

North Korea's 2023 Trade with China: Analysis and Forecasts

Jangho CHOI Research Fellow, International Cooperation for Korean Unification, Center for East Asian and Advanced Economy Studies
(choij@kiep.go.kr)

Yoojeong CHOI Senior Researcher, International Cooperation for Korean Unification, Center for East Asian and Advanced Economy Studies
(choiyj@kiep.go.kr)

I. North Korea's Trade with China in 2023

North Korea's trade with China increased by more than 120% compared to the previous year as the country declared a COVID-19 endemic and gradually eased border controls, but did not recover to 2018-19 levels, the year before the outbreak of COVID-19. North Korea's trade with China has increased significantly year-on-year, which is a positive sign that the North Korean economy is recovering, but it is also a negative sign that it has not recovered to its pre-pandemic levels, as North Korea is still facing shortages of goods and the North Korean border lockdown has not been fully lifted, which shows the instability of the North Korea's economy. This is due to the failure to resume overland trade using cargo trucks from China's Dandong to North Korea's Sinuiju, a key transit route, and the lack of success of North Korea's export diversification policy. As a result, North Korea's imports and exports

to China have only recovered to 64.1% and 16.9% of their pre-UN sanctions levels, respectively.

The opening of the border between North Korea and China in August 2023 was expected to lead to closer ties between the two countries, but unlike the North Korea-Russia relationship, which centered on military cooperation, economic cooperation between the two countries has not made much progress. In March 2023, China Ambassador, Wang Ya Jin, came to Pyongyang and began discussing North Korea-China economic cooperation, and North Korea's exports to China increased sharply in March and April. However, the trend quickly faded and failed to expand further in the second half of the year.

This article analyzes North Korea-China trade trends and statistics in 2023 to evaluate

the extent of North Korea's trade normalization and its performance.

II. Trade Trend and Items

1. Imports

Imports to China recorded 2.00 billion, 124.1% higher than the 0.89 billion in 2022. North Korea's imports from China in 2023 are estimated to be the maximum achievable given the lack of a full resumption of overland trade. However, as the negative impact of UN sanctions on the North Korean economy is ongoing, making it difficult to normalize industrial production.

North Korea mainly imported raw materials for processing trade (textile and garment raw materials), staple foods (rice and sugar), agricultural materials (fertilizer), and construction materials from China in 2023. The common characteristic of these items is that North Korea has difficulty producing them on its own.

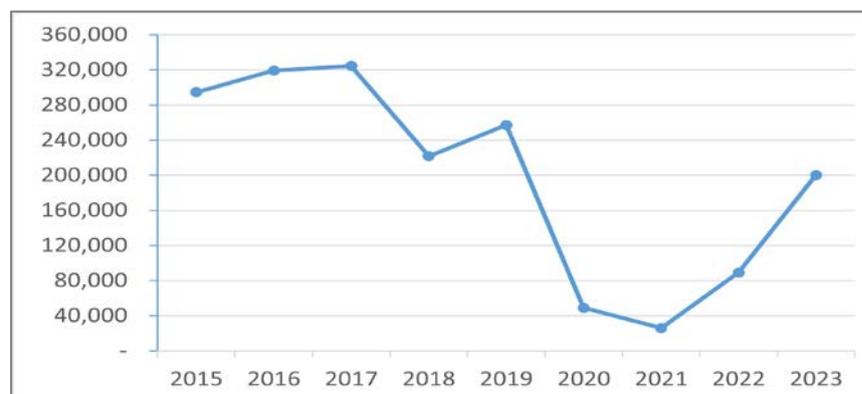
Human hair for wigs, beards, and eyelashes

(HS 6703) was the top imported product, followed by synthetic filament yarn fabrics (HS 5407) and knitted fabrics (HS 6006), suggesting that North Korea's industry is recovering, centered on textiles, apparel, and wigs. Imports of soybean oil (HS 1507), cane sugar (HS 1701), and pharmaceuticals (HS 3004), which are difficult to produce in North Korea, accounted for about 13% of total imports. Since the COVID-19 pandemic, North Korea has increased imports of painkillers and vitamins.

