welfare pensions, and the maternity and young child allowance, had a positive and significant association with male labor force participation. Although our analysis has documented a negative correlation between receipt of welfare benefits and women's LFPR, it is difficult to identify whether the determining factor is the income effect of the benefits or the lack of child care options.[43] It is also important to note that these findings are prior to the

[41] In 2018, the minimum wage was MNT 320,000 (about US$114), and currently (in 2022) it is MNT 420,000 (about US$150).

[42] Controlling for several covariates, such as age, marital status, education, location, number of children, health status, and household income of other household members (not including social transfers), we find a negative association between receiving social welfare benefits and labor force participation for rural and urban women ages 25 and older, and for urban men ages 25 and older. In the case of rural women younger than age 25, urban men younger than age 25, and rural men of any age, we also find negative association, but it is not significant at the 10 percent level (Fraikin 2022).

[43] Child care services are particularly limited in urban areas, where there is high demand. Further, qualitative evidence shows that women view a lack of quality child care as an important barrier to labor force participation (Schmillen and Sandig 2018).

fivefold increase in the benefit amount for the Child Money Program in 2020 in response to the COVID-19 crisis; it is possible that this significant increase has discouraged some women from entering the labor market.

Social assistance benefits are important for providing income for low-income people, but it is important to also ensure that a cycle of dependency is not created for those who could work. To avoid creating a cycle of dependency, it is necessary to help the workable[44] poor overcome barriers to entering the labor market as well as to create incentives to participate in the labor market. From welfare to work hinges on helping workable social assistance beneficiaries to overcome barriers to employment. This can be achieved by providing social assistance and employment support services for the poor to facilitate their productive participation in society, becoming self-sufficient and less dependent on public support. Further, welfare benefit programs can include design elements that encourage or incentivize beneficiaries to join or return to the labor market, including job-search conditionalities for individuals who could work. These are currently absent in Mongolia, though the government is increasing its efforts to improve employment activation measures for poverty-targeted Food Stamp Program recipients.

Constraints Associated with Functioning of the Labor Market

Job creation can also be constrained by imperfections in the labor market that impede the matching of labor supply and demand. These can be policy-initiated constraints, which stem from how the labor market is regulated and how social protection for workers is provided. These policies can hinder job creation if they make labor too costly or if they discourage workers from supplying their labor. However, policies need to provide adequate protection for workers. Mongolia revised its Labor Law in July 2021, which went into effect on January 1, 2022. The authorities are also planning to revise the legislation governing social protection and social assistance. The regulation of the labor market is not an important constraint in terms of job creation in Mongolia. However, the functioning of the labor market would benefit from a comprehensive labor market information system (LMIS) and upgraded active labor market programs to help workers access employment.

LMIS

An LMIS can help relevant stakeholders make informed decisions, thereby supporting better alignment between labor supply and demand and, consequently, contributing to lower structural unemployment (higher likelihood that job seekers will be matched to jobs and that vacancies will be filled) and higher labor productivity (thanks to a better match between job requirements and worker skills). The key stakeholders include government ministries and agencies, such as public employment services (PES), education and training institutions, students (prospective workers), workers and job seekers, and employers and investors. Policy makers are interested in monitoring labor market conditions and trends and in evaluating the performance of government employment programs. Education and training institutions, as well as the PES, need to know about the evolution of the demand for different

[44] *Workable* includes all individuals of working age who are neither disabled, in education, nor in training.

occupations and skills to align their programs and curriculums. Students are interested in returns to education and skills to guide their choice of the field of study and occupation. Workers, including job seekers, want to know about existing job opportunities and associated skill requirements. Finally, employers and investors are interested in the availability of skilled labor. An LMIS that meets these diverse needs

To meet diverse stakeholder needs, an advanced LMIS should include both "internal" and "external" subsystems. An internal LMIS serves the policy- and program-related needs of government ministries and agencies and is not typically accessible to the general public. In contrast, an external LMIS provides information of interest to nongovernmental labor market actors and is thus open to the general public. Naturally, there is some overlap between both subsystems. An LMIS also consists of different segments, including a public job-matching platform, a service-oriented segment (information on labor market services, such as employment services, career counseling, and training opportunities), and a data-oriented segment (key labor market indicators). The data-oriented segment includes information on labor market conditions, labor and skills supply, and labor and skills demand.

However, the existing LMIS in Mongolia primarily serves the needs of the government and its agencies, and the part of the system that is meant to serve the needs of the general public is virtually nonexistent. Extensive labor market data are available in Mongolia, collected by various sample surveys, but the data are not turned into information that is easily accessible and tailored to the needs of the diverse stakeholders. Also, no one-stop shop has been established for information of interest to the main labor market actors, including students, workers, and employers and investors. Moreover, there are some important data gaps, particularly related to occupational and skills demand.

Currently, the LMIS in Mongolia is equated with the eJob platform, which is being upgraded. The eJob platform is intended to facilitate automation of the business functions of various employment-related programs and services being implemented by the Ministry of Labor and Social Protection (MLSP). The cornerstone of the eJob platform is a job-matching technology (WorkNet) for Mongolian PES offices. The eJob platform is to be integrated with other relevant systems (databases) via a data exchange functionality known as XYP, implemented by the National Data Center.[45] However, the eJob platform is an LMIS in a narrow sense. With the exception of WorkNet, it is an internal management information system serving the needs of the MLSP and PES.

There is substantial space to strengthen the LMIS, especially the external subsystem, to serve all stakeholders. The current system is limited in terms of its scope, content, and accessibility. Reforms could extend the scope of the system, mainly by developing the external subsystem that is aimed at the general public, enhancing the content by adding indicators relevant for the main stakeholders, and improving accessibility by developing an LMIS portal functioning as a one-stop shop for labor

[45] The databases include the National Registration database maintained by the Ministry of Justice and Home Affairs, which contains demographic information about each citizen of Mongolia; the Social Insurance database, which contains information on social insurance beneficiaries and contributions; the Welfare Administration and Information System database, which contains information on all social assistance programs being implemented by the MLSP; the Integrated Household database of the MLSP, which maintains household information and generates a poverty score; and private sector databases operated by external service providers, such as providers of training services.

market information. The ultimate goal is to transform the current limited LMIS into a comprehensive LMIS serving the needs of all labor market actors.

The labor market information that external stakeholders require primarily concerns the supply of and demand for occupations and skills; such information, however, is not currently accessible to nor understandable by the general public. Currently, some of the data on the supply and demand for occupation and skills are available but do not contain much additional information. The data are shown mainly in different research reports and, to a limited extent, on the National Statistics Office of Mongolia (NSO) and MLSP websites.[46] There are two problems with this way of disseminating information. First, the reports reach a narrow, technical audience, mainly government officials and researchers. Second, although they are useful for their target technical audience, they are unintelligible for the general public. They present data without explanations and interpretations necessary for the nontechnical audience. Technical reports are therefore not an effective way of disseminating labor market information and reaching out to key stakeholders.[47] Thus, the labor market data that do exist are not used to their full potential. The challenge then is to turn available data into information accessible to and understandable by the general public.

Information on the demand for occupations and skills is particularly limited. This information is especially relevant for students and job seekers, education and training institutions, and employment and career advisory services. The Barometer Survey, implemented by the RILSP, collects data on vacancies and hiring by occupation as well as on key employability skills, but the survey's results are published only as a research report and thus are hardly accessible to potential beneficiaries.[48] The Wage Survey collects data on earnings by occupation, presented only for the nine major occupational groups, which limits the survey's usefulness. More detailed occupational groupings are necessary to make the data useful for students making career choices. The LFS is a potential source of data on employment and earnings by occupation, but such data are not published. The LFS could also be used to identify growing and declining occupations, but again, such data are not published.

Although some data on occupational and skills demand already exist, there are also important data gaps. These include data necessary to identify occupations in which there are shortages of workers and skills gaps, both occupation specific and generic.[49,50]

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[46] The examples of data reports include the *Report of the Barometer Survey of Labor Market Demand* published periodically by the MLSP; the *Survey of Employer Requirements for Employees 2017*, published by the MLSP and the RILSP; the *Graduate Employment Survey 2018*, published by the MLSP and the RILSP; and the *Wage Survey 2021*, published by the RILSP. The NSO also periodically publishes the results of the Labor Force Survey.

[47] An example is the report presenting the results of the Graduate Employment Survey 2018. The report shows employment outcomes (employment rates, earnings) of university and TVET graduates by field of study. This is important information that could guide the choice of a field of study by young people. However, this is a typical research report, which will neither be read nor understood by young people or their parents. The survey's findings do not reach the audience that would benefit the most from them. Consequently, they are not part of an LMIS, which, by definition, is accessible to all stakeholders.

[48] The RILSP organizes a dissemination event once the report is published, but the outreach is limited to government ministries, the academic community, and business representatives.

[49] Job vacancy data measure short-term labor shortages but are not necessarily indicative of long-term trends in demand. Job vacancy rates tend to be high in temporary or seasonal activities with high labor turnover (for example, in the construction sector), and the demand for relevant occupations may be falling in the long term (as is the case with manual workers).

[50] Data on occupation-specific skills gaps were collected in 2017 for eight occupations (Survey of Employer

Active Labor Market Programs

Active labor market programs (ALMPs) include several types of programs targeting different population groups.[51] ALMPs can be clustered into four general groups: job mediation and counseling, employability and skills training, entrepreneurship or self-employment support, and wage subsidies. The programs target the unemployed and the self-employed/microbusinesses generally, but specifically, some distinct categorical groups, such as youth, people with disabilities, herders, people with labor market attachment difficulties, and, more recently, women and recipients of the poverty-targeted social assistance benefit. The ALMPs are delivered under the responsibility of the General Office of Labor and Welfare Services (GOLWS) in the MLSP and through a network of public employment and welfare service offices established in 21 aimags and nine districts of UB, in addition to a handful of licensed private employment agencies, some of which provide services through a contract-based partnership with the PES. The coverage of ALMPs in Mongolia[52] has been increasing, and it stood at 5.8 percent of the labor force in 2019. [53,54] Expenditures on ALMPs represented 0.08 percent of GDP in 2019.[55] Women participate more than men in employment promotion programs in Mongolia: 55 percent of beneficiaries are women, but they also tend participate in less costly activities (2020).[56] There has been no rigorous impact evaluation of the ALMPs in Mongolia, so evidence is lacking on their effectiveness.

