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The Contribution of the Mining Sector to the Economic and Social Development of Mongolia

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Abstract: *The economic and social development of Mongolia is highly dependent on global market conditions, international economic trends, and the environment for foreign investment. The country's economic growth has primarily relied on the production of the mining and mineral resources sector. The mining sector occupies a significant position in Mongolia's industrial production. Furthermore, mining and extractive industries make a substantial contribution to tax revenues in Mongolia's unified state budget. Export revenues from products such as copper concentrate, coal, iron ore, and fluorspar play a vital role in funding the state budget.*

Over the past decade, the share of the mining sector in GDP, unified state budget revenues, and total exports has increased, while its share in industrial production and total imports has shown a declining trend. These changes have been influenced by unfavorable global economic conditions, declining prices of mineral resources in international markets, and factors such as the COVID-19 pandemic.

Except for copper concentrate, Mongolia predominantly exports raw mining products without further processing. Therefore, to implement the goals outlined in the country's long-term development policy, "VISION-2050", the government needs to take more resolute and consistent measures to process mining products domestically.

Keywords: *Mongolia, "VISION-2050", COVID-19, GDP, unified state budget, industrial sector, copper concentrate, coal, iron ore, fluorspar, export, import.*

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Most elements from D.I.Mendeleev's periodic table are found in Mongolia, indicating that the country is rich in mineral resources. Currently, Mongolia has identified over 80 types of minerals, more than 1,000 deposits, and over 8,000 occurrences (A.Davaasuren 2018).

In its long-term development policy, "VISION-2050", Mongolia identifies strategic goals for the mining sector: conducting natural resource valuation, implementing technological innovations to reduce production costs, processing raw minerals to add value, creating more jobs, and developing a responsible mining and heavy industrial sector through the establishment of a mineral exchange. The document also emphasizes equitable distribution of income from the mining and mineral resources sector among citizens through the establishment of a National Wealth

Fund (Vision-2050 2020). This policy positions the mineral resources sector as

the primary foundation and key driver of the country's economic development. The development of this sector is also tied to Mongolia's participation in international economic relations, the global division of labor, and the improvement of its citizens' living standards.

However, global market fluctuations, geopolitical conditions, the investment environment, and governance-related macroeconomic factors exert significant influence on Mongolia's economic and social development.

Between 2013 and 2022, Mongolia's GDP grew by 2.4 times, while production in the mining and mineral resources sector increased by 4.5 times. This indicates that the mining sector's growth has outpaced overall economic growth, underscoring the central role of mining in Mongolia's economy. This reliance can be further seen in Table 1 (not included).

Table 1. Economic indicators of Mongolia, in trillion tugriks

Indicators /Years	GDP of Mongolia	Volume of industrial production	Tax revenue of the national consolidated budget	Revenue from the mining sector in the national budget	Volume of mineral product exports from the mining sector	Volume of mineral product imports from the mining sector
2013	19174,2	10443,6	5072,7	1392,2	3798,9	1738,6
2014	22227,0	14402,9	5157,0	1338,7	5191,3	1463,9
2015	22894,7	14803,2	5118,9	1264,8	4148,8	936,4
2016	23931,3	15663,7	4996,8	941,1	4242,1	724,2
2017	28010,7	20963,1	6315,1	1865,1	5567,0	987,8
2018	32582,6	27373,0	8207,1	2393,6	6222,5	1325,7
2019	37839,2	31356,7	9749,0	3138,5	6755,2	1372,3
2020	37453,3	32081,5	8511,6	2699,4	6907,7	1007,2
2021	43555,5	35145,9	11299,9	4126,1	8403,7	1338,6
2022	52867,4	43710,9	15568,3	5355,1	11566,0	1960,3

Source: Revenue Department of the Ministry of Finance of Mongolia and the statistical data of the General Department of Taxation for 2022, National Statistics Database of Mongolia, 1212.mn.

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According to Table 1, from 2013 to 2022, the Gross Domestic Product (GDP) of Mongolia increased by 2.7 times, or 33.6 trillion MNT, while the production in the mining and mineral resources sector grew by 4.5 times, or 10.0 trillion MNT.

