

CHAPTER 1

REAL SECTOR

- 1.1 AGGREGATE SUPPLY
- 1.2 AGGREGATE DEMAND
- 1.3 LABOR MARKET AND BUSINESS
- 1.4 BUSINESS CYCLES

1. REAL SECTOR

OVERVIEW

The economy grew by 5.6 percent in the first half of 2024, reflecting robust economic activity. Growth in the transportation sector was driven by higher mining output and exports, while strong growth in the construction sector was fueled by engineering projects. As a result of government measures to support manufacturing through import tax exemptions on machinery and equipment, the manufacturing sector maintained growth for five consecutive quarters. Additionally, the retail, wholesale trade, and service sectors strengthened due to expanding domestic demand. The public sector wage hike had a spillover effect on the private sector, positively impacting employment and strengthening household purchasing power. Unfortunately, families with little or no labor income continue to struggle, and livelihoods in the countryside remain stagnant as the decline in the agricultural sector persists. With increasing production and employment, the economy's potential output is rising.

AGGREGATE SUPPLY

1. Growth has decelerated compared to the previous quarter, due to the worsening downturn in agriculture. The nominal GDP increased by 21 percent to MNT 37 trillion, and the real GDP by 5.6 percent to MNT 14.4 trillion in the first half of 2024. Growth decelerated from the previous quarter, mainly due to the agricultural contraction. Except agriculture, all economic sectors contributed positively to the growth. Despite the downward pressure from the contraction in agriculture, economic growth is expected to be around 5.6 percent in 2024, supported by an increase in service sectors' activities fueled by increased household consumption.

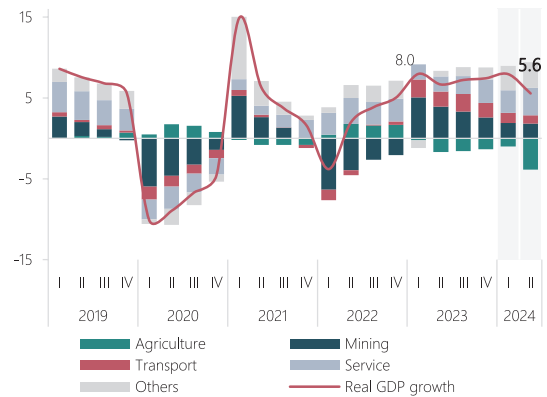
2. The mining output was pulled up by a continued increase in coal and iron ore production. The mining sector expanded by 15.4 percent year-on-year, contributing 1.8 percentage points to overall growth. Coal production reached 47.8 million tons, increased by 36 percent and iron ore production amounted to 4.6 million tons, which rose significantly by 47 percent from the same period the previous year. Meanwhile, copper concentrate production grew by 4.3 percent in the first half of the year, from a slight decline of 0.5 percent in the first quarter of 2024, largely due to increased production at Oyu Tolgoi. On the other hand, crude oil and gold production declined by 13 and 18 percent, respectively. Overall, the mining sector's performance in the first half of 2024 was in line with our projection.

3. Non-mining sectors grew by 4.2 percent in the first half of 2024, accounting for two-thirds of the total growth. This was driven by increased production in transportation, wholesale and retail trade, manufacturing, construction, and other services.

4. Higher coal exports have been supporting the transportation sector. The transportation sector expanded by 25 percent, contributing 1.0 percentage points to the growth, as the carried freight volume