Compared to other countries, ALMP programming disproportionately supports self-employment, and training represents a small part of the system. The largest program is the Job Support Program, which offers various services though almost 60 percent of its expenditures are in financial support for self-employment. Funding assistance for those wanting to start a business can be a useful component in an ALMP system but, in other countries, is typically a relatively small program. Some skills training is provided, but, unlike in other countries, this is a small part of the system in Mongolia. Also, the training that is provided tends to be very short term and with very low per-participant costs; such features, according to the international literature, are not associated with successful outcomes. In countries with developed ALMP systems, training is usually a major activity, and courses are longer and have strong links with employers and workplaces; when training is delivered by private agencies, funding is often provided on a performance basis (appendix A summarizes the international literature on the impact of ALMPs).

Requirements for Employees). Data on generic skills gaps will be collected using a skills-demand module to the Barometer Survey.

51 The ALMPs are governed by the Employment Promotion Law (revised in 2011).

52 *Coverage* refers to the percentage of beneficiaries in the labor force. Beneficiaries can be overcounted because the same participant can benefit from different measures under one program.

53 The number of job seekers mediated to jobs was excluded from this because there is duplication of counting of beneficiaries of employment promotion programs and job medication services.

54 This is likely to be comparatively higher than in the East and South Asian countries (average 3 percent in 2014).

55 This is comparable to the East Asia and South Asian country average of 0.06 percent of GDP (2014; Betcherman and Moroz, forthcoming).

56 Gender analysis undertaken on employment promotion programs of Mongolia under the EU-funded Strengthening Governance in Mongolia Project, 2020.

The effectiveness of ALMPs in Mongolia is limited by various factors, beginning with funding. These ALMPs are not a panacea for unemployment and job creation; however, when effectively designed and implemented, they can improve the employment prospects for unemployed and other vulnerable workers. Currently, Mongolia has an ALMP system that relies on funding through the Employment Promotion Fund (EPF); ALMP spending levels and implementation efficiency are constrained by the reliance on financing through the EPF. The EPF is based on fees for foreign workers, which is a problematic source,[57] as well as on inflexible interministerial arrangements that delay fund transfers to the EPF. These challenges lead to resource unavailability during much of the first half of the year, and programs are often not available in seasons when there would be greatest demand for ALMPs.

The monitoring and evaluation of ALMPs is systematically weak. Programmatic decisions are not based on systematic monitoring and assessment. Data are limited on characteristics of job seekers and program participants, and limited information is collected or available on program implementation, output indicators, or outcomes such as post-program employment status. Overall, there is a lack of understanding and capacity for conducting rigorous evaluation (Batchuluum 2022). No impact evaluations have been conducted, and along with the weak monitoring system, the effectiveness of ALMPs cannot be validated. Further, timely and accurate labor market information that identifies current and prospective labor demand, with locational and occupational detail, is required for successful ALMP programming, and improvements are needed in this important area as well (as discussed previously in this section).

The weakness in monitoring and evaluation is further constrained by an outdated and burdensome management information system, which creates significant inefficiencies and performance disincentives. Management information required for a high-quality and relevant ALMP system does not currently exist. The job-matching and management information system currently in use has multiple weaknesses that overload staff times, and it sometimes provides conflicting data. As mentioned previously, the MLSP is currently upgrading its internal LMIS[58] (consisting of eJob, the job-matching platform, and the management information system for ALMPs) to provide greater automation and optimization of business processes and enhanced reporting functions.

The government is increasing its efforts, in line with its "From Welfare to Jobs" policy, to improve employment activation measures for poverty-targeted social assistance benefit recipients; such measures are nonexistent for unemployment benefit recipients. Particularly, the activation of beneficiaries of the poverty-targeted Food Stamp Program has become an explicit focus of some ALMPs. In contrast, employment activation for unemployment benefit recipients is virtually nonexistent, even though activation is required by the legislation.[59] The fact that unemployment benefits are administered by the social insurance authority results in a disconnect between the employment promotion and social protection authorities. Skills training for

[57] The EPF revenue has been predominantly sourced by foreign worker employment fees, which constituted from 93.3 percent to 48.8 percent of revenue between 2016 and 2019. Foreign worker fees start flowing in late April/May, and this directly affects implementation of programs and overall expenditure performance and often results in a substantial volume of annual fund allocation being undisbursed in a given year. The proportion of state financing has increased marginally over the last few years (from 0.0 percent to 8.2 percent between 2016 and 2019).

[58] This is being undertaken with funding and technical support from the World Bank.

[59] Law on Unemployment Benefit Payable from Social Insurance Fund.

unemployment benefit recipients was not implemented during the past several years, but based on data from earlier years, the coverage of skills training among unemployment benefit recipients was quite low.[60]

The capacity of PES is limited. Well-resourced and well-trained PES are key for effective ALMPs. However, with community-level service staff who are responsible for delivering both the social welfare and employment services, the capacity of local offices is stretched. PES officers are not well trained in providing the latest in employment services. Profiling of job seekers, which is important for developing individual action plans, largely does not exist. The share of the unemployed who are registered with the public employment service has been falling and is now about 20 percent. Even so, there are more posted job vacancies than job seekers. This illustrates the need for greater outreach by PES offices and the need to establish PES as useful services for both job seekers and employers. Private employment agencies can be licensed by the MLSP to provide career counseling and job placement services.[61] However, agencies find payment rates established by the ministry to be low and administrative procedures to be burdensome (Batchuluum 2022). Accordingly, there are some private agencies that operate independently and mainly serve higher-skilled clientele.

Are Labor Market Regulations Too Rigid?

Our review of the labor regulations, including the minimum wage, does not suggest that these have been a hindrance to job creation. Less than 1 percent of firms responding to the 2019 Enterprise Survey identified labor regulations as the biggest obstacle to their operations. Since that survey, the new Labor Law has been introduced, and it does add some provisions that benefit employees and may increase costs for employers. However, even with these changes, Mongolia's employment protection rules are relatively flexible when compared to practices in the region and among comparator countries (Hatayama and Batchuluun 2022).[62] Different modalities of work, such as part-time work, home-based work, remote work, and roster work are provided by the labor legislation. Regulations on working hours and leave are largely comparable with international practices.

Overall, Mongolia's labor and minimum wage regulations provide a fair balance between the flexibility required by employers and the protection workers need. The new Labor Law, which went into effect in 2022, enhanced worker protections in a number of areas. The major reforms include, among other provisions, some limits on the use of fixed-term contracts, protections for nonstandard forms of employment, limits on working hours, provision of paternity leave, additional rules on mass dismissal, and increased severance benefits. Despite these changes that could potentially increase the costs for employers, the Labor Law generally follows the ILO international standards and practices taken by comparator countries. The ratio of the minimum wage to the value-

60 Only 7.3 percent of all unemployment beneficiaries during 2005-11 attended skills training (MLSP 2021).

61 In 2021, there were 86 licensed agencies.

62 Redundancy regulations are not overly restrictive. Only dismissing employees who are on leave as per legal entitlements by the employer's initiative is prohibited. Redundancy dismissal is allowed. Employers are not obligated to seek approval from or report to any authority or consult with worker representatives on either individual or mass dismissal. Consultation with worker representatives is required for negotiating the size of the redundancy pay in case of mass dismissal. The law characterizes what constitutes a mass dismissal (Article 81, Labor Law).

added per worker is not high relative to comparator countries. Regulations concerning termination are not restrictive. The amount of severance payments and the length of notice periods are comparable to other countries. Further, gender equality provisions exist, and maternity protection is comparable to international practices. The one change with the new Labor Law that may have implications for the labor market is the limits on the duration of fixed-term contracts, which is now two years.

The social insurance legislation prescribes an earlier retirement age for females than for males, and this may contribute to lower female labor force participation among older workers. Historically, the retirement age has been set lower for females, and much lower for those having four or more children. This may contribute to the significant gap in male and female participation rates in the older age groups. Although the authorities established policies in 2018 to gradually increase the retirement age for both men and women to 65 (for occupations with nonhazardous conditions), the retirement age effectively remains at 55 for females and 60 for males, if vesting requirements are met. Moreover, mothers with four or more children are entitled to retire at age 50, if vesting requirements are met.[63]

Further, though wage employees in the public and private sectors are covered by a mandatory social insurance scheme, contribution rates are relatively high. Employers have a legal responsibility to enroll workers in the contributory social insurance scheme. The mandatory contributory pension insurance scheme covered about 81 percent of the labor force at the end of 2020, having increased substantially from about 52 percent in 2010, and the coverage in the voluntary scheme increased nearly threefold during the same period. The employer and employee combined total social insurance contribution rates, including health insurance, increased from 21-23 percent during 2008-17 to 24-26 percent in 2019. The most recently applicable rates are relatively high compared to the global average (20.4 percent) and peer countries.

Mongolia also offers a voluntary pension insurance scheme for workers who do not have formal labor contracts, such as for the self-employed and herders, but this provision may contribute to informality. This extends social insurance to workers who have no labor contracts. However, it may contribute to informality because an individual can get a full pension at close to the minimum wage with only a 12.5 percent contribution rate under the informal scheme, yet the contribution in the formal scheme is 17 percent (combined employer and employee). In fact, 72 percent of all retirees in Mongolia get the same pension benefit (around the minimum wage), so there is a strong incentive for wage underreporting and little incentive on the part of either workers or firms to be part of a system that requires an additional 4.5 pp contribution.

Mongolia also has legal protections for women and pregnant women that are in line with, and in some cases exceed, international standards; though there is no existing evidence, it is possible that these measures may pose a barrier to women's employment. The Labor Law prohibits gender-based discrimination in the workplace, including gender-based violence and sexual harassment. The principle of equal pay for work of equal value exists. Women are entitled to 120 days of maternity leave, which exceeds the ILO standard (90 days). The new law also introduced paid leave for fathers (at least 10 working days). Three-year parental leave is provided, which

[63] Further, male and female employees in certain occupations (underground work, high heat, and other hazardous conditions) are entitled to retire 5-10 years earlier.

is longer than the global average (around 399 days). It is prohibited for employers to terminate employment of a pregnant woman, a mother, or a single father with a child under the age of three during this leave period. The length of this extended leave may help many families in a country without a strong child care system. But beneficiaries, typically women, may face barriers to returning to their jobs or earn lower wages due to their outdated skills. Moreover, although there has been no analysis with this provision, it may make employers more reluctant to employ women for highly paid jobs.

Another key issue arising from our analysis is weak enforcement and limited compliance with the Labor Law. This can have implications for worker protections and economic efficiency. Mongolian workers tend to work more than the legal number of hours, and there is a high incidence of noncompliance with provisions for overtime compensation.[64] According to the General Agency for Specialized Inspection (GASI), 25 percent of inspected entities did not comply with the hiring and firing regulations in 2020. Low labor force participation, discussed earlier in this report, could be the result of poor working conditions, including long working hours, low wages, or lack of compensation due to violations of the law. Maintaining fair and decent work environments is also needed to improve labor productivity.

