



China-North Korea Trade in 2015: The Beginning of a Downturn

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China-North Korea trade accounts for the majority of North Korea's international trade and is considered significant for the economic development and social stability of North Korea. Due to the fourth North Korean nuclear test and the subsequent UN sanctions resolution, the current situation and future prospects of China-North Korea trade are becoming increasingly relevant to the peace and stability of the Northeast Asian region. This paper examines recent trends in China-North Korea trade and analyzes the causes of the ongoing decrease and its prospects, before discussing possible effects and policy implications of a prolonged downturn.

CHINA-NORTH KOREA TRADE: TRENDS, FACTS, & MYTHS

China-North Korea trade has decreased in 2014-2015 in various aspects. The volume of goods traded and its share in North Korea's total volume of trade both dropped, as did China's trade surplus with North Korea. As for trade in services, while North Korean labor exports to China might have slightly increased, China's export of services to North Korea in the form of construction contracting has fallen by roughly one quarter since 2013.

Volume of Trade

The volume of China-North Korea trade in goods fell sharply in 2015. According to the General Administration of Customs of China (GACC), the bilateral trade volume valued at \$5.511 billion in 2015 dropped by 13.39 percent compared to 2014 (see Table 1 and Table 2). This is the second consecutive year the GACC reports a decrease of China-North Korea trade. Some experts consider the 2014 decrease questionable because it might have excluded China's export of crude oil to North Korea, which was valued above \$500 million in 2011-2013 and would have reversed the decrease into a slight increase if included.¹ No matter whether this reputed problem applies to the 2015 numbers or not, it does not change the fact that the trade volume dropped significantly compared to 2014.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ROK	642	724	697	1,056	1,350	1,798	1,820	1,679	1,912	1,714	1,971	1,136	2,343	2,714
Intl	2,260	2,391	2,857	3,002	2,996	2,941	3,816	3,414	4,174	6,357	6,811	7,345	7,611	N.A.
Total	2,902	3,115	3,554	4,058	4,346	4,739	5,636	5,093	6,086	8,071	8,782	8,476	9,954	N.A.
China	738	1,024	1,377	1,581	1,700	1,974	2,787	1,710	3,466	5,629	5,931	6,545	6,363	5,511
C/T	25.43	32.87	38.75	38.96	39.12	41.65	49.45	33.58	56.95	69.74	67.54	77.22	63.92	N.A.

Source: 통일부 월간남북교류동향 2015년12월호, p. 29; KOTRA 2014북한대외무역동향, p. 3; 中华人民共和国海关总署 (<http://www.customs.gov.cn>).

China's share in the North Korean total trade volume was also reduced. As shown in Table 1, China accounted for 63.92 percent of North Korean trade in 2014, dropping by 13.3 percentage points compared to the historical peak reached in 2013. North Korea's total trade volume in 2015 is not yet available, but it should not be too much lower than 2014, considering that the increase in intra-Korean trade and the efforts to promote trade diversification should have largely made up for the decrease in its trade with China. Assuming the 2015 volume remained the same as that of 2014, China's share in 2015 would have been about 55 percent.

One widely reported myth about China-North Korea trade is that China accounts for over 70 percent, or even 90 percent, of North Korea's total trade volume and that North Korea is depending more and more heavily on China for trade due to the country's increasing isolation. The main reason why China's share has been exaggerated is because the most widely used statistics on North Korea's total trade volume are from South Korean sources, which do not include intra-Korean trade as North Korea's international trade. Instead of mistaking the South Korean statistics on North Korean international trade for the latter's total trade volume, we should recalculate the numbers by adding the volume of intra-Korean trade, which is large enough to make a significant difference in the results (see Table 1). In addition, South Korean statistics might be so far the best numbers we can get about North Korean total trade volume using "mirror statistics," but they do not include every trade partner of North Korea and, thus, tend to underestimate the actual amount. For instance, in the KOTRA (Korea Trade-Investment Promotion Agency) statistics of North Korean international trade in 2012-2014, respectively 71, 80, and 72 countries are included.² Besides, it is not true that North Korea's trade dependency on China keeps growing. North Korea has been emphasizing trade diversification in recent years in order to prevent too much dependence on China as well as to make up for the decrease in its trade with China. As shown in Table 1, China's share in North Korean trade began to drop heavily since 2014, almost back to the 2010 level by the end of 2015.