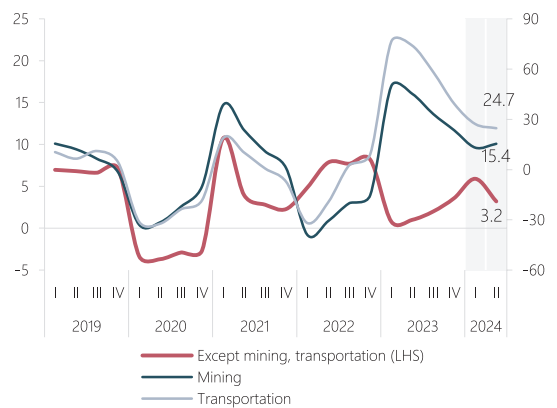
Figure 1.1 Real GDP growth

1. Real GDP growth contribution
(percentage points)



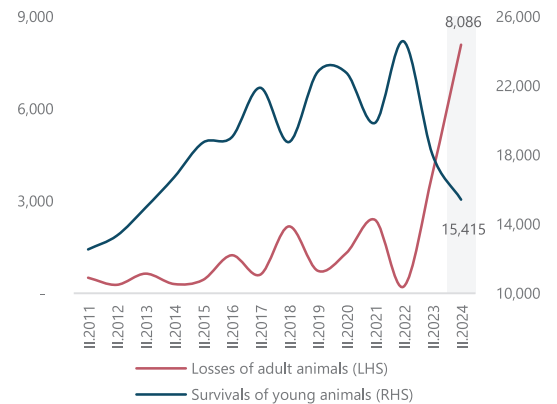
Source: National Statistics Office
Note: Contributions of sectors to the cumulative growth of real GDP.

2. Real GDP growth by sectors
(percent)



Source: National Statistics Office
Note: Cumulative growth of real GDP.

3. Animal losses and survival
(thousand heads)



Source: National Statistics Office
Note: Animal losses and survivals of the first half of each year.

reached 55.6 million tons, reflecting coal export volume rose by 27 percent compared to the previous year. Furthermore, respective increases of 13.2 percent and 8.9 percent in imports through railway and transit transportation are boosting the sector's growth and the sector's performance was similar to its projection.

5. The manufacturing sector sustained its growth momentum, supported by beverage production.

In the first half of 2024, the manufacturing sector expanded by 6.3 percent year-on-year, adding 0.4 percentage points to economic growth. This growth was largely driven by beverage production, which makes up about 25% of the sector. Particularly, water and soft drinks production grew by 15 percent, alcohol production by 59 percent, and juice production by 55 percent. However, meat production, which constitutes about 10-15% of the manufacturing sector, saw a 25% decline from the same period the previous year due to livestock losses from adverse weather conditions in 2023-2024.

6. The construction growth accelerated as general engineering construction increased.

Construction output increased consistent with projection, by 19.5 percent compared to the same period last year, contributing 0.3 percentage points to the growth. This expansion was primarily driven by the construction of railways and dams, ditches, cables, and networks in Ulaanbaatar.

7. The service sector expanded faster than expected and was the biggest contributor to the growth.

The wholesale and retail trade is the largest activity in the service sector and expanded by 6.8 percent, exceeding expectations in the first half of 2024. The sales growth of non-food goods was the key driver, which made up 79 percent² of overall sector's revenue due to a rise in wholesale trade of motor vehicle parts and petrol, as well as higher household non-food consumption and imports of goods. Additionally, the information and communication activities grew substantially, recording 17.4 percent, while other services expanded by 7.1 percent. With more enterprises, employees, and increased newly issued loans in the service sector, growth is expected to be sustained in the second half of the year.

8. Agricultural output shrunk sharply due to a significant loss of adult livestock.

The losses of adult livestock and lower survival of young livestock resulted in an agriculture contraction of 26.7 percent, decreasing overall growth by 3.9 percentage points. The loss of adult livestock reached 8.1 million heads, an increase of 4.2 million heads from the same period last year. Meanwhile, the number of survivals of young livestock fell to 15.4 million heads, a decrease of 2.6 million heads compared to the previous year. The loss of adult livestock is equal to 12.5 percent of the total number of livestock at the beginning of the year. Between 2023 and the first half of 2024, a total of 13 million heads of livestock were lost, which is expected to impede the recovery of the agricultural sector.

² As of 2024H1, the trade sector's sales revenue was composed of 21 percent from food products and 79 percent from non-food products. Source: NSO.

AGGREGATE
DEMAND

9. The stronger than expected domestic demand fueled the economic growth. The growth accounted for 5.7 percent, led largely by final consumption, supported by an uptick in wages. The largest positive contributors to growth were private, public consumption and changes in inventories, which accumulated 12.1, 9.7, and 6.0 percentage points, respectively, while net exports contributed to lowering growth by 21.9 percentage points. Particularly, private consumption increased by 16.9 percent, and public consumption³ grew by 46.9 percent. Net export declined by MNT 176.8 billion, reflecting a 29.4 percent increase in goods import as rising consumption and domestic activation. Domestic demand is expected to remain strong and to support the growth further, as upcoming holiday and tourism season.