The current inspection system needs improvement in several areas, beginning with institutional arrangements within the government for conducting inspections. There has been limited coordination between the MLSP and GASI to implement labor inspections. The MLSP is the central authority responsible for all the labor issues, while GASI has professional control over the implementation and enforcement of labor legislation. GASI's labor inspectors are under the administrative supervision of local governors and are structurally independent of the MLSP. As a result, the MLSP has limited authority over the enforcement of the Labor Law.

The effectiveness of the inspection system is further limited by inspection procedures. There are conflicting rules regarding inspection. The Law on State Inspection prohibits inspections without prior notification to employers. Legal requirements for prior notification to employers of an inspection or requiring consent for inspections from governmental agencies are not aligned with the provisions of ILO Convention No. 81 or Convention No. 129. However, the new Labor Law provides labor inspectors the right to access the business entity and organization without prior notice. Moreover, labor inspections for compliance with the Labor Law (except for occupational health and safety) are conducted based on applications, requests, or complaints received from individuals and legal entities. The individuals who file complaints must disclose their names to the public, which discourages employees or third parties from making an inspection request.

Unemployment Insurance

The unemployment insurance system covers wage workers in the formal sector; the coverage rate is high, but most unemployed do not receive benefits. About three-quarters of the labor force contribute to social insurance, including unemployment

[64] According to the 2019 LFS report, 22.8 percent of all employees work more than 60 hours per week. According to the 2019 Wage Structure Survey, 58.6 percent of employees who worked during rest days or public holidays were not paid extra compensation.

insurance (UI). This is a very high level, especially given Mongolia's per capita income and important share of informality in the labor force. However, only about one-fifth of the unemployed qualify for unemployment insurance benefits. This is likely due to the fairly stringent eligibility requirements and the relatively low benefits. No unemployment benefits are available for informal workers, although this is not common worldwide.

The UI scheme offers modest benefits at a modest cost. The contribution rates are not high by international comparison; 0.2 percent of insured earnings is required from both employees and employers. To receive a benefit, an unemployed worker needs to have paid the UI premium for 24 or more months, including the last nine consecutive months prior to becoming unemployed. UI benefits provide between a 45 percent and 70 percent replacement rate (depending on the individual's period of employment) for a short period of time (up to 76 days), with a minimum benefit of at least 75 percent of the minimum wage. By international standards, the benefit eligibility requirements are high, and the continuous employment condition likely rules out many workers due to the seasonality of many economic activities in Mongolia. The level and duration of the unemployment benefit are relatively low by international standards.

There is a trade–off between the affordability of contributions and fiscal costs and the coverage and adequacy of benefits. Currently, the trade-off in Mongolia leans toward affordability and keeping costs low, with low contribution rates, low benefits, and significant eligibility requirements. The replacement rate is adequate when judged by international standards, but the duration of the benefit is short.

5. POLICY IMPLICATIONS

In this section, we consider the policy implications of the JD and present policy priorities and recommendations. This policy discussion addresses the challenges identified in the analysis and considers our assessment of the constraints affecting the labor market and job creation. We begin with recommendations to address labor demand constraints. These recommendations, building on recent World Bank reports, focus on enhancing the capacity of the private sector to meet the overarching challenge of creating more and better jobs. More dynamic private sector job creation would also open up more opportunities for groups who currently are not participating fully in the labor market, including women and youth. Job creation is also affected by constraints to labor supply. These include limitations in the skills development system and in activating social welfare and unemployment benefit recipients. Recommendations are put forward that are intended to extend labor force participation and employability, especially for excluded groups. Finally, proposals are put forward to alleviate constraints in the functioning of the labor market, covering a range of labor policies. A labor market that more efficiently matches labor supply and demand will increase overall employment, and effective employment programs will have particular payoffs for groups such as women, youth, and the less educated, who have difficulty accessing the labor market. The specific recommendations are included in Table 5.1.

Table 5.1. A jobs strategy requires actions on several fronts

Areas	Objectives	Policy actions
Labor demand[a]	**Improving business environment to encourage diversification and job creation**	• Establish a regulatory oversight body to reduce regulatory uncertainty. • Establish an effective public-private dialogue to identify critical regulatory constraints and bottlenecks and ensure an open channel of communication between government and the private sector. • Introduce compulsory public consultation procedures into the regulatory process. • Offer a special tax regime for young enterprises, creating favorable conditions for their development. • Expand the use of movable collateral, explore supply chain finance, and improve the credit reporting system. • Further streamline the issuance of licenses and permits within a unified and simplified system by incorporating best international practices and setting up a licensing council. • In addition to enabling a job-friendly business environment, address Mongolia's challenge of encouraging diversification.

Areas	Objectives	Policy actions
Labor supply	**Upgrading the quality and relevance of the skills development system**	• Use program and labor market information to make higher education and technical and vocational education and training institutions relevant to labor market demands and to the country's development priorities. • Introduce effective incentives for strengthening the link between educational and training institutions and the labor market. • Establish a results-driven and genuine partnership with the private sector for skills development. • Improve the school-to-work transition of graduates by linking students to workplaces and the labor market via, for example, internships, cooperative learning, and job placements. • Further develop occupational standards in partnership with employers.
	Enabling social assistance beneficiaries to work	• Accompany activation services with tailored social services that address barriers to employment. • Incentivize Food Stamp Program beneficiaries' entry into employment (or staying in employment). • Address the additional barriers to employment faced by women via complementary and quality social services. • In the long run, implement a holistic, tailored approach that assesses and addresses barriers at the household level via a case management approach. • Introduce adequate coordination of welfare and employment policies. • Ensure that a robust monitoring and evaluation system for activation policies is in place. • Set realistic expectations for welfare-to-work programs where unemployment is high and where access to high-quality programs and services is not fully available.
Labor market func–tioning	**Building a comprehensive labor market information system**	• Consider an open-access labor market information web portal and establish an analytical unit (often referred to as a labor market observatory) responsible for managing the portal and generating labor market information • Develop the labor market information web portal (labor market observatory) as a for labor market information. • Determine the governance structure of the labor market observatory.
	Improving active labor market programs (ALMPs)	• Tackle the constraints related to Employment Promotion Fund funding stability and interministerial fund transfers. • Introduce employability and skills development programs that are responsive to urban labor market needs. • Introduce a systematic approach for enhancing monitoring and evaluation of ALMPs. • Strengthen public employment service staff capacity for effective counseling of the unemployed. • Develop effective mechanisms for skills training for unemployment benefit recipients.

Areas	Objectives	Policy actions
Labor market functioning	**Making labor market regulation more effective through better enforcement**	Strengthen the labor inspection system by the following actions: • Remove the requirement of advance notice to employers before inspection. • Introduce confidentiality of the source of any complaints concerning violation of labor regulations. • Increase administrative capacities and financial allocations for enforcement of labor regulations. • Store and update information collected during inspection visits in a shared information system easily accessible by both the Ministry of Labor and Social Protection and the General Agency for Specialized Inspection. • Increase the maximum length for fixed-term contracts.
	Reforming unemployment insurance to improve worker protections	Following analysis to understand the actuarial and economic impacts, the Mongolian government may want to take the following steps: • Reduce the requirement for continuous contributions from the current nine months. • If affordable, make the duration and level of benefits more generous. • Establish a lower cap on the covered wage applicable for contributions and benefits, making it possible to have a longer duration of benefits at an affordable cost. • Introduce stronger links between unemployment insurance and employment promotion by more rigorously enforcing a requirement for unemployment insurance benefit eligibility to show evidence of actively searching for employment.

Note: a. The labor demand proposals only focus on improving the business environment and add to recommendations already made by the World Bank in recent reports addressing issues related to economic development and diversification.

A policy environment to meet Mongolia's jobs challenges requires a whole-of-government approach, including actions from different ministries. Job strategies need to be multisectoral to alleviate the different constraints on employment. Actions on the part of the MLSP and other departments and agencies concerned with workforce development are important for meeting this challenge. But reforms from ministries responsible for economic policies that can transform the private sector must provide the foundation for meeting Mongolia's jobs challenges. Finally, coordination across all relevant ministries and agencies is needed for an effective job strategy.

Encouraging Labor Demand through a Vibrant and Diversifying Private Sector

The starting point for meeting Mongolia's jobs challenges is a vibrant private sector. It is the private sector that creates most employment, so a dynamic private sector is necessary to meet Mongolia's overarching challenge of creating more and better jobs. Our analysis in the previous section has concluded that there are important demand-side constraints for job creation. The role of government is to create the conditions for private sector-led growth and to commit to policies that address these demand-side constraints. We propose some policy actions that will support a business environment

that encourages the investment, innovation, and diversification necessary for robust labor demand. These recommendations supplement the proposals that the World Bank has made regarding private sector development in recent reports (World Bank 2018, 2020b).

Improving the Business Environment to Encourage Diversification and Job Creation

The following measures, ranging from the short term to the long term, would ensure more stability in the policy and regulatory environment to support firms: establish a regulatory oversight body to reduce regulatory uncertainty, establish an effective public-private dialogue to identify critical regulatory constraints and bottlenecks and ensure an open channel of communication between government and the private sector, and introduce compulsory public consultation procedures into the regulatory process.

Continue to expand the use of movable collateral, explore supply chain finance, and improve the credit reporting system, thereby improving access to finance. Given that the size of the movable asset market is still small, effort could be made to expand the use of it. The usefulness of supply chain finance has been demonstrated in a number of markets for increasing access to finance by SMEs and for improving value chain competitiveness.[65] The applicability of supply chain finance in Mongolia could be explored. The government should consider investing in the development of a real credit reporting system that covers the entire adult population and includes all types of creditors.

Further streamline the issuance of licenses and permits within a unified and simplified system by incorporating best international practices[66] and setting up a licensing council. Mongolia has aimed to streamline the issuance of licenses and permits within a unified and simplified system. Under Section 6 of the New Recovery Policy, Mongolia is committed to resolving and streamlining the system of state inspections, licenses, and technical specifications required by government authorities. It is also recommended to set up an electronic register of all licenses and approvals and that they be publicly accessible online. The government should also consider adopting secondary legislation setting up a Licensing Council to improve public-private coordination and allocating permanent technical staff to support the Council, and passing secondary legislation detailing the activities that are licensed together with their timeframe.