The mining sector has played a crucial role in the industrial production of Mongolia, and it can be said that this sector determines the development of the industrial sector. For example, from 2010 to 2022, the volume of industrial production increased by 6.7 times, or 37.2 trillion MNT, while the mining sector's production grew by 6.1 times, or 21.1 trillion MNT.

From 2013 to 2022, the tax revenue of Mongolia's consolidated budget increased by 3 times, or 10.4 trillion MNT, while the revenue from the mining and extraction sector increased by 3.8 times, or 3.9 trillion MNT. This indicates the significant role of

the mining and mineral resources sector in forming the country's consolidated budget.

In terms of copper concentrate exports, in 2013, 714.5 billion MNT, the highest amount, was collected, and in 2022, it accounted for 45.3% of the total revenue from the mining sector. During this period, copper export revenues increased by 1,711.1 billion MNT, or 3.4 times.

In 2013, coal export revenues amounted to 346.9 billion MNT, which made up 24.9% of the total revenue of the mining sector. By 2022, this figure had increased to 2,260.7 billion MNT, which accounted for 42.2% of the total mining revenue. During this period, coal export revenue grew by 1,913.8 billion MNT, or 6.5 times, showing a significant increase in the revenue generated from coal exports, which nearly equaled the copper revenue, as seen in Table 2.

Table 2. The amount of revenue from certain mineral resources contributing to the formation of the national budget.

Revenue Types/ Years	Mining Sector Revenue	Coal	Copper	Iron	Manganese	Other
2013	1392,2	346,9	714,5	77	8,5	245,4
	Percent	24,9	51, ³	5,5	0,6	17,6
2014	1338,7	317,7	734,5	68,8	6,8	210,8
	Percent	23,7	54,8	5,1	0,5	15,7
2015	1264,8	145,7	891,6	25,7	6,4	195,4
	Percent	11,5	70,5	2,0	0,5	15,4
2016	941,1	183,7	515,8	25,2	6,3	210,2
	Percent	19,5	54,8	2,6	0,7	22,3
2017	1865,1	695,6	887,6	23,5	13,6	244,8
	Percent	37,2	47,6	1,26	0,7	13,1
2018	2393,6	996,4	999	30,1	16,3	351,7
	Percent	41,6	41,7	1,25	0,7	14,6

2019	3138,5	1282,2	1333,3	47,5	39,3	436,2
	Percent	40,8	42,5	1,5	1,25	13,9
2020	2699,4	877,7	1266,3	105,2	49,4	400,8
	Percent	32,5	46,9	3,9	1,8	14,8
2021	4126,1	980,9	2648,2	189,2	110,8	197,0
	Percent	23,8	64,2	4,6	2,7	4,8
2022	5355,1	2260,7	2425,6	56,5	33,7	578,6
	Percent	42,2	45,3	1,05	0,6	10,8

Source: Statistics from the Revenue Department of the Ministry of Finance and the General Department of Taxation of Mongolia, 2022.

