

# North Korea's Trade with China in 2015: Analysis and Forecasts

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## I. North Korea's Trade with China in 2015

The year 2015 marked the first time North Korea's trade with China shrank since 2009. According to China Customs, North Korea's trade with China in 2015 recorded 5.4 billion, a drop by 14.7% from 6.4 billion in 2014. Exports to China recorded 2.5 billion, 12.6% lower than the 2.8 billion in 2015, and imports stood at 2.9 billion, falling 16.4% from 3.5 billion in 2014. The trade deficit recorded 459 million, dropping by 32.0% from 675 million in 2014. Although North Korea's overall imports and exports have witnessed a decline, the trade balance improved.

It seems that North Korea's trade has reached a turning point due to the structural changes in the trade environment between North Korea and China. The continued slowdown of China's GDP growth rate and a sharp reduction in imports, signs of a domestic consumption-driven economy, is well expected to continue, and will further lead to a steady decline in North Korea's trade with China. Although imports from China have dropped due to a shortage of foreign currency resulting from export

decline, the negative impact this may have on North Korea's economy has yet to show. Market prices have stayed stable since 2013.

### 1. Exports

As for export prices, a continued raw material price decline since 2011 in the international commodity market has had a considerably negative impact on North Korea's exports of coal and iron ore. It has undermined North Korea's export price competitiveness, as the gap between international prices and North Korea's iron ore export prices has shrunk from 27% (during 2009~2014) to 16% in 2015. North Korea's exports are forecast to continue to suffer from weakened international raw material prices in the second half of 2016. Note that China's economic slowdown has been regarded as a major driving factor accounting for the sharp decline in international raw material prices since 2011.

As for export volumes, a sharp decline in China's coal and iron ore imports resulting from a domestic consumption-driven economy dampened North Korea's exports to China. Coal imports declined by a much bigger margin than the fall in domestic demand. China's

coal imports fell by 30% and 11% in 2015 and 2014, respectively, while coal demand fell only by 3.7% and 2.9%. In addition, a new environmental protection law to prevent the exacerbation of air pollution in major cities of China led the country to send back North Korean coal of uneven quality. However, this did not mitigate North Korea's coal exports in 2015, thanks to an aggressive low export price strategy to make up for the loss in export price reduction.

## 2. Imports

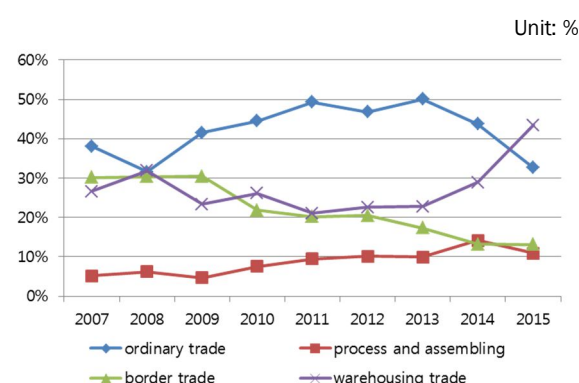
The decline in North Korea's imports seems to have been led not only by the shortage of foreign currency due to export reduction, but also by improved production capabilities and the promotion of the use of domestic goods. As for the improved production capabilities, many items have shown a decrease in imports after Kim Jong-un, in his New Year's Message of 2015, emphasized that domestic consumption and production should rely on locally available goods. Surprisingly, commodity prices in markets have remained stable, and there seem to be no symptoms of suffering from a lack of basic necessities, even though North Korea's total imports fell in 2015. We want to put weight on three pieces of evidence to support the improved production capabilities of North Korea: growing exports of coal, expansion of warehousing trade, and an increasing share of consumer goods.

First, the coal export volume in 2015 was far beyond the expected maximum level of coal production capacity. North Korea's coal exports to China peaked at 20 million tons in 2015. The significant expansion of coal exports might reflect its improved mining capability, which gives us a glimpse of the spillover effect to other industries, in the same manner in which other industries have already

changed production equipment to enhance production capacity.