In addition to enabling a job-friendly business environment, address Mongolia's challenge of encouraging diversification. Lessons can be learned from the experience of some countries in carrying out policies to achieve diversification by building on a resource base (see box 5.1). These experiences show that efforts to change the production profile of an economy are successful when they are preceded or accompanied by measures to diversify its asset base (including natural, human, physical, and institutional capital; Gill et al. 2014). More tailored policies for Mongolia to align or

[65] For example, SME suppliers/distributors can leverage the higher credit standing of their larger buyers or sellers to borrow from financial institutions.

[66] Including clarification of the objective of the law, relationship to other laws, typology of permits, inventory and listing of licenses, time limits, online license portal registry, role of the council, and systematic review.

build its human capital in concert with some selected priority sectors identified in Vision 2050 and the NRP will be discussed in a separate research study.

Box 5.1. Industrial Policies to Achieve Diversification in Resource–Based Economies

In principle, resource-rich countries should be able to tap into the abundance of natural resources for industry policies without needing to export other goods and services or taxing to fund public activities. However, not all resource-rich countries have been successful in encouraging nonextractive activities through industrial policies. Industrial policies appear to work when they are consistent with the country's endowments of natural, human, physical, and institutional capital. Hence, economic diversification may take longer because it takes time to build a balanced portfolio of assets. Policy makers looking for quick results may be better off implementing industrial policies only in sectors in which their economy is already adequately endowed while involving a sizable part of their population in these sectors. These policies will be best served by policies to improve education and health, infrastructure and communications, and regulations for private enterprise as the country becomes better off along the way.

The experiences of three resource-rich countries that have implemented somewhat successful or less successful industrial policies are introduced below.

Finland

Finland is a small, open economy with a population of around 5.4 million and per capita income of about US$37,660 (2011 purchasing power parity [PPP]). The country has implemented a series of industrial policies, which seem to have worked well.

Finland used to be an agricultural economy. From the 1950s through the 1970s, Finland's natural resources-based state-owned enterprises were profitable, and they reinvested the profits to support private investment in capital equipment and partly to start public companies in "strategic" sectors of the economy: basic metal and chemicals, energy, and downstream forestry industries such as paper and pulp.

When the oil crisis hit in the 1970s, policies became export oriented. This required a shift in the industrial structure to advanced machinery and electronics and an emphasis on higher value-added segments of the downstream forestry industry.

The structural change was supported by financial deregulation, enhanced research and development of new industrial technologies, and transformation of education. Meanwhile, institutions to support the implementation of science and technology were established.

At the beginning of the 1990s, when the economy plunged into a deep recession prompted by the collapse of trade with the former Soviet Union and other factors, Finland formulated a new industrial policy that took a "systemic view," emphasizing the interdependency among research organizations, universities, companies, and industries, particularly on knowledge development and diffusion, innovation, and industrial clusters.

As technological progress and globalization started to accelerate in the early 1990s, the national innovation system and industrial clusters became the cornerstones of industrial policies focused on information and communications technology, which benefited companies such as Nokia. Nevertheless, the recent decline of Nokia in the mobile device industry also casts doubt on the agility and longer-term sustainability and effectiveness of industrial policies.

Saudi Arabia

Saudi Arabia has a population of 28 million and a per capita income of about US$24,700 (2011 PPP). Since the first discovery of oil in 1938, Saudi Arabia's economy has suffered from Dutch disease. Starting around the 1970s, the government has sought to diversify its economic structure. The government follows five-year development plans, the first few of which focused on establishing physical infrastructure as a first step, whereas the later plans emphasized diversification. However, the results of these diversification plans are mixed.

Early industrialization efforts prioritized using public sources in developing oil and oil-related industries, including steel, fertilizer, oil refineries, and petrochemicals, which turned out to be very successful. These were consistent with the country's main assets. Indirect public support, such as tax holidays, preferential access to credit, favorable leasing of industrial sites, and other incentives, was extended not only to the priority sectors but also to other industries, with the aim of promoting the development of non-oil industries (including food processing, furniture making, and other consumer goods production industries). An industrial cluster program was launched at the start of this century targeting five industries: minerals and metals, automotive, plastics and packaging, home appliances, and solar energy.

The government has invested oil earnings in physical capital and created impressive infrastructure and capital-intensive industries.[a] However, industrial policies to support other sectors have been less successful. Its recent investments in human capital to make unskilled or semiskilled labor-intensive industries competitive have yielded fewer results.

Chile

Chile is a small, open economy with a population of about 17 million and per capita income of about US$16,330 (2011 PPP). Chile is the world's biggest copper producer. During the global depression of the early 1930s, the government was encouraged to explore alternative industries. Forestry first gained policy makers' attention. Today, wood and wood-derived products are Chile's second-largest exports after copper.

Besides forestry, during the 1970s-1990s the government pursued sector-neutral policies to encourage new enterprises, diversify exports, and support small and medium enterprises. However, even though government support was sector neutral, the success stories have tended to come from resource-based industries, such as wine and salmon cultivation.

After the Asian crisis of the late 1990s, innovation became the primary focus of industrial policies in Chile. The government announced "strategic industries" for targeting, departing from sector neutrality. But these industries consisted only of natural resources-based industries.

However, an assessment in 2010 found the national innovation strategy's structure and elements of the strategy, including the creation of priority clusters, to be appropriate, but that implementation has been slow.

Chile has not carried out massive investments using the "windfall," as many resource-rich countries do, preferring to keep the government size small, in accordance with a liberal ideology. The proceeds were instead absorbed in the sovereign funds.[b]

Investments in human capital development in Chile have been neither large nor effective, which was considered a key factor that impeded technology adoption. Low taxation is conducive to private investments in sectors in which Chile has a natural comparative advantage, but private sector activities have not induced a high rate of labor participation, particularly among women. Chile's public institutions, generally considered the best in Latin America, are strong enough to manage its sovereign wealth fund well but not enough to implement its innovation policy aimed at economic development.

Source: World Bank based on Maloney (2002) and Gill et al. (2014).
Note:
a. The government established the Saudi Basic Industries Corporation (SABIC) in 1976, which was tasked with developing oil-related industries. To facilitate SABIC's and other industrial activities, it also created a royal commission in 1975 to develop Jubail and Yanbu, state-of-the-art industrial cities on the Gulf and Red Sea coasts. Also in the mid-1970s, the government gradually acquired shares in the Arabian American Oil Company (now Saudi Aramco, officially the Saudi Arabian Oil Company) and nationalized it completely in 1980. These are all examples of successful industrial policies.
b. The Copper Stabilization Fund and its successor, the Economic and Social Stabilization Fund, do not make investments but support countercyclical fiscal policies, helping to reduce the impact of volatility injected into the economy by the fluctuations in the copper price. The other sovereign fund, the Pension Reserve Fund, is essentially a savings fund with no withdrawals allowed for a minimum of 10 years.

Enhancing the Supply of Labor through Better Skills and Work Incentives

Job creation and widespread access to the labor market would benefit from certain measures to improve the employability of the workforce. Our analysis has found that the education and training systems could be enhanced to provide workers, present and future, with better skills to meet the needs of the emerging economy. In addition, reforms could improve the employment prospects of social assistance recipients.

Upgrading the Quality and Relevance of the Skills Development System

Use program and labor market information to make HEIs and TVET institutions relevant to labor market demands and to the country's development priorities. The importance of developing an LMIS in Mongolia for providing labor market information to various stakeholders, including education and training institutes, is discussed in the next subsection. HEIs and TVET institutions also need to regularly undertake their own analysis in addition to conducting consultations with employers and other stakeholders to understand the trends and underlying factors for graduate employment outcomes, skills mismatches, and the relevance of the programs they offer.

Introduce effective incentives for strengthening the link between educational and training institutions and the labor market. Such incentives are needed to enable educational institutions to align their programs and enrollments in view of labor market demands and the country's economic development priorities as well as forging productive and innovative partnership with the private sector. The financing mechanisms for TVET could also be reformed to provide incentives for enrollment and program alignment with the labor market trends.

Establish a results-driven and genuine partnership with the private sector for skills development. In case of HEIs, various consultative bodies exist at the national, sectoral, and institutional levels, but they are often seen as more formal than genuine partnerships, and decisions taken are largely subject to government authority. The modalities of effective relationships with industry have not yet been built. Private sector engagement needs to be supported with a legally prescribed status, mandate, and accountability for professional and trade associations. This would facilitate the growth and maturity of these institutions and increase the impact of stakeholder engagement for both HEIs and TVET institutes. Professional associations are needed to serve in institutional and national governing bodies and in panels of large-scale development and research programs to develop occupational standards, enhance curriculums, and undertake peer reviews of institutional and program performances, among others.

Improve the school-to-work transition of graduates by linking students to workplaces and the labor market via, for example, internships, cooperative learning, and job placements. Currently, HEIs do not offer sufficient support to students with respect to services and learning programs oriented toward employment, such as career guidance, internships, cooperative learning, and job placement. Higher education curriculums need to offer flexibility and choices for learning, including team-based and experiential learning, learning experiences for cultivating the most-needed soft skills (communication and teamwork skills), cognitive skills (critical thinking, analytical, and planning skills), and professional skills (foreign language proficiency, etc.). More institutional autonomy would facilitate reforms along these lines. TVET institutes would also benefit from assessing how well services and programs build links with the labor market.

Further develop occupational standards in partnership with employers. This is especially important for increasing the relevance and quality of TVET programs. Also, the capacity of training institutes to design and deliver competency-based curricula that are informed by occupational standards or employer demands needs to be built. Through effective engagement and consultation with employers, the TVET providers need to be

able to identify the skills gaps of students or graduates and make efforts to constantly improve their curriculum, internships, or on-the-job training delivery.

Enabling Social Assistance Beneficiaries to Work

Intermediation services, including counseling and job search assistance, can play an important role in helping social assistance beneficiaries find employment. ALMPs, including preemployment and vocational training, on-the-job training, intermediation, counseling, and wage subsidies can also boost the capabilities and employability of social assistance recipients. Individuals unable to access formal jobs, such as those in rural areas, may also be served via programs promoting productive self-employment. This section provides some recommendations for activation of social assistance beneficiaries, while more detailed recommendations on ALMPs are provided later in this section.

Accompany activation services with tailored social services that address barriers to employment. Activation services targeted at social welfare recipients are most effective when they are accompanied by tailored social services, thereby addressing multiple barriers to employment. Social welfare recipients with marginal labor market attachment tend to be vulnerable and face multiple overlapping barriers to employment, with the result that employment services by themselves may not be adequate. Complementary services may be necessary for many beneficiaries to move from welfare to work. For this reason, in the short- and medium-term, PES would need to be equipped to refer individuals to services they do not provide, such as social care, child care, elderly care, fee waivers for health and education services, finance, housing subsidies, transportation subsidies, substance abuse counseling, or support accessing identification and basic legal documents, among others. Providing financial literacy education can also help beneficiaries achieve independence from social welfare.