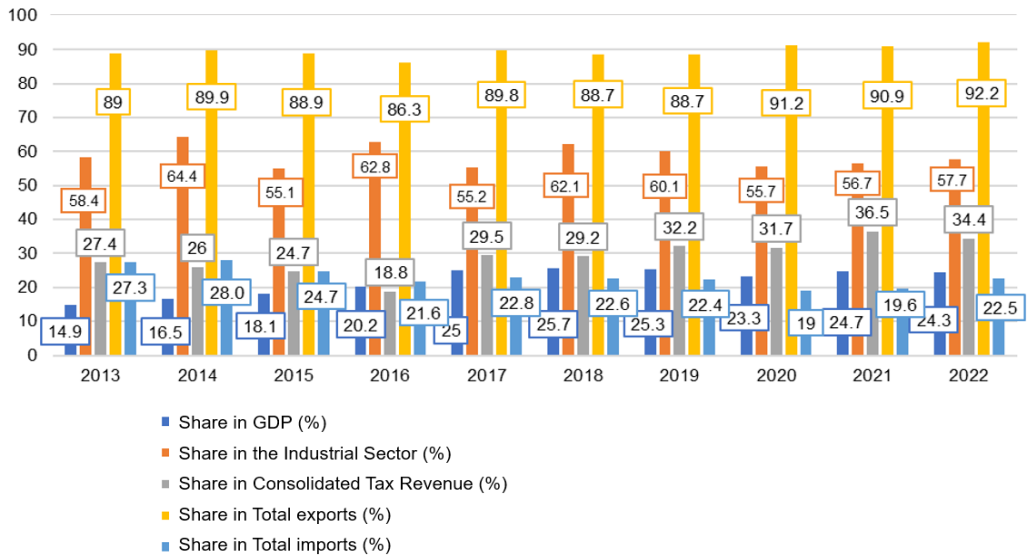
According to Table 2, in 2013, the revenue from iron ore exports amounted to 77.0 billion MNT, which accounted for 5.5% of the total revenue from the mining sector. By 2022, this revenue had decreased to 56.5 billion MNT, which made up 1.05% of the total mining revenue. From 2013 to 2022, the revenue from iron ore exports decreased by 20 billion MNT.

In 2013, the revenue from fluor spar exports was 8.5 billion MNT, which made up 0.6% of the total mining revenue. By 2022, this revenue had increased to 33.7 billion MNT, still representing 0.6% of the total mining revenue. From 2013 to 2022, fluor spar export revenues grew by 25.2 billion MNT, or 4 times.

In 2013, the revenue from other types of mineral exports amounted to 245.4 billion MNT, which accounted for 17.6% of the total mining revenue. By 2022, this had increased to 578.6 billion MNT, contributing to 10.8% of the total mining revenue. During this period, the revenue from other mineral exports increased by 333.2 billion MNT, or 2.4 times.

Certain types of minerals, such as copper concentrate, coal, iron ore, and fluor spar, play a significant role in generating revenue for Mongolia's consolidated budget. Notably, copper concentrate export revenues make the largest contribution, accounting for 50% of the total revenue.

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Source: National Statistics Database of Mongolia, 1212.mn.

According to Figure 1, from 2013 to 2022, the mining sector's contribution to Mongolia's GDP ranged from 14.9% to 24.3%, to industrial production from 58.4% to 57.7%, to consolidated budget revenue from 27.4% to 34.4%, to total exports from 89% to 92.2%, and to total imports from 27.3% to 22.3%. This indicates that the sector's contribution to Mongolia's economy is significant. Over the last decade, the share of the mining sector in GDP, consolidated budget revenue, and total exports has increased, while its share in industrial production and total imports has decreased.

In conclusion, global economic challenges, the decline in the prices of Mongolia's mining and mineral raw materials in external markets, and the COVID-19 pandemic have contributed to a reduction in the revenue from mineral

exports, which in turn slowed down economic growth.

However, thanks to timely crisis management measures taken by the Mongolian government and efforts by state-owned enterprises, the country successfully navigated the difficult period of the pandemic, improving macroeconomic indicators and increasing government budget revenues. Copper concentrate, coal, iron ore, and fluorspar, as export products, played a crucial role in forming the consolidated budget revenue. This underscores that Mongolia's economy, and particularly its national budget, is heavily dependent on the export of a limited range of mineral resources. Thus, increasing the level of processing of mineral raw materials, particularly by focusing on deeper processing and exporting finished products, would not

only help achieve the goals set out in Mongolia's long-term development policy "Vision-2050", but also create conditions for industrialization, strengthen the national economy, improve the budget situation, and reduce dependence on global mineral markets.

Over the past 10 years, the structure of Mongolia's mineral exports has shifted, with the share of coking and thermal coal, as well as unprocessed and semi-processed gold exports, increasing. Meanwhile, the share of iron ore, concentrates, pyrite, unrefined oil, copper concentrates, fluorspar ore and concentrates, zinc concentrates, and other raw materials has decreased. In other words, coal exports dominate Mongolia's mineral exports, which is linked to the country's geographical advantage of being close to China's steel plants, allowing it to sell coal at prices lower than global market rates.