10. In the first half-year, household real income improved by 17.3 percent, yet the growth pace is expected to slow in the second half-year. Household income reached MNT 2.5 million, rose by MNT 486 thousand as household labor income increased by MNT 371 thousand, and social welfare and pension benefits grew by MNT 70 thousand over the same period. The government of Mongolia once again raised civil servants' wages by an average of 10 to 40 percent starting in April 2024. Moreover, household income was supported by 5.3 percent increase in number of workers, which amounted to 1,347 thousand people in 2024H1, and the employment rate improved to 58.6 percent, increased by 2.3 percentage points. Household income growth is expected to decelerate by the second half of the year due to the high base effect.

11. Rising personal loans are injecting household consumption. Credits to households, including salary, pension, and savings-backed loans, surged, leading to a significant 40.8 percent rise in personal outstanding loans, which has expanded household consumption. Household expenditure on non-food items expanded by 28.1 percent, while food expenditure remained unchanged. Particularly, in the first half year, expenditures on transportation, durables, and utilities increased notably by 43.4 percent, 45.1 percent, and 17.9 percent, respectively. Combined effects of the personal saving increase of 22.3 percent in the first half-year and the Bank of Mongolia's decision⁴ to ease loan requirement on consumer credits, are expected to promote private consumption further.

12. In Ulaanbaatar, household real income has grown by 21.3 percent, while in rural areas, it has increased only by 1.4 percent. Around 47 percent of overall registered households are living in Ulaanbaatar, 21 percent are in other urban areas, and the remaining 32 percent live in the countryside. In Ulaanbaatar, the average income was estimated at MNT 2.9 million, while the household average income in the countryside reached just MNT 2.0 million. Moreover, labor income made up 60 percent of household income in urban areas, whereas around half of herder family's income comes from livestock production. In the first half year, income flow from livestock dropped by 10.9 percent due to a huge agricultural production loss, leading to 3.6 times slower growth in herder's income relative to the national average.

³ Household consumption includes non-profit organizations' consumption.

⁴ By Monetary Policy Committee meeting on June 25 and July 2, 2024, the of the Bank of Mongolia decided not to impose debt-to-income ratio (ROI) restrictions on new credit card loans with an amount lower than the minimum subsistence level; and not to apply the IOC and time limits to higher education tuition loans that meet certain conditions.

13. Low-income families are still struggling.

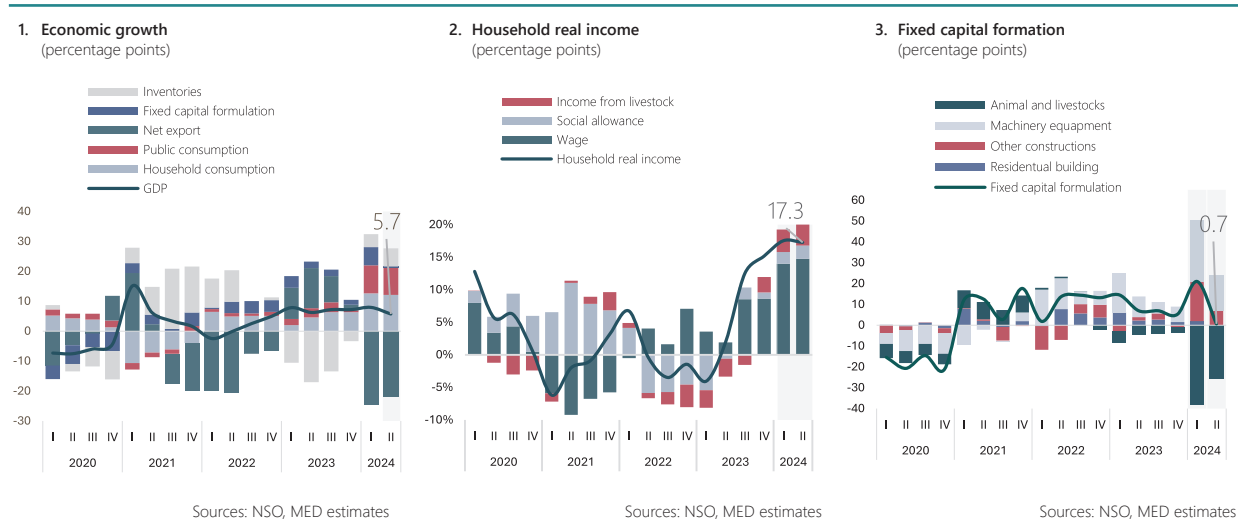
According to NSO, 36.5 percent of households are earning less than MNT 1.6 million, and their average income is estimated around MNT 1 million. At the same time, households' average income, which earns more than MNT 1.6 million, accounted for MNT 3.2 million. Moreover, labor income comprises 62.1 percent of total income for households with higher income than MNT 1.6 million; meanwhile, it comprises only 23.5 percent for households with income lower than MNT 1.6 million. Also, the labor income of households with income lower than MNT 1.6 million decreased by MNT 34.7-105.6 thousand, indicating that the wage rise has been effectless for them.