Incentivize Food Stamp Program beneficiaries' entry into employment (or staying in employment). Stopping a benefit when a recipient's income rises can be a disincentive to working. Instead, allowing benefit recipients to continue to temporarily receive a portion of monetary benefits upon finding employment can help ensure adequate incentives for finding employment. Reductions in benefit levels over time, rather than immediate stoppage of benefits, can also prepare beneficiaries to become self-sufficient upon their exit from the program.

Address the additional barriers to employment faced by women via complementary social services. Qualitative evidence shows that lack of access to quality child care services poses a significant barrier for Mongolian women to join the labor force (Schmillen and Sandig 2018). In some cases, overcoming such a barrier may be all that is needed for female (or even male) social assistance beneficiaries to become employed and also earn higher wages (Altansukh et al. 2019).

In the long run, implement a holistic, tailored approach that assesses and addresses barriers at the household level via a case management approach. A tailored approach requires assessing an individual's employability and readiness to participate in activation services. Unless beneficiaries can be referred to and can access needed social services, they may not be ready to participate in activation measures.

Ensuring that an individual's barriers to employment are lifted requires the personalized interventions of agencies via a case management approach. Such an approach could also tackle the household as a whole rather than just the individual. However, this would require the development of case management tools and knowledge to effectively address barriers via the delivery of multiple complementary services. Chile Solidario provides a good example of a case management approach that considers the multiple barriers social assistance recipients may face (box 5.2).

Box 5.2. A Holistic Case Management Approach to Help Social Assistance Beneficiary Households Become Self-Sufficient: The Case of Chile Solidario

The Chile Solidario program is an example of a case management approach that considers the multiple and interrelated causes of poverty at the household level and provides tailored services. The program provides personalized support by a social worker who works with beneficiary families to assess their needs and help develop a "family contract" outlining a personalized plan for a family to exit extreme poverty by improving human capital assets, housing, and income-generation capacity.

During a two-year period, families receive cash transfers at a decreasing rate, and, most importantly, they receive continued psychosocial support and preferential access to psychological and social services, guaranteed subsidies, and public social programs. The program also works on the supply side by ensuring coordination among different programs, based on the understanding that isolated and sectoral programs are not able to address the multiple and interrelated causes of extreme poverty. Instead, the program aims to bundle services tailored to meet the specific needs of households, thereby enhancing their capacity to become self-sufficient.

Note: For more information on Chile Solidario, see Glasso (2015) and World Bank (n.d.).

Introduce adequate coordination of welfare and employment policies. Adopting such a holistic, case management approach requires coordination across policies and institutions. Welfare and employment policies must be subject to adequate coordination at all institutional levels for planning, implementation, and delivery of services. Mongolia may consider one of three choices: merging employment assistance with the administration of social benefits, creating separate institutions charged with coordinating delivery of labor market and income support programs, or setting up integrated labor and social assistance information systems.

Ensure that a robust monitoring and evaluation system is in place for activation policies. Adequate monitoring and evaluation includes monitoring of inputs, activities, outputs, and outcomes as well as conducting process and impact evaluations and cost-benefit and cost-effectiveness analyses.

Set realistic expectations for welfare-to-work programs where unemployment is high and where access to high-quality programs and services is not fully available. The availability of jobs is a necessary condition for successfully activating social welfare

beneficiaries. Rural areas may prove to be particularly challenging for welfare-to-work strategies, especially in the short run. Over time, stronger social and employment services may help beneficiaries to access employment. In some cases, helping them migrate to where employment opportunities and social services are available could be considered.

Improving the Functioning of the Labor Market through More Effective Labor Policies

Reforms to some labor policies could make the labor market more efficient and offer more support to workers. Labor policies play an important role in addressing imperfections in the labor market, which can impede the matching of job seekers with available jobs and also may not provide adequate protection for workers. Reforms are suggested in the areas of labor market information, ALMPs, unemployment benefits, and labor regulations to improve the functioning of the labor market.

Building a Comprehensive LMIS

Consider an open-access labor market information web portal and establish an analytical unit (often referred to as a labor market observatory) responsible for managing the portal and generating labor market information. The critical missing part of the LMIS in Mongolia is the external subsystem, which serves the needs of all labor market actors (stakeholders). Accordingly, the main short-to medium-term priority is to develop a system that is open and easily accessible to the general public and that contains information that is relevant and understandable for the target audience.

Develop the labor market information web portal (labor market observatory) as a one-stop shop for labor market information. It would be separate from both the eJob platform and the ministry's webpage. It would be open to the general public, and its objective would be to provide information relevant to the labor market actors outside of government.

The main functions of the labor market observatory would include the following:

- Compiling labor market data coming from various sources (NSO, MLSP, Ministry of Education, GOLWS, eJob, etc.);
- Defining and producing a set of key labor market indicators that can be generated using existing data;
- Monitoring labor market conditions and trends using the key labor market indicators;
- Turning existing data into information by presenting and interpreting the data so that they are relevant and intelligible for the intended users;
- Making labor market information available by regularly publishing it on the public LMIS portal and disseminating it to target audiences using other media (for example, infographics, leaflets, and social media);
- Initiating new data collection to fill information gaps; and
- Interacting with the stakeholders to best respond to their information needs

Determine the governance structure of the labor market observatory. International practice varies in this respect; there is no standard model. The observatory could be an independent institution, or it could be under one of the government ministries or agencies (most often under the MLSP or PES). One option to be considered is to establish the observatory as a separate unit within the RILSP.

Improving ALMPs

Tackle the constraints related to EPF funding stability and interministerial fund transfers. Predictable and timely fund transfers are essential for offering ALMPs to the unemployed and job seekers throughout the year. The Employment Promotion Law (2011), which governs the ALMPs, is expected to be revised. The revision of the law and related Cabinet regulations should prioritize the tackling of ALMP funding-related constraints. Also, an effective interministerial dialogue needs to happen to address operational constraints preventing timely fund transfers to the EPF.

Introduce employability and skills development programs that are responsive to urban labor market needs. As Mongolia urbanizes and shifts to more formal sector jobs, employability and skills development programs programs will need to be more responsive to the needs of the urban labor market. ALMPs currently are heavily tilted to support self-employment and microenterprises, with little focus on skills training. The program mix could be better aligned with emerging trends-notably, the increasing concentration of poverty in UB and the shifting of employment to more urban wage jobs. The current focus on self-employment and non-UB areas[67] may reflect the government's strategy of decelerating migration to UB and promoting local employment. Nevertheless, the effectiveness of this policy should be assessed in view of the changes in key indicators, such as unemployment and poverty reduction at the national and local levels.

Introduce a systematic approach for enhancing monitoring and evaluation of ALMPs. The MLSP may consider developing and implementing a strategy for enhancing the monitoring and evaluation system for ALMPs and reflecting the information in program design and implementation. This strategy could be part of an improved LMIS in general. The MLSP is redeveloping its LMIS (internal and service based) with funding and technical support from the World Bank, and this process is expected to contribute to PES that are more customer oriented and efficient. This should pay close attention to enhancing service and program output indicators and the characteristics of ALMP applicants, enrollees, graduates, and dropouts as well as monitoring and assessing the performance of PES offices. The transparency of results communication and reporting needs to be much improved.

Strengthen PES staff capacity for effective counseling of the unemployed. The capacity of PES officers to profile job seekers, develop individual action plans, and provide tailored counseling support needs to be improved. Capacity-building programs need to be planned and implemented on a continuous basis using both traditional and digital means. Also, the capacity of the GOLWS for effectively implementing and monitoring of the ALMPs and staff capacity-building programs needs to be supported

[67] Two-thirds of all ALMP beneficiaries are non-UB residents (70.6 percent in 2019).

with sufficient staffing and resources. In view of digitizing welfare services and improving the job-matching platform and the LMIS for ALMPs, the role of community-level (*soum* and *khoroo*) employment and welfare service officers compared with district- or aimag-level employment offices need to be reviewed and adequately defined to balance the delivery of employment and welfare services and ensure effective links between them.

Develop effective mechanisms for skills training for unemployment benefit recipients. The current system should be able to identify those recipients most in need of vocational training, and the training funding and implementation mechanism should be enhanced, as should the transparency of training implementation and the communication of results. Further, the issue of linking vocational training financing under the Unemployment Insurance Fund and the EPF needs to be discussed.

Making Labor Market Regulation More Effective through Better Enforcement

Strengthen the labor inspection system with legislative reforms. This should be done by removing the Law on State Inspection's requirement of advance notice to employers before inspection, making it consistent with the new Labor Law, and introducing confidentiality of the source of any complaints concerning labor regulation violations. Under ILO Convention No. 81 and Convention No. 129, labor inspectors must keep the source of any complaint confidential and should not notify the employer that an inspection was made due to such a complaint. Although efforts to amend legislation will take time, the government should step up its efforts to ratify these two labor inspection conventions.

Increase both administrative capacities and financial allocations, thereby improving the enforcement mechanism. Inspections could be carried out more frequently, not waiting for requests or complaints from individuals and legal entities. Allocating more resources should be considered to increase the number of registered labor inspectors and train them to ensure they have sufficient knowledge and capacity for enforcing the legal provisions.[68] In addition, the MLSP can continue cooperating with other ministries, the Confederation of Mongolian Trade Unions, and the Mongolian Employers Federation to provide training to enhance awareness of legal obligations among workers and employers.[69] The enforcement capacity must be strengthened to facilitate its effective implementation and ensure full respect for relevant legal provisions.

Storing and updating information collected during inspection visits in a shared information system easily accessible by both the MLSP and GASI. The frequent exchange of information allows for the monitoring and analysis of labor inspection data and readjustments of labor policies and inspection systems.

[68] The number of inspectors can be determined by criteria specific to the national context (ILO 2020). In Mongolia, there were 85 registered labor inspectors in 2020. This means there were around 14,000 employed population per 1 inspector, or around 8,300 waged workers per 1 inspector, in Mongolia.

[69] According to the new Labor Law (Article 161.2), trade unions and nongovernmental organizations can monitor the implementation of the law and the application of laws. Trade unions or other worker representative organizations can be involved in the application of labor regulations by helping workers understand their rights or submitting complaints if their rights were violated.