Balance of Trade

China has maintained a favorable balance of trade with North Korea over the past few years. According to GACC, China reported a \$380 million trade surplus with North Korea in 2015, which marks the fourth consecutive year that the surplus has decreased (see Table 2). The 2014 decrease, again, needs further verification as to whether crude oil was actually exported to North Korea yet not included in the statistics, as argued by Nam Jin-wook.³ If this were indeed the case for 2014 and 2015, the actual surplus would have been larger, but that would not affect the decreased amount of the surplus in 2015.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Import	271	396	582	497	468	582	754	501	1,188	2,464	2,485	2,912	2,842	2,565
Export	467	628	795	1,085	1,232	1,393	2,033	1,210	2,278	3,165	3,446	3,633	3,523	2,946
Total	738	1,024	1,377	1,581	1,700	1,974	2,787	1,710	3,466	5,629	5,931	6,545	6,363	5,511
Surplus	196	232	213	588	764	811	1,279	709	1,090	701	961	721	681	380
C/T	25.43	32.87	38.75	38.96	39.12	41.65	49.45	33.58	56.95	69.74	67.54	77.22	63.92	N.A.

Source: 中华人民共和国海关总署 (<http://www.customs.gov.cn>)

These numbers raise questions about another myth, which claims that trade with China is North Korea's major source of hard currency, which might be used somehow by the North Korean government to finance its nuclear and missile projects. This claim is becoming particularly relevant as North Korea's fourth nuclear test and subsequent rocket launch have heated up international concerns about its growing nuclear capability. This claim is based on records of North Korea's exports, the majority of which have been to China. But if we look at the balance of trade to see North Korea's net hard currency income, the picture would be very different. As shown above, North Korea is recording a trade deficit with China every year, which means that instead of earning a net surplus by trading with China, it has to use

hard currency earned from other sources, such as intra-Korean trade, to finance the deficit. As such, the claim that trade with China is North Korea's major source of hard currency is telling only half the story and could be misleading.

Service Trade

Labor exports are becoming an important source of hard currency for North Korea. In particular, North Korea is believed to have sent larger numbers of laborers overseas in recent years to make up for decreasing revenue from goods exports due to the “May 24 measures” imposed by the South Korean government and later the shrinking exports to China. According to Lee Suk, labor exports are becoming so significant for North Korea that it might be even more effective to give higher priority to trade in services, in particular labor exports, than trade in goods when considering new sanction measures after North Korea's fourth nuclear test.⁴

There is no readily available data on the exact number of North Korean laborers working in China, at least to the knowledge of this author. One source from which we can get some hints is the number of North Korean visitors to China compiled by the China National Tourism Administration (CNTA). As shown in Table 3, respectively over 184,000 and 188,000 North Koreans visited China in 2014 and 2015, reduced by about 20,000 compared to 2013. The decrease mostly took place in the “business” category, whereas the numbers under “working and crew” remained as high as around 90,000 since 2013. It is hard, however, to figure out the exact meaning of the numbers under the “working and crew” category, as to how much of these numbers are repeated counts of multiple entries of the same persons and how many of these people are working as contracted laborers in Chinese companies, serving at North Korean restaurants in China, or simply temporary visitors on short-term working missions.