14. Inventory accumulation was substantial. Gross capital formation consists of two components, namely fixed capital formation and changes in inventory. Annual

growth of gross capital formation was 17.6 percent, largely driven by 1.6-folded inventories, which reached MNT 1.4 trillion. A huge contraction in biological assets due to a large number of adult animal losses, offset the 30.6 percent increase in machinery equipment and the 29.4 percent increase in engineering construction, subsequently, the fixed capital formation grew only by 0.7 percent. Financing was good as credits to corporations rose by 50.7 percent, FDI increased by 70.7 percent, and fiscal investment increased by 59.0 percent.

15. Net export contracted due to the significant increase in goods and service imports. National currency strengthening is attributed to the moderation of import prices, coupled with economic activation, which increased imports for consumption and investment.

Figure 1.2 Growth contribution



LABOR MARKET AND BUSINESS

16. The labor market has not only recovered but also exceeded pre-pandemic levels.

In the second quarter of 2024, the number of employed individuals grew by 68 thousand compared to the same period last year and by 72⁵ thousand compared to pre-pandemic figures, reaching a total of 1 million 347 thousand. This marks a 16 percent increase over the projected 1 million 200 thousand employees, continuing the post-COVID-19 upward trend. Excluding seasonal effects⁶, the number of employees increased by 46 thousand compared to the same period last year. Growth in the trade and service sectors played a significant role, with increases of 47 thousand and 41 thousand employees, respectively. However, the agricultural sector experienced a decline, losing 42 thousand workers, which slowed the overall growth rate. In terms of location, urban employment rose to 617.4 thousand, an increase of 71.2 thousand from the previous year, while rural areas, accounting for 54 percent of total employment, saw a slight decline to 729.7 thousand, down by 3.1 thousand from the same period last year.

17. Unemployment among women has risen.

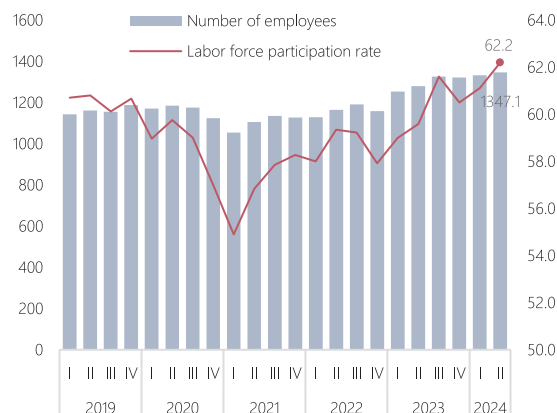
The number of unemployed individuals increased by 6 thousand compared to the same period last year, reaching 82.3 thousand. Consequently, the unemployment rate grew by 0.1 percentage points, bringing it to 5.8 percent. In terms of gender distribution, 58 percent of the unemployed are men, and 42 percent are women. The number of unemployed men increased by 1 thousand from the same period last year to 47.6 thousand, while the number of unemployed women saw a more significant rise, increasing by 5.1 thousand to 35 thousand.

⁵ Due to adjustments in the calculation methodology for the Labor Force Survey weights, the updated figures have been applied.

⁶ Seasonal detrending is a statistical method that removes recurring seasonal patterns from time series data. These patterns often arise from factors such as weather changes, holidays, school schedules, and agricultural cycles. By eliminating these regular fluctuations, it becomes easier to identify underlying trends and cyclical movements, enabling more accurate comparisons between different time periods.