Increase the maximum length for fixed–term contracts. The maximum cumulative duration of fixed-term contracts is important for employers to adjust human resources in response to their operational needs. Under the new law, Mongolia sets 2 years as the maximum length of fixed-term contracts. While the new law enhances workers' protection, it can affect the flexibility of labor markets and thereby job creation and Mongolia may therefore want to consider a longer maximum length.

Reforming UI to Improve Worker Protections

Introduce parametric reforms to the the UI scheme after conducting analysis to understand the actuarial and economic impacts.[70] Some of the parameters of the UI scheme could be revised, guided by actuarial projections that can assess the impact on costs as well as the adequacy of benefits. One key change to consider is reducing the requirement for continuous contributions from the current nine months. This is a long duration for eligibility, especially given the seasonal nature and volatility of Mongolia's economy. If affordable, the duration and level of benefits could also be reviewed with an eye to increasing generosity; as noted, these are low by international standards and limit the protections offered to workers who have lost their job. In addition, the relatively short duration may not be long enough for some unemployed workers to find new jobs. Another parametric reform should be to establish a lower cap on the covered wage applicable for contributions and benefits. This would make it possible to have a longer duration of benefits at an affordable cost.

Introduce stronger links between UI and employment promotion by more rigorously enforcing a requirement for UI benefit eligibility to show evidence of actively searching for employment. Many of the considerations were raised in the earlier discussion on activating social assistance recipients. Although this encompasses a number of measures, one worth noting is the importance of more rigorously enforcing a requirement for UI benefit eligibility to show evidence of actively searching for employment.

[70] For more detailed diagnosis of the unemployment insurance system and policy reform options, see appendix B.

APPENDIX A. SUMMARY OF INTERNATIONAL EVIDENCE ON THE IMPACTS OF ALMPS

ALMP category	Summary of impacts	Comments
Job creation through wage subsidies or payroll tax exemptions	• Can have positive employment effects, especially when well targeted, but effects may be short term and not go beyond the subsidy period	• Overall effects are likely overestimated because of displacement/substitution and windfall effects • Nonetheless, can bring targeted groups (e.g., youth, long-term unemployed) into employment even where true aggregate employment impacts are not positive
Training	• Any positive effect is more evident on employment than wages • Impacts for youth are less clear than for prime-age workers	• Effectiveness benefits from on-the-job training and private sector involvement • Program participation and effectiveness improve if potential constraints due to accessibility, credit, and child care are addressed • Effectiveness increases when complemented by job placement support • Impacts are less positive with short-duration programs • Mixed evidence on whether impact differs by gender • Mixed evidence on whether impact becomes more positive over time
Employment services, including job search assistance and intermediation services	• Generally positive impacts on employment and earnings, although impacts are largely short term • Most effective for workers "closer" to the labor market • Costs are low, so cost-benefit ratio is usually good	• Not much evidence in developing countries, where they have a very small role and limited reach • Not very effective for disadvantaged workers with more severe barriers • Information technology is opening up new possibilities for employment services
Self-employment support	• Limited evidence on employment and income effects • Some studies suggest benefits greatest for men and the better educated	• Limited number of studies, and few follow impacts over longer term • Combination of technical and financial support leads to better results than just financial support • An attractive option for only a small minority of the workforce

APPENDIX B. EVALUATION OF UNEMPLOYMENT INSURANCE IN MONGOLIA

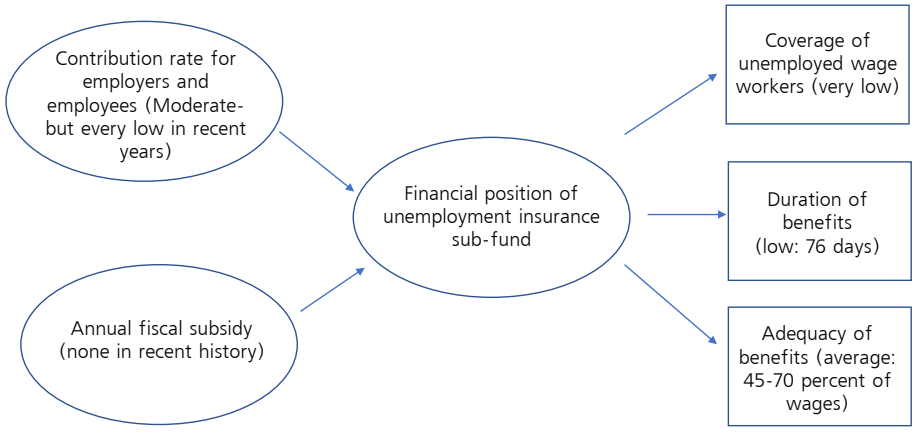
Assessment: Architecture and Parameters

Mongolia has a one-pillar contributory UI scheme structured to provide benefits for workers with labor contracts meeting the vesting rules but provides no additional protections. Most countries with contributory UI schemes also have some kind of noncontributory means-tested social assistance scheme for poor and vulnerable groups who do not qualify for UI or have exhausted their benefits. In addition, no framework is in place for supplementary UI benefits offered by the state. Likewise, no facility for informal workers exists, although this is not common worldwide.

The parameters of the existing UI scheme provide a modest defined benefit at a modest cost. The scheme has a defined benefit design and is financed on a pay-as-you-go (PAYG) basis. The contribution rate is very low by international standards: 0.2 percent of wages for employers and 0.2 percent for employees, with a 15 percent discount provided every three years in which an employee does not make a claim. The voluntary insurance does not offer unemployment insurance. The vesting rules require that a beneficiary has paid the UI premium for 24 or more months, including the last 9 consecutive months prior to becoming unemployed. An insured person can receive an unemployment benefit again if he/she paid the UI premium for an additional 12 months, including the last 3 consecutive months prior to becoming unemployed. The UI benefits provide between 45 percent and 70 percent replacement rate (depending upon the individual's period of employment) for a short period of time (up to 76 days), with a minimum benefit of at least 75 percent of the minimum wage.[71]

There is a tradeoff between the affordability of contributions and fiscal costs and the coverage and adequacy of benefits. This tradeoff is illustrated in Figure B.1.

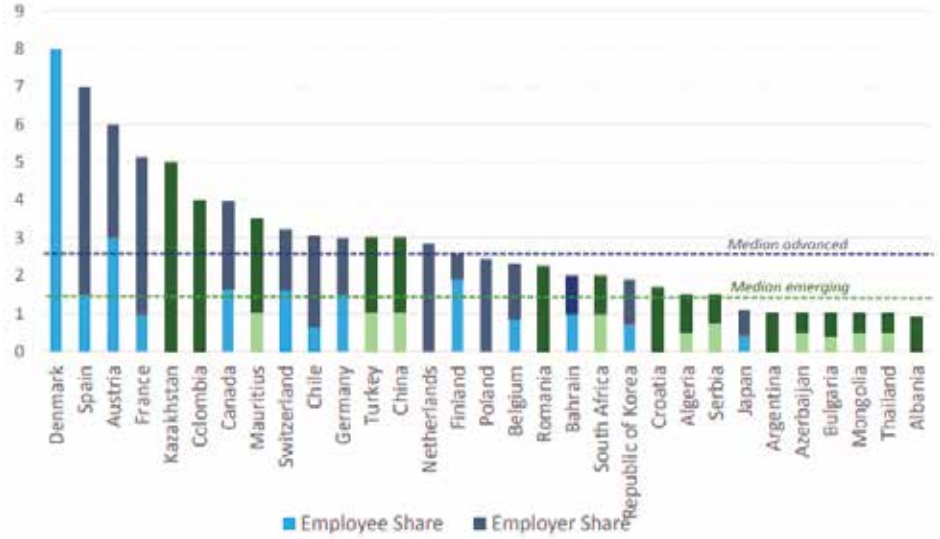
Figure B.1. Tradeoffs between Affordability and Adequacy of UI



[71] The benefit rate is applied on the average past three wages: (i) up to 5 years of insured employment: 45 percent; (ii) 5-10 years: 50 percent; (III) 10-15 years: 60 percent; (iv) 15 years and above: 70 percent.

The contribution rate of 0.2 percent for both employers and employees is very low by international standards (figure B.2). These rates had been reduced from a rate of 0.5 percent for both employers and employees. The low contribution rate is consistent with the low coverage of the unemployed and the low duration of benefits.

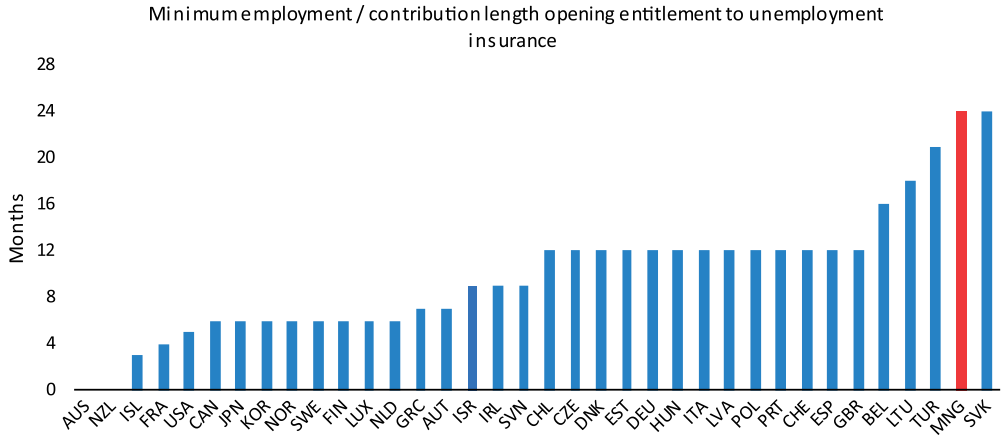
Figure B.1. Contribution Rates for UI (Percentage of covered wages)



Source: Asenjo and Pignatti 2019.
Note: The figure does not reflect the minimums or caps on covered wages applicable to each country. The Mongolian figure reflects the 2019 contribution rates of 0.5 percent for both employers and employees.