Table 3. North Korean Visitors to China (2010-2015) (unit: Thousand Persons)

	Total	Business	Tourism	Relatives & Friends	Working & Crew	Others
2015	188.3	25.9	1.5	0.1	94.2	66.7
2014	184.4	33.9	1.5	0.1	89.1	59.7
2013	206.6	55.1	2.9	0.3	93.3	55.0
2012	180.6	55.2	4.5	0.2	79.6	41.1
2011	152.3	39.0	4.6	0.1	75.3	33.3
2010	116.4	25.3	4.3	0.4	53.9	32.4

Source: 中国国家旅游局, <http://www.cnta.gov.cn/>

Table 4. China's Service Export to North Korea (2002-2014) (unit: \$ million)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Projects	2.55	4.87	34.87	26.34	28.74	7.22	33.49	18.01	30.18	56.10	106.67	120.88	90.49
Labor	5.17	4.15	4.37	5.12	5.47	6.41	7.39	5.37	4.82	N.A.	N.A.	N.A.	N.A.
Consulting	0.15	-	0.15	0.10	0.16	-	0.80	-	-	N.A.	N.A.	N.A.	N.A.
Total	7.87	9.02	39.39	31.56	34.37	13.63	41.68	23.38	35.00	N.A.	N.A.	N.A.	N.A.

Source: 中国国家统计局, 《中国统计年鉴》各年版, <http://www.stats.gov.cn/tjsj/ndsj>

Note: Projects refer to overseas construction projects contracted to Chinese enterprises; Labor refers to Chinese labor force organized to go abroad to provide service to foreign agencies (note by source).

One thing for sure is that the actual number of North Korean laborers in China should be significantly smaller than these rough data. According to a report of the Asan Institute for Policy Studies, there are a total of 52,300-53,100 North Korean laborers working overseas as of 2013, of which about 19,000 were working in China and about 20,000 in Russia.⁵

It is often overlooked that service trade between China and North Korea works both ways. While North Korea exports laborers to China, some Chinese companies are working as contractors of construction projects and/or providing labor and consulting services in North Korea. According to the *China Statistics Yearbook*, which classifies these services as “economic cooperation,” contracted projects account for the majority of China’s service exports to North Korea, amounting to \$90.49 million in 2014 (see Table 4). Similar to the trend in goods trade and the total number of North Korean visitors, China’s service exports to North Korea also peaked in 2013 and began to drop in 2014, falling by about \$30 million and roughly one quarter.

THE POLITICAL ECONOMY OF SHRINKING TRADE: CAUSES & PROSPECTS

The ongoing decrease of China-North Korea trade is caused primarily by the decline of North Korean mineral exports and the suspension of some existing economic cooperation platforms after the execution of Jang Sung-taek, neither of which is likely to be reversed in the foreseeable future. China recently launched a number of infrastructure projects in areas near to or along the China-North Korean border under its Belt and Road Initiative. These projects could have opened some new possibilities for China-North Korea trade, but this is very unlikely for the near future given the January 2016 North Korean nuclear test and the UN sanctions resolution adopted thereafter.

Decline of North Korean Mineral Exports

As some experts have pointed out, the decline in North Korea’s export of minerals, anthracite in particular, is the main economic cause of the decrease of China-North Korea trade in 2015. North Korea began to enlarge mineral exports to China and rely on them as the major source of hard currency after the South Korean government imposed the “May 24 measures” in 2010, before which it used to rely on a trade surplus with South Korea to finance most of its trade deficit with China. Lee Suk has quantitatively tested this mechanism in a regression analysis, proving that there is one-way Granger causality between North Korea’s exports to China, especially the export of anthracite, and its imports from China after the issuance of the “May 24 measures.”⁶

Anthracite accounts for over 40 percent of North Korea’s export revenue to China in 2011 to 2013; however, anthracite exports to China began to decline in both price and volume: The unit export price dropped from \$83.30/ton in 2013 to \$73.40/ton in 2014, and the export volume shrank from 16.49 million tons to 15.43 million tons, resulting in a 17.7 percent decrease in the yearly export revenue.⁷ Determinants for this decline, according to Jong-Kyu Lee, include the falling export unit price, declining demand due to China’s withering steel industry, and the Chinese government’s plans to strengthen environmental regulations and further restructure the steel industry.⁸ These factors continued to push down North Korean anthracite exports to China in 2015, resulting in another 7.6 percent decrease in export revenue.⁹