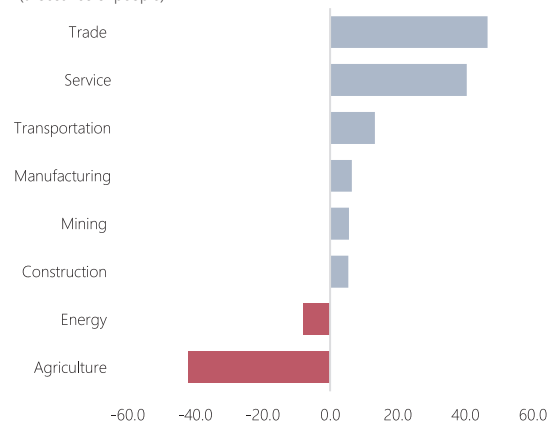
Figure 1.3. Labor market

1. Number of employees and its change (thousands, percentage)



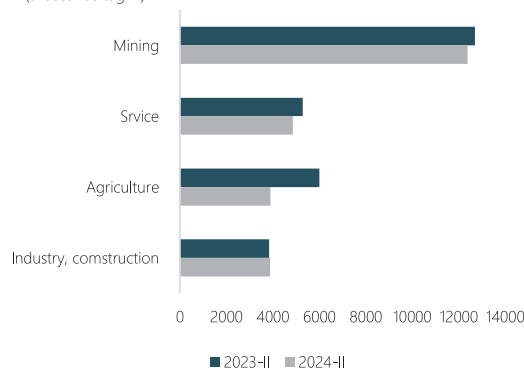
Source: National Statistics Office

2. Changes in the number of employees, by sector (thousands of people)



Source: National Statistics Office

3. Labor productivity level, by sector (thousands tugrik)



Source: National Statistics Office

18. People’s tendency to work has been increasing.

As both the number of employed and unemployed individuals has risen, the labor force, measured by the sum of these groups, grew by 74 thousand compared to the same period last year, reaching 1 million 429 thousand. This expansion in the labor force led to a 2.6 percentage point increase in the labor force participation rate, bringing it to 62.2 percent. After adjusting for seasonal variations, the participation rate stood at 60.2 percent, which is 0.8 percentage points higher than the same period last year. Meanwhile, the number of people outside the labor force, representing 38 percent of the working-age population, decreased by 49 thousand, bringing the total to 869 thousand. This suggests that a portion of the population previously outside the labor force has become more active, joining the ranks of either employed or unemployed citizens. Among the reasons for this shift, the number of pregnant women and those caring for children decreased by 19 thousand, while those caring for the elderly or sick, unable to find jobs, or disinterested in working, each decreased by 6 thousand. This trend largely reflects the growing participation of women in the labor market.

19. The decline in agricultural productivity has had a negative impact on overall labor productivity.

Labor productivity dropped by 10 percent compared to the same period last year, falling to 5 million 936 thousand. By sector, productivity in the industry and construction sectors increased by 1 percent, reaching 3 million 882 thousand. However, the sharp decline in the agricultural sector led to a 35 percent decrease in labor productivity per worker, bringing it down to 3 million 902 thousand. Additionally, productivity in the mining and service sectors fell by 2.5 percent and 8 percent, respectively, with the impact of the rising number of workers in these sectors.

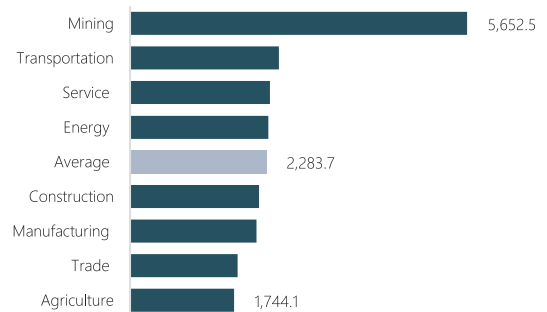
20. Despite rising wages, more than half of all workers earn below the average wage.

In the second quarter of 2024, the nominal average wage increased by 452.9 thousand MNT compared to the same period last year, reaching 2.3 million MNT. The median wage⁷, however, increased by 445.9 thousand MNT to 1.8 million MNT, indicating that half of the workforce earns less than 1.8 million MNT, while the other half earns more. This highlights the disparity, as although the average wage exceeds 2 million MNT, more than half of employees actually earn less than this figure. Looking at average wages by sector, the mining industry leads with the highest average wage at 5.7 million MNT, which is 2.5

⁷ The median wage represents the middle value in a list of employee salaries arranged in either ascending or descending order. It is the point at which half the employees earn more, and half earn less.