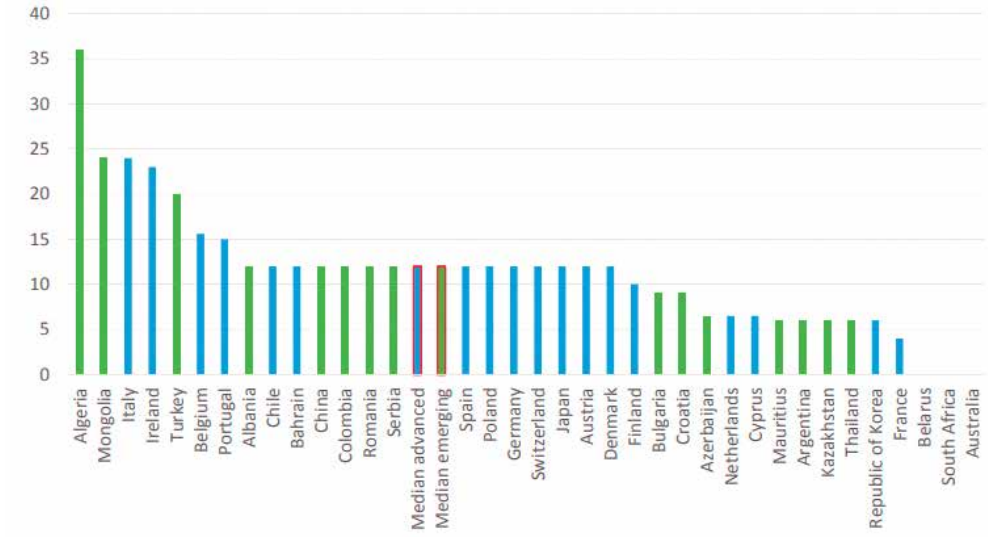
Mongolia requires a long period of employment for UI benefit eligibility (24 months), and the requirement for 9 months of continuous uninterrupted work likely contributes to the low level of coverage of the unemployed. This requirement is very high when compared with either OECD countries or a sample of developed and developing countries, as indicated in figures B.3 and B.4. In addition, Mongolia's formal workers may have both short job tenures and climate-influenced seasonality of employment, both of which would make it difficult to satisfy the uninterrupted work requirement and thus contribute to the low coverage.

Figure B.3. Minimum Contributions for UI Benefit Eligibility in OECD Countries



Source: OECD 2018. https://www.oecd-ilibrary.org/social-issues-migration-health/how-demanding-are-eligibility-criteria-for-unemployment-benefits-quantitative-indicators-for-oecd-and-eu-countries_5jrxtk1zw8f2-en

Figure B.3. Minimum Contributions for UI Benefit Eligibility in Select Advanced and Emerging Countries (Months)



Source: Asenjo and Pignatti 2019.
Note: Blue columns refer to "advanced economies", and green columns refer to "emerging economies".

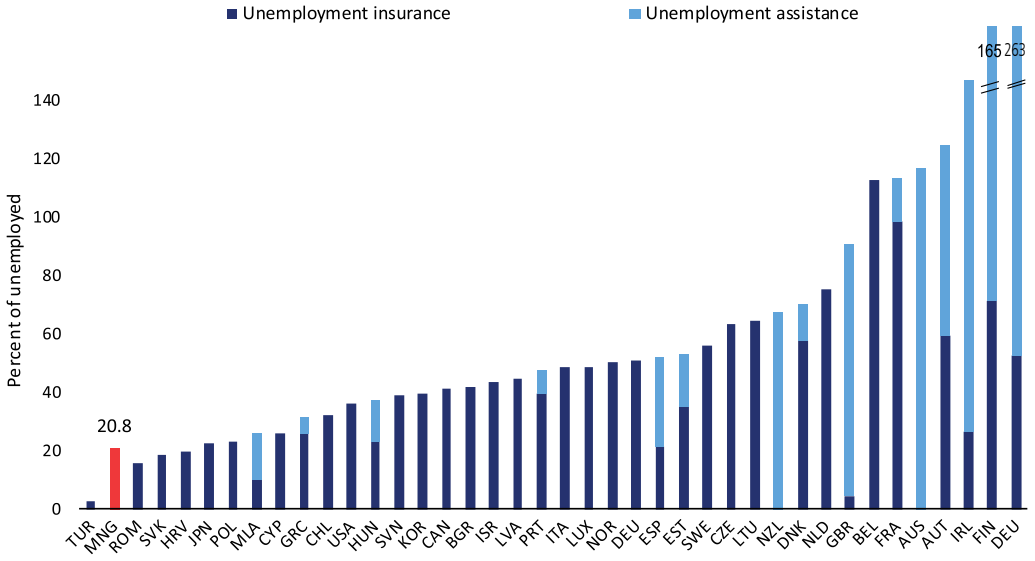
A large share of the Mongolian labor force is covered by UI. About 76 percent of the labor force had contributed to social insurance, including UI, by the end of March 2022. This is a high level, especially given Mongolia's level of per capita income and important share of informality in the labor force.

Yet only about one-fifth of the of the unemployed qualified for UI benefits. Such pseudo coverage of the unemployed was low-about 18-21 percent prior to the COVID-19 pandemic and somewhat higher thereafter (figure B.5). Looked at comparatively, this level of pseudo coverage was very low when compared to OECD countries (figure B.6), though it is higher when compared with the median of a sample of emerging/ developing countries for which we have data (figure B.7).

Figure B.4. UI Beneficiaries and Coverage of the Unemployed (Beneficiaries and percentage of the unemployed)

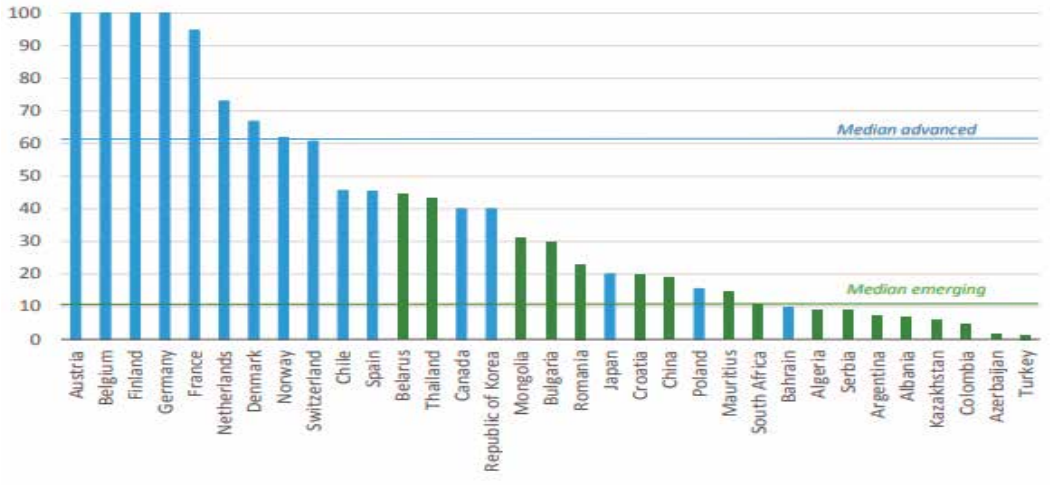
Sources: Batchuluun 2022; Ministry of Labor and Social Protection (unemployment benefit recipient numbers for 2015); Mongolian Statistical Information System, National Statistics Office of Mongolia (unemployment benefit recipient numbers for 2017-21).

Figure B.5. Pseudo Coverage to Coverage of the Unemployed by UI and Unemployment Assistance in OECD Countries



Source: Social Benefit Recipients (SOCR) Database, Organisation for Economic Co-operation and Development, Geneva, https://www.oecd.org/social/social-benefit-recipients-database.htm; Statistical Database, National Statistics Office of Mongolia, Ulaanbaatar, www.1212.mn.

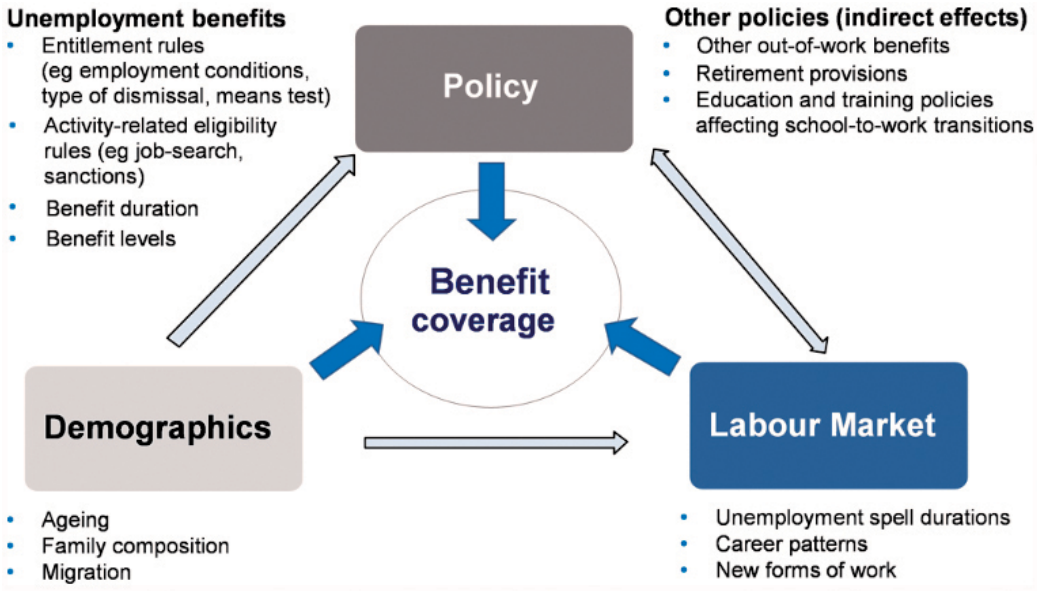
Figure B.7. Pseudo-Coverage to Coverage of the Unemployed by UI in Select Advanced and Emerging Countries (Percentage of the unemployed)



Source: Asenjo and Pignatti 2019.

Further work is needed to better discern a more precise explanation for the relatively low pseudo coverage despite high labor force coverage. There are several factors that influence UI benefit pseudo coverage (figure B.8). These include the benefit eligibility rules, including the duration of required contributions and the adequacy of benefits including their duration and benefit level. Also important are the labor market conditions and the level of unemployment.

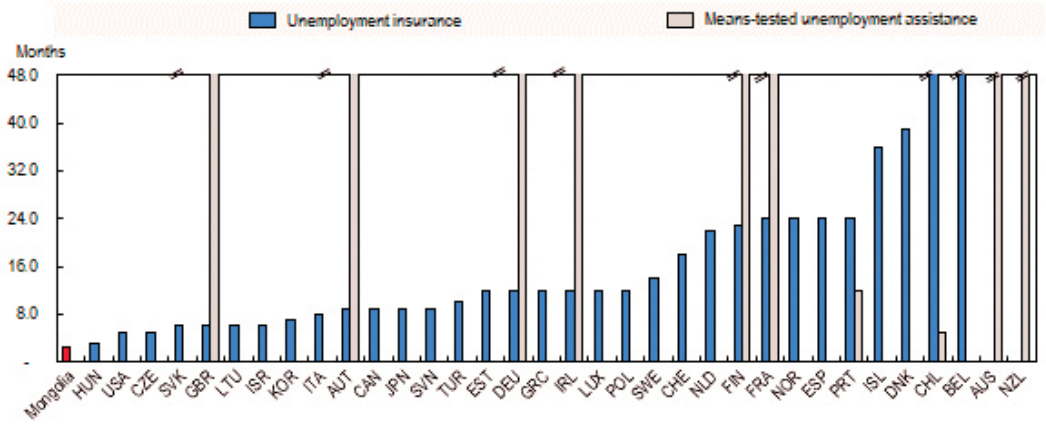
Figure B.8. Factors Influencing UI Benefit Coverage



Source: OECD 2018.