Second, warehousing trade has visibly overtaken ordinary trade in 2015 (Figure 1). Note that warehousing trade is under suspicion for being a source of detour trade from North Korea to third countries, via China. Since most warehouse-traded products are processed goods (including textiles) rather than raw materials, this supports the possibility that North Korea has improved its production capacities in manufacturing.

Figure 1. NK's Export Share by Trade Regime



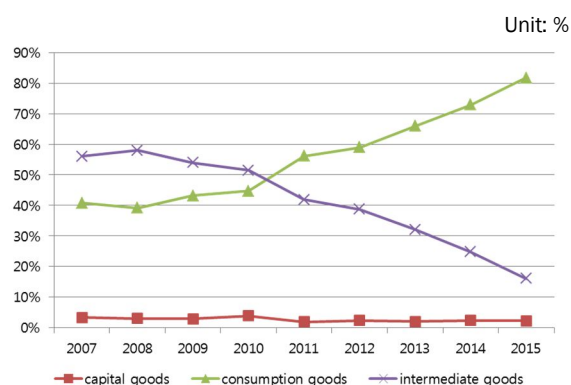
Source: China Customs Statistics.

Third, the export share of consumption goods surpasses that of intermediate goods (Figure 2). In particular, the export share of textiles and agro-food as consumption goods has significantly increased. This might imply that North Korea is skewing production resources toward high value-added consumption goods, which require more processing procedures compared to low value-added intermediate goods.

In 2016, the import decline, either caused by China's economic slowdown or economic sanctions against North Korea, could worsen the country's consumer welfare by causing

shortage of food and basic necessities. Again, however, we have not found any evidence linking import decline to welfare loss.

**Figure 2. NK's Export to China by BEC**



Note. Raw materials and non-processed goods are excluded.  
Source: China Customs Statistics.

## II. Trends by Item

Iron ore and anthracite were North Korea's major exports until 2013. From 2014, however, exports of mining products (HS code 25, 27) are on the fall, handing over their share to textiles (HS 62) and fishery (HS 03) products.

As for iron ore, North Korea's exports dropped by 68.0%, while China's total imports of iron ore dropped by 39.3%. Among major exporting countries to China (Australia, Vietnam, and Mongolia), the drop of North Korea's iron ore export was second-largest, next to Vietnam. Note that Vietnam announced resource protection policies in 2011, discouraging exports of mineral resources.

As for coal, China's anthracite imports dropped by 39.5%, while North Korea's anthracite exports to China dropped by 7.8%, the smallest decline among the major exporting countries above (Vietnam, Mongolia, and Australia dropped by 90.1%, 71.3%, and

54.3%, respectively). As mentioned above, North Korea's minor decline in coal exports is thanks to aggressive pricing in coal exports to make up for the loss in exports originating from the sharp decline in raw material prices in the international commodity market. In trade statistics, the export volume increased by 26.9%, while export value decreased by 7.8%. So far, it seems that China's economic slow-down and environment protection policy have not played a role in North Korea's anthracite exports.

Shares of export products have also changed significantly. Textiles and fishery emerged as major export items to China (Table 1). Among textile-related products, coats and suits requiring elaborate handwork have increased dramatically. The export share of textile and fishery is expected to continually increase, to make up for the loss in raw material exports to China, as raw material prices in the international commodity market are set to fall steadily. Note that this indirectly indicates that production capability in North Korea is improving, as mentioned above.

**Table 1. Major Export Products to China**

Unit: thousand USD, ( ) is growth rate, %

Classification		2014	2015
Item	HS		
Mineral Fuels, oils and waxes	27	1,152,378 (-18)	1,060,787 (-8)
Apparel and Clothing Accessories (not Knitted or Crocheted)	62	622,023 (25)	632,753 (2)
Ores, slag and Ash	26	338,748 (-18)	204,729 (-40)
Fishery	03	143,172 (23)	166,097 (16)
Articles of Apparel and Clothing Accessories, (Knitted or Crocheted)	61	118,985 (36)	108,017 (-9)

Source: China Customs Statistics.