Figure 1.4 Wage

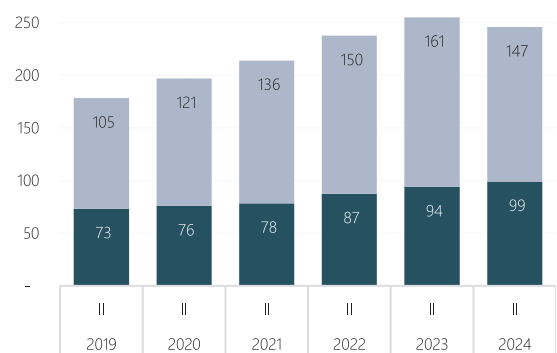
1. Average wages in enterprises, by sector (thousands tugrik)



Source: National Statistics Office

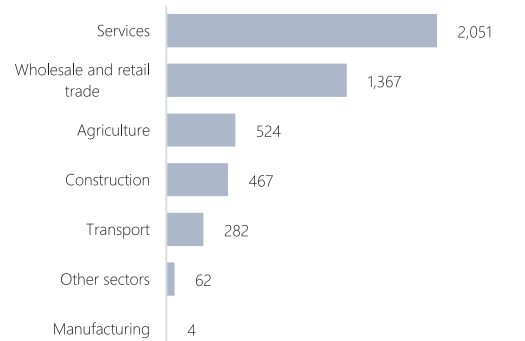
Figure 1.5. Business register

1. Total number of registered enterprises by operating status (thousands)



Source: National Statistics Office

1. The change in the number of enterprises operating by sector (the number of enterprises)



Source: National Statistics Office

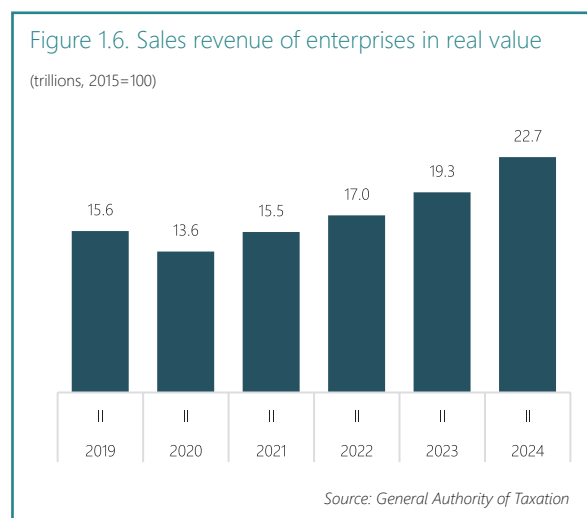
times higher than the national average. In contrast, the hotel, accommodation, and catering industry has one of the lowest average wages, at 1.4 million MNT, which is 1.6 times lower than the national average.

21. The growth in domestic economic activity and foreign demand has intensified enterprise operations. As of the second quarter of 2024, the number of enterprises operating has reached 99.1 thousand, marking a 5.5 percent increase from the same period last year. With increased domestic economic activity and purchasing power, the number of enterprises operating in the service sector increased by 2.4 thousand, including 1.1 thousand from the wholesale and retail trade sector, which accounts for 76 percent of the service sector. The growth in the wholesale and retail trade sector was driven by small enterprises (1-9 employees), while medium and large enterprises in the sector are on the contrary decreasing. Mining exports increased the number of enterprises operating by 282 in transport and 47 in mining. In the mining sector, 34 new enterprises employ 1-9 people, 6 employ 10-19, 3 employ 20-49, and 4 employ more than 50. In the transport sector, medium and large enterprises declined, while those with 1-9 employees increased. In agriculture, the number of enterprises operating increased by 551, with 201 in crop farming, 7 in animal husbandry, and 306 in forestry. The number of enterprises operating increased by 407 in manufacturing and 467 in construction, with the construction sector experiencing the highest growth in medium and large enterprises (Figure 1.5).

Table 1. Change in the number of enterprises operating by employee count

Number of employees	Number of enterprises	Percentage change	Note
1-9	84.4	6.1%	The service sector accounted for two-thirds of the growth.
10-19	7.1	3.9%	Agriculture contributed 1.4 percent, services 1.3 percent, and construction 0.8 percent of the growth.
20-49	4.9	0.5%	Of the 22 newly started enterprises, 17 are in construction.
50+	2.8	2.0%	Of the 54 new enterprises, 38 are in services, 8 in construction, 4 in mining, and 3 in manufacturing.
Total	99.1	5.9%	

22. The majority of the increase in enterprise sales revenue was driven by the service sector. As of the second quarter of 2024, the real sales revenue of enterprises rose by 17.6 percent year-on-year, reaching 22.7 trillion MNT (Figure 1.6). The service sector contributed 15.7 percentage points to the increase, with growth primarily from the wholesale and retail trade sector, which form the largest part of the sector.