Iron ore, North Korea's second largest export item to China for years, shrank even more severely in 2014 and fell out of North Korea's top five export items in 2015. The yearly export revenue reached as high as \$298.7 million in 2013, accounting for 10.26 percent of overall exports to China. The unit price of North Korean iron ore, however, fell from \$97.69/ton in January 2014 to \$54.42/ton in December 2014, and further to around \$45/ton by the end of 2015. The export volume showed relatively minor decreases at first, dropping from 3019.75 thousand tons in 2013 to 2793.83 thousand tons in 2014, but began to fall sharply to less than 1500 thousand tons in 2015. As a result of the decrease in unit price and export volume, the yearly revenue from North Korean exports of iron ore to China fell by 25.7 percent to \$221.9 million in 2014 and again by 67.2 percent to \$72.8 million in 2015.¹⁰

Suspended Cooperation Platforms

The difficult political relations between China and North Korea did not help to slow the decrease in bilateral trade. On the contrary, the execution of Jang Sung-taek in December 2013 resulted in the suspension of some existing economic cooperation platforms, which worsened the conditions of trade from 2014. The two governments initiated a variety of economic platforms when their leaderships decided to strengthen bilateral economic cooperation in 2010. The momentum of cooperation was maintained for some time after the death of Kim Jong-il, with Jang taking charge on the North Korean side. Platforms established under the 2010 initiative include the North Korea Investment Office in Beijing, the China-North Korea Co-development and Co-management Committee of the Rason Economic and Trade Zone, the Huangjinping and Weihua Islands Economic Regions, and the China-DPRK Economic Trade Cultural and Tourism Expo. These platforms played an important role in the rapid expansion of trade from 2010, not only as signals of the political will of both sides to promote bilateral economy cooperation but also as institutional improvements that can better facilitate economic transactions on the ground.¹¹

Some of these platforms, in particular those claimed to have Jang as the backer, were suspended soon after his execution. One example is the North Korea Investment Office in Beijing, which was established in July 2010 and reportedly was the only overseas branch established thus far by the DPRK Committee on Joint Ventures and Investment that had just been upgraded the previous month from the Bureau of Joint Ventures and Investment Guidance into one of five committees directly reporting to the cabinet. The office held a variety of events to fulfill its mission to attract Chinese investments to North Korea, including conducting online and offline promotion of North Korean investment policies and projects, providing daily investment counseling, organizing potential investors to conduct on-site business trips, and establishing the North Korea Investment Fund.¹² No updates can be found about the office from shortly after Jang's execution until April 2015 when South Korea's Yonhap news reported its closure.¹³ It is hard to know the exact amount of trade revenue or investment that had actually been attracted to North Korea via this office, but it certainly received wide publicity and raised expectations among interested Chinese investors about the North Korean government's willingness to improve the business environment. The closure of the office, likewise, did not only shut down a channel for attracting investments, but also brought down investors' expectations about North Korea's economic prospects.

The Huangjinping and Weihua Islands Economic Regions (hereafter the Two Islands), the establishment of which owed deeply to Jang, were also suspended after his execution. Construction work on the site was reported to have cooled off by mid- December 2013,¹⁴ and

remained largely untouched since then. The only reported new development is the exterior work on an office building designed for the managing committee, which is said to have been almost finished as of October 2015.¹⁵ The Two Islands were once expected to become the new frontier of China-North Korea economic cooperation, as their location connected to Dandong is even more advantageous than that of Rason. The expectations soon faded after the execution of Jang, together with a real estate boom in Dandong, leaving only the unsold apartments to remind people of the uncertain prospect of this bilateral economic cooperation.