As for imports, five major products reported a decrease in imports (Table 2). Imports of elec-

trical machinery and equipment (HS 85) decreased by 20.8%, and mineral fuels and oils (HS 27) by 23.1%. However, the impact of the import decline of electrical machinery on the North Korean economy would not be significant, since the country seems to have sufficient stock of those products. In 2014, imports of electrical machinery grew by 65.3% compared to 2013. Mineral fuels and oils, however, might have a notable impact if their imports fall significantly as in the trade statistics. The future trend of mineral fuels and oils should be monitored.

**Table 2. Major Import Products from China**

Unit: thousand USD, ( ) is growth rate, %

Classification		2014	2015
Item	HS		
Electrical Machinery and Equipment	85	419,413 (65)	332,239 (-21)
Boilers, Machinery and Mechanical appliances	84	310,015 (18)	252,043 (-19)
Railway or Tramway Rolling-Stock, and Parts	87	210,516 (-12)	196,140 (-7)
Plastics and Articles	39	193,428 (36)	168,045 (-13)
Man-made Textile Materials	54	166,278 (14)	151,695 (-9)

Source: China Customs Statistics.

As mentioned above, the fall in imports could possibly derive from the improved production capacity in North Korea, which could be confirmed by the declining trends of some items imported from China. For instance, North Korean media insisted that they localized the production process of 3D printers (HS 8443) and electrical insulating oil (HS 2170), and the import volume of those items actually decreased in 2015. Note that these products are not meant for ordinary use. However, there is not enough evidence to support the theory that production capacity in North Korea has improved. Media has been providing conflicting information.

### III. What to Expect in 2016

North Korea's trade in 2016 will be affected by multiple factors, such as the new economic sanctions against North Korea, the shutdown of Kaesong Industrial Complex (February 2016), steadily decreasing raw material prices in the international commodity market, China's sharp import decline and its environment protection policy, and North Korea's economic development strategy.

As for iron ore, North Korea's exports to China in 2016 are expected to be on a similar level as 2015, or record a slight increase. Note that iron ore prices rose in the first half of 2016, as opposed to predictions by experts in 2015.

As for anthracite, although North Korea will try to flood the market, these efforts may not have much impact due to China's economic reforms in the mining sector and environment protection policy.

As for the Kaesong Industrial Complex, it may lead to an increase in its toll-processing textile exports to China. However, South Korea will implement a stringent unilateral sanction to curb North Korea's detour trade to third countries via China. Media reported that almost half of all toll-processing orders to North Korea via China seem to have come from South Korea-based companies.

As for North Korea's development strategy, the trend of replacing imported goods to domestic products is forecast to continue in 2016. However, it is questionable whether this will succeed, because the country lacks raw materials essential for production such as electricity, plastics, and rubber.

As for the sanction's effectiveness, China's willingness to implement the sanction will play a crucial role in determining whether North Korea's trade with China continually falls in 2016. China's sanctions include arbitrary areas, 'civilian-related clauses', and the interpretation of this is solely at the discretion of China. China will not only consider its own economic interests (environment protection policy for air quality improvement, and sharp import decline due to localization policies), but also those of the local governments of China's three northeast provinces, since the cities in those provinces rely heavily on economic cooperation with North Korea. The political relationship between the US, China and the two Koreas will also affect China's decision.

All in all, the steady decline in coal and iron ore prices in the international commodity market and China's economic slowdown would negatively affect North Korea's trade with China. However, the keys are in China's discretion of the sanction and North Korea's improved production capabilities. We have also yet to see whether China will fully implement the UNSC's sanction against North Korea, as a report says that China has recently resumed economic cooperation with North Korea in infrastructure construction. **KIEP**