BOX 1. LABOR FORCE PARTICIPATION RATE

Figure 1.7 illustrates how the labor force participation rate has evolved in various countries worldwide due to the impact of the pandemic, focusing on representative nations with available quantitative data. It presents the levels from 2019 (pre-pandemic), 2021 (during the pandemic), and 2024 (post-pandemic). As shown in the figure, labor force participation generally declined across countries during the pandemic, irrespective of their development status. However, by 2024, labor force participation in some countries, particularly developed ones, has rebounded, while in others, it has continued to decline, even after the pandemic.

Countries experiencing consistent economic growth, such as Vietnam, Kazakhstan, China, and South Korea, have maintained labor force participation rates between 63 percent and 70 percent. In the case of Mongolia, labor force participation stood at 61 percent before the pandemic but dropped to 57 percent during the pandemic. However, with the successful recovery and revitalization of the economy following the pandemic, employment has increased, and as of the second quarter of 2024, the labor force participation rate has reached 62.2%, marking the highest level since 2015.

With the expectation that the labor force participation rate will rise by 1 percentage point each year, reaching 65 percent by 2028 (assuming the unemployment rate will maintain its trend), the number of employed individuals will need to rise by an average of 47 thousand per year over the next four years. This means a corresponding number of new jobs must be created annually to accommodate the growing workforce and sustain the employment rate.

As of the second quarter of this year, 1,347 thousand people are employed in our country.

To increase the labor force participation rate to 65 percent within the next 4 years, an additional 190 thousand workers will be required. This workforce will comprise 80 thousand graduates from universities, vocational and technical educational institutions, and 110 thousand individuals from other groups currently outside the labor force. To achieve this:

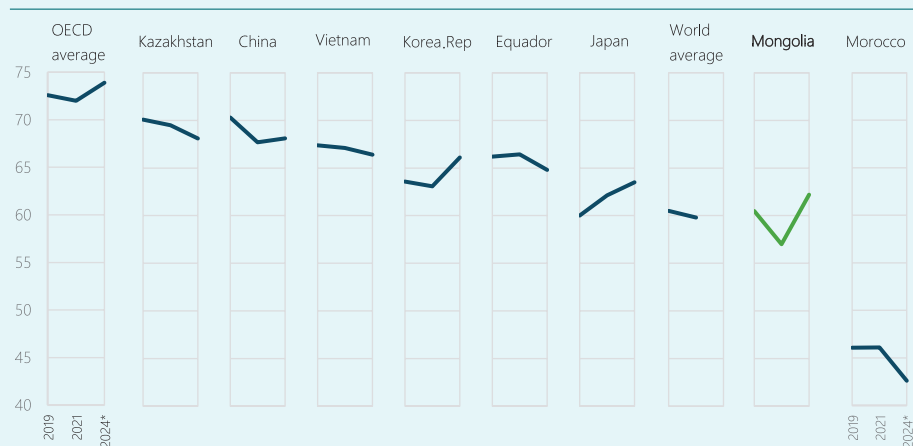
- To support the employment of those outside the labor force - such as the elderly, students, people with disabilities, caregivers, and those lacking professional or practical experience - measures in the Government Action Program includes training the elderly in new skills, reserving 2 percent of jobs for the elderly, and 4 percent for people with disabilities, improving the legal framework for students and young people to work during their free time, supporting start-up businesses, and creating a legal environment for childcare and daycare services, supporting the care economy, providing opportunities for remote and short-term work, targeting the social welfare, assistance and services provided by the government, diversifying vocational and technical education institutions in the provinces to meet labor market demands and on introducing KOSEN training colleges to enhance skill development in line with workforce needs.

In our country, approximately 30 thousand people are expected to retire per year between 2025 and 2028, while 50 thousand students will graduate and enter the labor market. Assuming 30,000 of these graduates will fill existing vacancies, the remaining 20 thousand will require new jobs. Additionally, as more individuals from outside the labor force join the workforce, an average of 47 thousand new jobs will need to be created annually. This aligns with the – Barometr Survey on Labor Market Demand⁸, which has shown an average of 48 thousand new job openings per year over the past four years. Therefore:

- Along with supporting economic growth and investment, the plan includes implementing development projects and programs, the “Productivity Revolution” initiative will be introduced to expand electronic and remote jobs that support intellectual work, creating 1,000 high-tech jobs, tax and economic policy incentives will be provided for small, medium-sized, and self-employed businesses that create stable jobs, etc.