Unfortunately, the government's policies and regulations regarding coal export contracts, transportation, customs control, and easing inspection processes have not yielded results in terms of reducing costs or improving the efficiency of coal transportation. This is affecting the occurrence of illegal activities, corruption, and bribery.

Mongolia has relied on the import of minerals and energy products to meet the demand for the stable operation of various sectors of its economy. These include auto gasoline, diesel and aviation fuel, petroleum by-products, coke, bitumen, high-quality brown and hard coal, liquefied gas, and other hydrocarbon gases, as well as petroleum jelly, paraffin, and wax. Of the total value of mineral products, 86.6% is occupied by petroleum products, including gasoline and diesel. Of this, 34.4% is gasoline and 52.2% is diesel.

As of 2022, there were approximately 1.2 million people employed in Mongolia, of which 60.3 thousand worked in the mining sector. This represents only 5.77% of the total workforce, but the sector contributes over 24% to the national GDP, demonstrating the productivity of the mining industry. This can be seen as the result of the continuous integration of scientific, technical, and technological advancements and improvements in labor organization within the extraction industry. In 2013, the proportion of the total workforce employed in the mining and extraction sector was 4.56%, while in 2022 it increased to 5.11%, reflecting a 0.55 percentage point growth.

Table 3. Number of employees in the mining and extraction sector (thousand people)

Years	Total number of employed persons in Mongolia	Number of employees in the mining and extraction sector	Proportion of employees in the mining sector in the total number of employees
2013	1103601	50271	4,56
2014	1110698	40926	3,68
2015	1151223	42641	3,70
2016	1147843	38205	3,33
2017	1238333	52017	4,20
2018	1253023	57687	4,60

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2019	1146161	57923	5,05
2020	1162912	51575	4,43
2021	1125593	56003	4,98
2022	1180474	60342	5,11

Source: Unified Database of the National Statistics Office of Mongolia, 1212.mn.

In 2013, the average salary of employees in Mongolia was 774.9 thousand MNT, and by 2022, it had increased to 1.5 million MNT, rising by 728.9 thousand MNT, or 1.9 times.

In the mining sector, the average salary of employees was 1.8 times higher than the national average in 2013, amounting to 643.5 thousand MNT. By 2022, this figure increased to 2.4 times the national average, or 2.1 million MNT. In other words, while the average salary in the country increased 1.9 times from 2013 to 2022, the average salary in the mining and extraction sector grew by 2.5 times. This is due to the regular payment of basic wages, bonuses, additional allowances, incentives, and overtime to workers in the mining sector. It is also linked to the fact that this sector plays a key role in the development of Mongolia's society, economy, culture, and humanities, attracting the highest levels of both foreign and domestic investment.

In conclusion, it can be said that the mining sector is primarily responsible for

providing the hard currency required to import essential products for all sectors of Mongolia's society, investment, and construction. Mongolia's economy largely relies on the income generated from the sale of its natural resources and minerals, which finances the national budget and payments for imported products. This suggests that the country's existence depends heavily on the mineral and natural resource sector.

While investments and construction projects are crucial to the country's development, all of these efforts will remain dependent on the export of raw minerals unless Mongolia develops its industrial sector and diversifies its economy. The country will continue to rely on the foreign currency generated by mining exports to meet the demands of its economy, society, culture, infrastructure development (including transportation, logistics, and energy), and to import goods and services necessary for the daily lives of its citizens.

References

- A.Davaasuren. 2018. "Utilization of Mineral Resources of Mongolia." Research report, Ulaanbaatar.
- General Department of Taxation, Ministry of Finance of Mongolia. n.d. "Statistical Data (2010-2022)." Accessed October 10, 2024.
- Mongolia, National Statistical Committee of. n.d. "The share of the mining sector in the economy of Mongolia." Accessed October 10, 2024. <https://www.1212.mn/mn>.
- The State Great Khural of Mongolia. "Vision-2050." *Integrated legal information system*. May 13. Accessed October 11, 2024. <https://legalinfo.mn/mn/detail/15406>.