Meanwhile, the other cooperation platforms in which Jang was involved less deeply continued functioning and kept playing an important role in facilitating China-North Korea trade. For instance, the China-DPRK Economic Trade Cultural and Tourism Expo that was initiated in 2012 held its third and fourth annual meetings in October 2014 and 2015, attracting over 100 North Korean companies each year to come to Dandong to meet with hundreds of companies from China as well as other parts of the world.¹⁶ Another example is the China-North Korea Co-development and Co-management Committee of the Rason Economic and Trade Zone. Established in 2012, it played a key role in the formulation and amendment of trade and investment laws in Rason in 2013,¹⁷ and is continuing to perform as coordinator in law enforcement and dispute resolution between Chinese and North Korean companies in the Rason area.

China's Belt and Road Initiative and Infrastructure Building

Aside from the above economic and political factors that tended to push the China-North Korea trade downward, it is noteworthy that some new projects favorable for bilateral economic cooperation were initiated in 2015. They are mostly infrastructure built by the Chinese side under the Belt and Road Initiative (B&R), which focuses on connectivity and cooperation among relatively underdeveloped countries. The projects have not brought significant changes so far to the shrinking China-North Korea trade as most of them are just completed or not fully utilized due to the lack of a high-level political push on reviving bilateral economic cooperation, but are important, nonetheless, because they are opening some new possibilities for China-North Korea trade.

To be clear, North Korea is not an official partner of the B&R to this day, yet China has decided not to exclude the China-North Korea border areas from the grand initiative of infrastructure building and upgrading. In fact, the Chinese government did not take North Korea into much consideration in the early B&R policy drafts, but took a more open stance as local governments bordering North Korea proposed various projects in their local B&R plans and defined North Korea as an important potential partner for long-term economic development.¹⁸ Later in April 2015, the new Chinese ambassador Li Jin-jun upon his arrival in Pyongyang introduced the B&R to the North Korean minister of external affairs and expressed hopes for the two countries to work together to push forward bilateral economic cooperation. North Korea, however, maintained its long held cautiousness about multilateral economic mechanisms and made no official response on this matter. According to two Kim Il-Sung University professors, there have not been many public discussions about the B&R in North Korea as of September 2015.²⁰

Despite the absence of inter-governmental partnership on the B&R, China began to launch infrastructure projects in areas bordering North Korea where infrastructure works proved necessary for the long-term development of the locality. These projects include: 1) border

economic zones, such as the Helong Border Economic Cooperation Zone (approved March 3)²¹ and the Guomenwan Border Trade Zone at Dandong City (October 15);²² 2) a shipping route between China and North Korean ports, namely the Longkou-Nampo break bulk cargo and container-shipping route (September);²³ and 3) renovation of ports of entry, such as construction of the New Tumen River Bridge.²⁴

From the Chinese point of view, these projects are launched more as part of the grand work to upgrade infrastructure in border areas, not necessarily for the purpose or as signals of the immediate revival of China-North Korea economic cooperation. It would be unfair to disadvantage the Northeast provinces and leave border facilities out of the B&R just because relations with North Korea are somewhat difficult for the moment, considering the fact these provinces are suffering from a low economic growth rate and most of the land border checkpoints between China and North Korea were built before the 1940s under Japanese rule. Whether and when these new facilities will be utilized at full capacity, however, is another matter subject to the influence of many factors, as shown in the indefinite postponement of the opening of the New Yalu River Bridge. It would have benefited people on both sides of the border if the facilities could have been put to the best use soon, but this does not seem likely given the fourth North Korean nuclear test and the UN resolution expanding sanctions against it.