Agriculture-related items also stand out, with imports of compound chemical fertilizers (HS 3105) amounting to \$80.66 million (4.0% of total imports, 141,108 tons), the second highest volume since 2017 (262,012 tons in 2018). At the same time, rice (HS 1006) was imported in the amount of \$76.81 million (3.8% of total imports, 164,326 tons), which was 4.2 times the average annual import volume of 39.556 million tons in 2017-18, suggesting that North Korea is sourcing rice from abroad to address food shortages and restore the grain monopoly.

Figure 1. NK's Import from China

Unit: Ten thousand USD, %



Source: China Customs Statistics.

Table 1. Top 10 Commodities of NK's Import from China

Unit: Ten thousand USD, %

No.	Export Item	HS	Value (2023)	Share (%)	
				2022	2023
1	Human hair	6703	16,003	0.8	8.0
2	Soybean (cooking oil)	1507	9,004	5.5	4.5
3	Mineral or chemical fertilizers	3105	8,066	0.0	4.0
4	<i>Filament yarn(fabric)</i>	5407	8,045	3.5	4.0
5	Rice	1006	7,681	3.7	3.8
6	Cane sugar	1701	6,933	3.1	3.5
7	Other knitted or crocheted fabrics	6006	6,613	3.7	3.3
8	Medicine	3004	5,868	4.6	2.9
9	Manufactured tobacco	2403	5,150	2.7	2.6
10	Floor coverings of plastics	3918	4,882	2.5	2.4
Total (Top 10)			78,245	27.5	30.0
Total			200,350	100.0	100.0

Source: China Customs Statistics.

In addition, North Korea imported a variety of construction materials, including flour, rubber tires, building materials, and foodstuffs (palm oil, milk, and cream) outside the top 10.

Notably, coke imports had unusually increased, recently reaching the highest amount in seven years. North Korea has attempted to produce iron using its own production technology (known as Juche iron) since the 1950s. Juche iron refers to steel that utilizes North Korea's abundant anthracite coal instead of coke, which the country must fully import. The increase in coke imports is presumed to have resulted from the recent increase in North Korean arms exports to Russia, which has increased the demand for steel and metals.

Looking at North Korea's imports by industry, textiles and apparel sector accounted for a significant share (30.0%), followed by agriculture (26.3%), chemicals (14.0%), and plastics

and rubber (13.7%). Imports of electronics, machinery, fisheries, metals, and transportation are not available due to UN sanctions. The high share of the textile and clothing industry raises suspicions of wig exports, military uniform exports to Russia, and smuggled clothing exports to China. Imports in the agricultural sector are likely due to a significant increase in rice imports as the North Korean authorities imposed a monopoly on grain while preparing for food shortages. In the chemical industry, oxygen function amino-compounds, polymers of ethylene, and organic surfactants were imported each month as industrial raw materials along with fertilizers (the third largest import). In the case of plastics and rubber, large imports of tires for large buses had an impact.

Finally, to assess the level of normalization of North Korea's industrial production, we conducted an analysis of dual-use goods imports.

The value of dual-use goods imports \$33.77 million, which is about 52.1% of the average 2018-19 import value of \$64.77 million. If this indicator is used alone to assess the resumption of North Korean industry, it can be concluded that, although total imports in 2023 recovered 84.7% of the 2018-19 level, the degree of normalization of industrial production was only 52.1% of the 2018-19 level.

2. Exports

North Korea's exports to China stood at 0.29 billion, up 118.4% from 0.13 billion in 2023. Exports remain at the 16.9% of the level before the tightening of UN sanctions on North Korea, as the country has failed to diversify its products and expand exports of major export items. Exports were higher than the average value of \$214.7 million in 2018-19, the year before COVID-19, due in large part to increased exports of wigs, ferroalloys, and electrical energy. Monthly exports have tended to stabilize around \$25 million, albeit with fluctuations.