Figure 1.7. Labor force participation rate

(pre-pandemic, pandemic, post-pandemic, by countries)



Source: ILO, OECD, NSO

* The labor force participation rate for 2024 has been updated using the most recent available data for the country.

⁸ An annual survey conducted by the Training, Assessment and Research Institute for Labor and Social Protection

23. Potential output growth was maintained by the recovery of the labor market. In the first quarter of 2024, the gross fixed capital formation decreased due to the loss of 8.1 million heads of adult livestock, but the growth of potential production was maintained at about 4 percent due to the rebound of the labor market. For instance, machinery and equipment positively impacted gross fixed capital formulation for 2 consecutive quarters but cultivated biological assets and buildings at a constant price decreased by 387 billion MNT and 90 billion MNT, respectively, resulting in an overall decrease of 349 billion MNT in gross fixed capital formation in the reporting quarter. Conversely, the number of employees increased by 46,000 from the same period last year and by 12,000 people from the previous quarter.

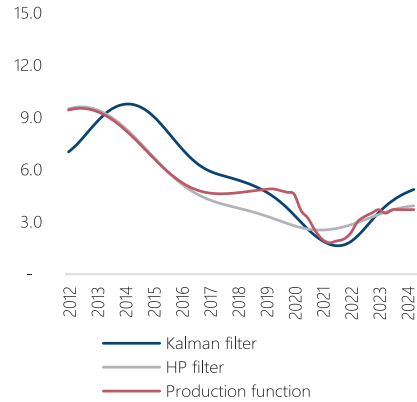
24. The contraction in the agricultural sector widened the negative output gap. In the reporting quarter, the tendency to reach the production potential level was shifted from -0.5 to -1.0 due to the agricultural sector shrank. However, by the end of the year, the negative output gap is expected to be closed because the contraction impact of the agricultural sector on the GDP gradually diminishes while domestic economic activity maintains its growing inertia.

25. Domestic currency appreciation led to a decrease in prices of imported intermediate goods, is spurring business activities. A real marginal cost is the cost of using an additional unit of labor or the intermediate goods used in production. About 60 percent of total import is used in production, indicating the appreciation of tugrug contributes to cost reduction in production. In the reporting quarter, compared to the SPLY, tugrug appreciated by 2 percent, and the real marginal cost⁹ decreased by 5 percent, led labor market recovery.

⁹ Calculated from output gap and real exchange rate gap
¹⁰ The difference between actual GDP or actual output and potential GDP
¹¹ Calculated by newly announced employment statistics from Labor Force Survey which adjusted by weight.

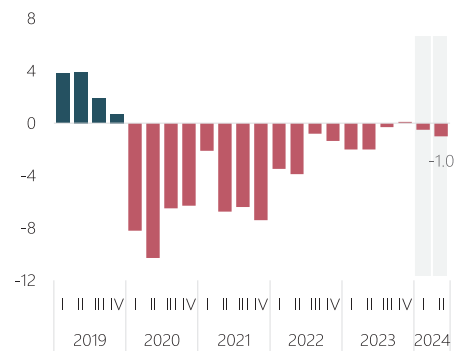
Figure 1.8. Output gap

1. Potential output growth (percentage)



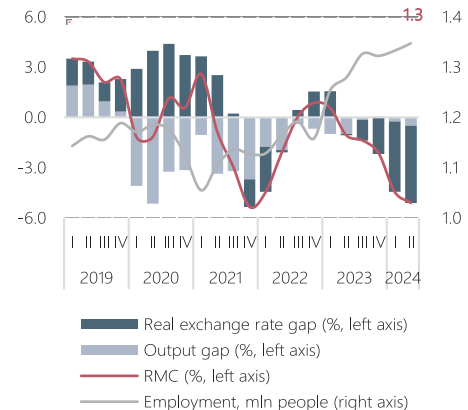
Source: Estimation of the MED
 Note: Potential output growth is calculated by 3 different approaches HP filter, Kalman filter and Production function.

2. Output gap¹⁰ (percent of potential output)



Source: Estimation of the MED
 Note: Output gap is calculated by Production function.

3. Employment¹¹ and RMC (real marginal cost) (left axis: mln people, right axis: percent)



Source: Estimation of the MED
 Note: RMC is evaluated from the GAP model of Monetary Policy Analysis.