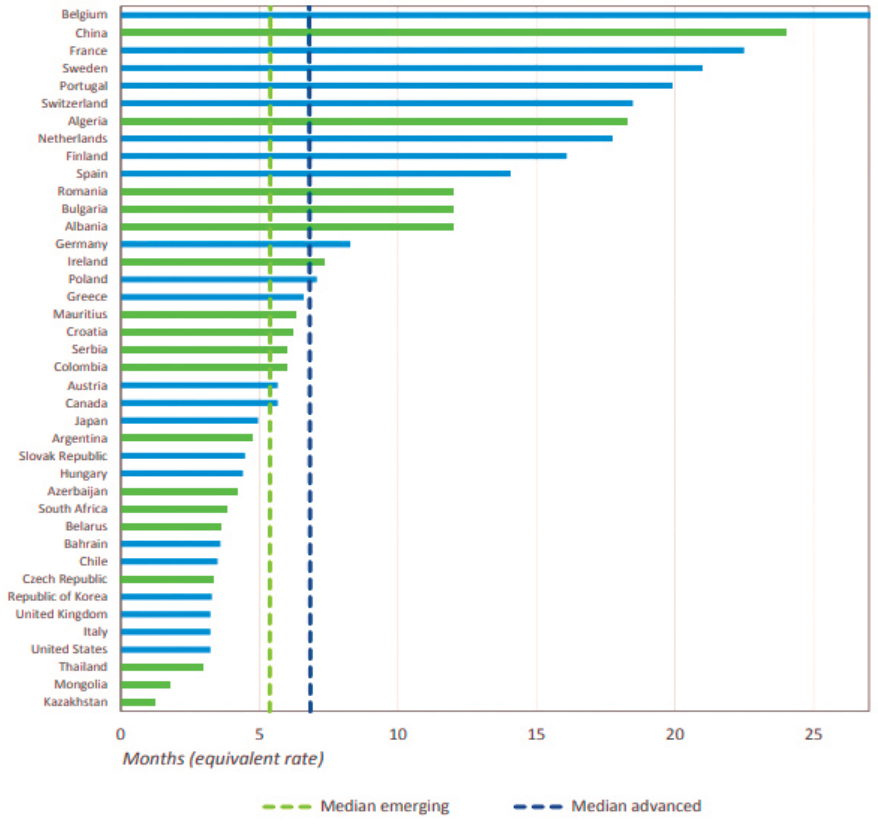
UI beneficiaries receive benefits for up to 76 days, a duration that is very low when compared with both OECD and emerging countries (and figure B.10). The low duration is a key reason why the contribution rate can be so low, but it also is too low to be sufficient for the job search period.

Figure B.9. Maximum Duration of UI Benefits in OECD Countries



Source: OECD 2018.
Note: Mongolia data are based on the Mongolian law.

Figure B.10. Maximum Duration of UI Benefits in Advanced and Emerging Countries



Source: Asenjo and Pignatti 2019.

The UI benefits provide 45–70 percent replacement rate, depending upon the individual's period of employment, which can be considered adequate from a number of metrics, although such benefits are for a short duration. By law, the minimum benefit has to be at least 75 percent of the minimum wage, which can be binding and very often will provide for a much higher replacement rate for low-income workers. Although a 45-70 percent replacement rate is relatively high by international standards, the average benefit in 2020 was just over the individualized national poverty line.

The UI scheme is linked to employment promotion activities, particularly to vocational training and skills development programs. There are, however, substantial weaknesses in the skills training and ALMPs.

Reform Options

Mongolia could strengthen the protection of the unemployed by reforming some of the parameters in its UI scheme as well as by supplementing its mandatory contributory scheme with social assistance for the unemployed and a supplementary UI savings account scheme. Many countries employ a three-pillar approach to UI-utilizing a contributory scheme for formal sector workers; providing some level of noncontributory social assistance to the poor unemployed, which may or may not supplement cash transfers for the poor; and finally establishing a system for tax-enhanced unemployment savings accounts. Each of the schemes in this three-pillar approach provide different benefits and covers different risks: the contributory scheme provides some limited income smoothing during a period in which unemployed individuals seek alternative work as well as links to job placement; social assistance to the unemployed seeks to reduce the adverse welfare effects of unemployment for the poor and therefore prevent a prolonged economic and social impact; and supplementary UI savings can supplement UI benefits, provide benefits for individuals who may not qualify for UI benefits or whose benefits may have run out, and can provide a means of unemployment support for workers who do not have formal wage employment.

Parametric Reforms to the Existing Scheme

Whether the authorities choose to adjust the parameters of the UI scheme, it is essential to undertake an actuarial assessment to determine the sustainability under existing parameters, simulate the effects of economic volatility on costs, and evaluate reform options, such as changes to required contributions. An actuarial analysis can spell out the sustainability of the existing scheme, evaluate the potential fiscal costs during economic downturns, and weigh the costs and benefits of changes to parameters, such as reducing the vesting requirements and/or extending the benefit period.

Adjusting the contribution rate and the benefit level is a social policy choice that the authorities would need to consider in view of other forms of social insurance and social assistance. It would be possible, for example, to increase the duration of

benefits along with an increase in the contribution rate.

We believe that it is essential to reduce the minimum requirements for benefit eligibility as a means of increasing the proportion of the unemployed who are provided benefits. A review of covered employment patterns can assist in making an informed choice in reducing required duration of contributions while adjusting the contribution rate as necessary to offset the anticipated increase in benefit payouts.

The minimum benefit level needs to be reviewed and revised. Although the governing law indicates that the minimum benefit should be at least 75 percent of the minimum wage (since 2015), the minimum is revised on an ad-hoc basis. It would be much more useful to set the minimum as a fixed percent of the median covered wage to prevent the substantial annual adjustments and the uncertainty over the minimum benefit.

Another recommended option to improve the equity of the scheme is to limit the contributions and the benefits to a proportion of the median covered wage. The pension insurance scheme limits the reference wage for contributions and benefits to 10 times the minimum wage. The problem with using the minimum wage as a reference point is that this amount is not automatically adjusted, and the relationship between the minimum and the median fluctuates substantially over time. Many developed countries have a periodic annual adjustment in the maximum reference wage.

Much stronger links are needed between UI and employment promotion.[72] Although this encompasses a number of measures, one worth noting is the importance of more rigorously enforcing a requirement for UI benefit eligibility to show evidence of actively searching for employment.

Social Assistance for the Poor Unemployed

The authorities could introduce a means-tested unemployment assistance program to supplement the Food Stamp Program for those qualifying unemployed who are also living in households below the poverty line. The Food Stamp Program covers less than a third of the poor and provides benefits that are a fraction of the poverty gap for Mongolians living under the poverty line. Supplementing such benefits for a limited time can help many of the poor support themselves when they are without an income and avoid more long-term poverty and its consequences. Many countries have a means-tested noncontributory unemployment assistance program that aims to assist the poor and vulnerable unemployed, very often linked to measures to support such individuals in finding employment. Importantly, such a benefit can provide important support for those unemployed who do not qualify for UI benefits or whose benefits have run out.

[72] This issue is addressed in the draft report by Batchuluun (2022).

Options for a Supplementary Unemployment Savings Scheme

The authorities could consider tax-preferred defined-contribution UI savings accounts (UISAs) to supplement the existing PAYG defined-benefit scheme. Such accounts could be voluntary for workers without employment contracts and should be structured with low contribution rates to ensure affordability. Admittedly, the payouts from such accounts would be very low for most workers. Such accounts could be offered to both workers with employment contracts and informal workers on a voluntary basis. Account balances not utilized during unemployment could be accessed as severance, retirement, or during adverse health emergencies.

The authorities already have an individual account accounting system in place for notional individual pension accounts at the Social Insurance General Office. Although an individual account system exists, a system is not in place linking individual accounts with funds or securities that would be needed for funded individual accounts. The current version of the draft social insurance law indicates that 2 pp of the current 17 percent contribution rate will be earmarked to funded individual accounts for cohorts born after 1979. If such legislation were to be adopted, the infrastructure for mandatory individual accounts would be needed to support the funded individual accounts established. It is therefore conceivable that the institutional infrastructure needed for mandatory funded individual accounts could also support supplementary pensions and UI accounts.

UISAs could also be one vehicle to consider as a means for prefunding severance entitlements. According to Mongolian law, employers are required to pay laid off workers one to four months of contracted salary.[73] There is, however, limited means of enforcing this requirement. In addition, workers who are laid off from companies going bankrupt or facing severe hardship are not ensured of receiving the severance payment and thus are unprotected from such risks. Establishing a vehicle by which severance is prefunded and held in a third-party account is one means of protecting workers against such risks, and UISAs can serve a secondary role of prefunding severance payments.

UI for Informal Workers?

Providing contributory UI for the self-employed, nonwage agricultural workers, and other informal workers is challenging in both developed and developing countries.

- There is a substantial moral hazard incentive problem for a defined-benefit UI scheme for informal workers. The problem is mainly that workers who have volatile and temporary employment have a strong incentive for maximizing the payout from any such UI scheme. However, workers in contractual wage-based employment often have a strong incentive to stay employed as long as possible, and the employers are incentivized to retain workers in part to justify the investments they make in development and training.

[73] The schedule is as follows: (i) for 6 months-2 years of service, not less than 1 month of base salary; (ii) for 2-5 years of service, not less than 2 months of base salary; (iii) for 5-10 years of service, not less than 3 months of base salary; and (iv) for 10 or more years, not less than 4 months of base salary.

- From a worker's perspective, UI contributions may be onerous, even if they promise a periodic payout and links to training and job placement.

Mongolia would face similar moral hazard issues if it aimed to extend the current UI scheme to informal workers. A number of middle-income countries have experimented a hybrid design that includes a small noncontributory "solidarity fund" linked to contributory UISAs. The results have been mixed. Such design requires that the institutional infrastructure is in place for transparent, efficient, and well-governed UISAs.

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