Exports were highly dependent on specific products, wigs and false eyelashes, a labor-intensive industry, accounting for 57.1% of total exports. In spite of increasing wigs export, North Korea failed to further expand its amount (which remained below \$19 million) and diversify the export items in the second

half of the year. As North Korea's exports are under particular scrutiny by the UN Security Council, it is essential to have China's demand or cooperation to expand exports. If relations between North Korea and China were better, North Korea's exports of manufactured goods would have gradually increased in volume and variety, but our analysis does not find any of those anomalies since May.

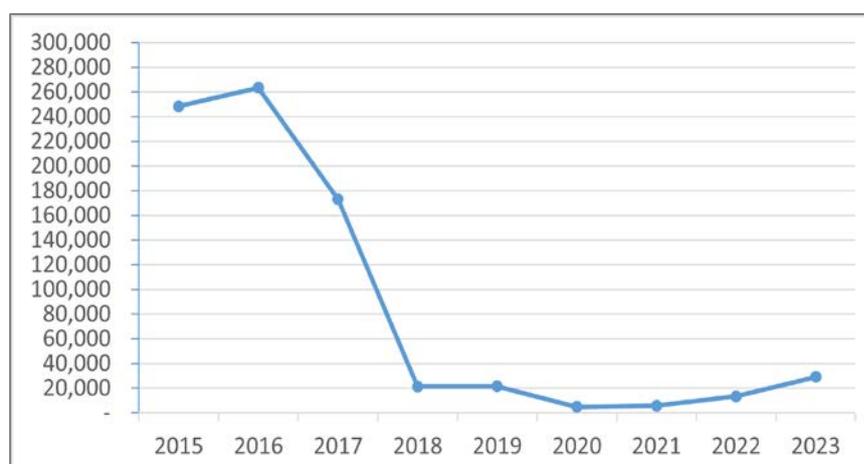
Other mineral exports followed wig exports. Ferro-alloys (ferrosilicon, HS 7202) amounted to \$32.06 million (11.0% of total exports), tungsten and tungsten rocks (HS 2611) amounted to \$25.94 million (8.9% of total exports), and molybdenum ores and rocks (HS 2613) amounted to \$7.17 million (2.5% of total exports) was exported. These items are continuously exported throughout the year despite controversy over their violation of UN sanctions against North Korea.¹ Electric power (HS 2716) is exported \$2,226 (17.6% of total exports) was exported. The energy is produced by six hydroelectric dams, including the Supung Dam on the Yalu River, jointly operated by North Korea and China. Exports of float glass (HS 7005) amounted to \$6.09 million (2.1% of total exports), and this item is also emerging as a new export item from 2022. Other exports included float glass (HS 7005), carbide (HS 2849), raw silk (HS 5002), portable watch movements (HS 9108), and artificial graphite (HS 3801).

¹ Tungsten is used to make light bulb filaments, metal cutting tools, refrigerator compressors, military shells, warheads, ammunition, and military vehicle parts,

while molybdenum is used to make metal cutting tools, metal processing equipment, roller bearings, compressors, implants, artificial joints, and more.

Figure 2. NK's Export to China

Unit: Ten thousand USD, %



Source: China Customs Statistics.

Table 2. Top 10 Commodities of NK's Export from China

Unit: Ten thousand USD, %

No.	Export Item	HS	Value (2023)	Share (%)	
				2022	2023
1	Wigs and false eyelashes	6704	16,674	8.7	57.1
2	Ferro-alloys	7202	3,206	20.2	11.0
3	Tungsten and tungsten rocks	2611	2,594	23.1	8.9
4	<i>Electronic Energy</i>	2716	2,226	15.3	7.6
5	Molybdenum ores and rocks	2613	717	10.2	2.5
6	Float glass	7005	609	5.0	2.1
7	Carbide	2849	539	3.3	1.8
8	Raw silk	5002	441	6.6	1.5
9	Portable watch movement	9108	406	1.3	1.4
10	Artificial graphite	3801	253	0.3	0.9
Total (Top 10)			78,245	27.5	30.0

Source: China Customs Statistics.

