

## Strengthening Complementary Textile Production System between North Korea and China



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Recently, the rapidly declining price of minerals and metals in the international market and slower economic growth of China, which is referred to as the ‘new normal,’ have brought structural changes in trade between North Korea and China. The interesting feature of this change is in the source of change; the impetus is coming from China and the world, not from North Korea, even though North Korea is regarded as the most closed economy in the world.

North Korea has been exposed to the world market through its trade with China. Even though political relations between North Korea and China have deteriorated in recent years, China is still North Korea’s biggest import trading partner and the main

source of foods, basic necessities, electronics, energies, and even technology transfer. North Korea has relied heavily on China for its exports of mineral fuels, marine products and textiles. China's share in North Korea's total exports increased dramatically from 51% in 2003 to 90.1% in 2014 (Source: Korea International Trade Association). Mineral fuels account for 37.2% of North Korea's total exports and this is followed by textile (20.1%), iron ore (10.4%) and marine products (4.4%).

As the price of minerals took a nosedive, it had led to hard times for North Korea. The price of coals decreased drastically from USD 141.94 per metric ton in January 2011 to USD 61.94 in April 2015 (Source: Australian thermal coal, IMF Cross Country Macroeconomic Statistics). The drop in prices is not limited to coals; iron ore along with many other metals also experienced the same price declines since 2011. The falling prices resulted in huge losses in export revenue from minerals for North Korea.

To overcome this downturn phase of mineral prices, North Korea has tried to diversify the composition of export commodities. To offset losses in mineral exports, North Korea has made efforts to increase the export of textile, fish and crustaceans by using its cheap labor force and abundant fishery resource endowment. In 2014, the revenue from exports of textiles to China increased by 23.7% which is the sharpest increase among export commodities, and that of fish and crustaceans increased by 21.9%. Eventually, the total exports of North Korea in 2014 was 7.6 billion USD, a 3.7% increase compared to the previous year.

In contrast to the previous commodity share changes in trade between North Korea and China, increased textile exports to China brought about an integration of the textile production system between North Korea and the two Northeast Provinces of China, Jilin and Liaoning. Instead of importing finished garments from North Korea, the two provinces of China have begun to outsource the labor-intensive process of textile production to North Korea to avoid China's relatively high tariffs on finished garments, which is 17% on average. As a result, the complementary textile production system between North Korea and the two provinces of China is being established through the trade of intermediates of textile.

A surge in textile exports from North Korea has accelerated as the two regions' needs are more tightly met. The two provinces of China have suffered from rapid rural-urban migration of labor and the phenomenon of workers avoiding manufacturing jobs, which has led to wage increases in the two provinces of China. The two provinces needed a cheap labor force that can solve the problem of insufficient labor force and North Korea represented a solution for

that problem. As a result, the labor intensive part of the manufacturing process has moved to North Korea. Due to increasing losses in export revenue from mineral resources, North Korea eased restrictions on foreign investment into domestic production facilities, and local governments of the two provinces of China also implemented duty exemption policy which has been applied to few textile firms to boost the economic growth of the provinces.

Both China's rising labor costs and North Korea's deregulation of foreign direct investment led also to the drop of coordination costs in managing different stages of the textile production across borders. As coordination costs have fallen below the wage gaps between the two provinces of China and North Korea, labor intensive processes of textile production have started to move to North Korea to make use of North Korea's cheap labor. The coordination costs include the risks of contract breach by North Korean partners, restrictions on cross-border interaction, and lack of legal protection and constraints related to industry infrastructure in North Korea. Progress in information and communication technologies such as smart phones and messenger applications in smart phones, and the allowance of those technologies in North Korean territory further decrease the coordination costs.

The increasing trade of intermediates has two implications. Firstly, strengthening complementary, cross-border textile production through trade of intermediates will further increase the trade of North Korea. The increase in processing trade of intermediates will raise not only North Korea's imports of raw materials from China, but also North Korea's exports of intermediates to China. The increase in trade of intermediates would make the total bilateral trade even less meaningful than it may seem because much of the trade would consist of re-exports of intermediates. In order to make 1 unit of an intermediate cloth, for instance, North Korea imports fabric at \$10 from China, and after processing the fabric, exports a unit of intermediate textile at \$12 to China. The total bilateral trade is \$22, but it contributes only \$2 to North Korea's economy. There is a possibility that the increase in North Korea's total trade in 2014 is exaggerated, if one were to construe the increase in its volume of trade as a proxy of North Korea's growth or development. In other words, a large part of the increase in trade would be a result of changes in China's economy, through its boom of intermediates trade, and not the result of growth of North Korea's economy.

Second, the increase in intermediate trade also means North Korea's increased dependence on the Chinese economy, making the North Korean economy less vulnerable to domestic shocks. As the trade in intermediates grows, economies are more intertwined, implying that

economic shocks in China's textile industry would forcefully translate to shocks not only to North Korea's textile industry, but also to total trade of North Korea. At the same time, however, it makes North Korea's economy less sensitive to domestic shocks because the biggest source of its external income is China. **KIEP**