3. 2023 Economic Policy Assessment

According to the analysis of trade statistics, the main goals of North Korea's 2023 US foreign economic policy are: (1) resuming smuggling trade in textiles and clothing, (2) building irrigation canals in preparation for summer

floods, (3) implementing state-led grain distribution, (4) building living houses in a rural area, and (5) increasing metal production for Russian arms exports

While imports of raw materials have increased significantly due to the resumption of

the textile and clothes smuggling trade following the opening of the border, the development of new export items in response to UN sanctions has been slow. Rather than promoting new export products (silk (canine), float glass), exports have reverted to traditional export products (clothing and wigs, mineral products (ferroalloys, tungsten, molybdenum)). Imports of plastic pipes and tubes increased significantly for irrigation canal construction in preparation for summer disasters. Among natural disasters, floods have the most adverse impact on North Korea, which is likely to have been working on large-scale irrigation canal construction in preparation for heavy summer rains. Increased rice imports to prevent food shortages and to implement a grain monopoly have led to the largest annual rice imports. North Korean authorities have tightly controlled the market distribution of grain and operated national grain sales centers to ensure state control over grain distribution channels, which has increased the demand for foreign grain imports. Lastly, the construction of ‘sal-imjip’ (cultural houses) throughout North Korea has led to an increase in imports of building materials such as plastic flooring, plywood and veneer, lighting fixtures, furniture, and porcelain tiles and ceramics.

III. What to Expect in 2024

The future of North Korea's trade with the rest of the world in 2024 will be determined by whether North Korea fully opens its borders and improves its relations with China. North Korea's trade volume has already decreased

significantly during the 2020-22 border closure period, and logistics costs have increased significantly due to UN sanctions and border closure policies. Therefore, the improvement of North Korea-China relations and the full opening of the border in 2024 will be the determining factors for North Korea-China trade.

In 2024, both North Korea's exports and imports are expected to be slightly higher than in 2023. North Korea's exports are unlikely to increase significantly, as North Korea-Russia military cooperation is expected to continue and China is likely to maintain its checks on the growing Sino-Russian alignment. In addition, the issue of whether North Korea will open its borders to the outside world, and the related issue of returning the more than 100,000 North Korean workers in China and issuing visas to their replacements, is one that is highly scrutinized by the international community and difficult for North Korea and China to reach an agreement on, so North Korea's border opening in 2024 is likely to remain at the current level. As a result, North Korea is likely to adapt to the current situation and modestly increase its exports and imports. A significant increase in exports and imports is only possible if relations between North Korea, China, and Russia improve further. As North Korea seems to be sourcing a significant portion of the materials needed to produce military weapons and supplies from China, imports from China will increase if North Korea's exports of military goods to Russia continue.

Increased imports will lead to a larger trade deficit, but it will be within North Korea's ability to manage for one to two years. The 2024 trade deficits expected to be around \$1.6 billion, similar to that of 2023, and given North Korea's estimated foreign exchange reserves, the deficit is assessed to be manageable for a short term.

Despite the increase in imports from China in the transition to the coronavirus pandemic, it is difficult to say that it has yet led to the recovery of industrial production and economic development. If North Korea-Russia military cooperation were to be expanded to economic cooperation, it is possible that import would increase further and industrial production would normalize faster, but the infrastructure for economic cooperation between North Korea and Russia is not in place, limiting the potential for expanded cooperation. North Korea and Russia have only few economic projects that can maximize both countries' economic interests, so the scope of cooperation is small. Also, Russia's share of North Korea's total

trade, excluding weapons, is not expected to exceed 2%.

As a result, improved North Korea-China relations and increased economic cooperation will be key to North Korea's economic recovery in 2024. With ongoing UN sanctions and supply chain uncertainty, cooperation with China, which accounts for more than 95% of North Korea's trade, will be essential to maintaining stable imports and exports. There are also many issues to be resolved between North Korea and China, including the return of an estimated 100,000 overseas workers and the resumption of tourism to North Korea by Chinese citizens which does not violate UN sanctions.

In 2024, the 75th anniversary of the establishment of diplomatic relations between North Korea and China, North Korea is expected to actively pursue efforts to resume economic cooperation between the two countries, and may attempt to further relax of border controls, expand trade between North Korea and China. **KIEP**