EFFECTS OF FURTHER DOWNTURN: HINTS FROM RECENT DATA

How will the further decrease of China-North Korea trade affect North Korea? One way to answer this question is to get some hints from changes on the North Korean side during the decrease so far, although it has not been long since the decrease started. First, North Korea's trade deficit with China was reduced in 2015 despite its shrinking exports. As shown in Table 2, the deficit shrank from \$681 million in 2014 to \$380 million. While exports to China fell by \$227 million, North Korea reduced imports from China by \$578 million and improved its balance of trade by about \$300 million. North Korea had to cut its imports from China to counter the decrease in export revenue, having no easy access to cover it by enlarging a trade surplus with other partners. The fact that imports were reduced by a larger amount than the decrease in exports leads to two possible interpretations about North Korea: the first, it is very sensitive to the unfavorable expectation of export revenue losses that it reacted by reducing the outflow of hard currency sharply; the second, it is quite elastic in terms of import demand, which is not that hard to understand given the high level of state influence over imports and the recent campaign of increasing domestic production of consumer goods. In short, the recent data on North Korea's balance of trade show that it is quite sensitive to the decrease of export revenue from China but might not be so fragile as to change due to its flexibility or elasticity in imports.

Ready-made garments (RMGs) are the key export items that helped North Korea lessen the decrease of exports to China. As shown in Table 5, North Korea's export to China of four kinds of RMGs, namely men's overcoats, men's suits, women's overcoats, and women's suits, increased by 24.2 percent, 25.1 percent, 17.6 percent, and 66.5 percent respectively in 2014, earning \$124 million more of export revenue than the previous year (see Table 5). The growth rate did not remain as high in 2015, but the total export revenue of the four RMG

Rank 15'	HS Code	Item	2013		2014		2015	
1	2701	Coal	1379.8	15.1%	1135.7	-17.7%	1049.8	-7.6%
2	6201	Men's overcoats	126.7	42.6%	157.3	24.2%	168.5	7.1%
3	6203	Men's suits	122.2	59.0%	152.9	25.1%	151.3	-1.1%
4	6202	Women's overcoats	116.5	32.3%	137.1	17.6%	130.5	-4.8%
5	6204	Women's suits	63.3	24.2%	105.3	66.5%	96.9	-8.0%
6	2601	Iron ores	298.7	20.1%	221.9	-25.7%	72.8	-67.2%
Total North Korean Export to China			2,911.5	17.2%	2,841.5	-2.4%	2,564.5	-9.7%

Source: 한국무역협회, www.kita.net

Rank 15'	HS Code	Item	2013		2014		2015	
1	5407	Woven fabrics of synthetic filament	136.8	14.0%	152.8	11.6%	138.2	-9.5%
2	2710	Petroleum oils	104.5	-35.5%	154.8	48.2%	116.5	-24.8%
3	8704	Motor vehicles for goods transport	143.3	1.5%	108.7	-24.2%	108.1	-0.5%
4	1507	Soya bean oil	85.0	21.4%	112.2	32.0%	104.0	-7.4%
5	8517	Line telephone or telegraph	74.7	-19.9%	112.3	50.4%	73.5	-34.6%
-	100630	Rice	28.5	6.8%	37.0	29.6%	10.8	-70.9%
-	100590	Maize	31.9	56.5%	5.7	-82.3%	3.0	-46.7%
Total North Korean Import to China			3,633.2	5.4%	3,522.5	-3.0%	2,946.5	-16.4%

Source: 한국무역협회, www.kita.net

items stayed at the 2014 level, and all of them surpassed iron ore to become top five export items to China. Considering the fact that North Korea once managed to replace intra-Korean trade with mineral exports as the primary source of hard currency after the South Korean government issued the “May 24 measures” in 2010,²⁵ it is not impossible for it to attempt another round of trade restructuring by replacing minerals with labor-intensive products as the primary export items, although this attempt should be more challenging than the previous round since the promotion of export-oriented labor-intensive industries would require closer coordination with international partners than the mining industry.

On the import side, all of North Korea's major items from China decreased as its exports continued to shrink in 2015, although the rate of decrease varied. Among North Korea's major imports, grain, freight cars, telephones, and petroleum fell most sharply in the last two years. As shown in Table 6, North Korea's import of rice, maize, telephones, and petroleum from China decreased by 70.9 percent, 46.7 percent, 34.6 percent and 24.8 percent, respectively in 2015, more severely than the overall export decrease. Freight cars, the third largest import item, dropped by merely 0.5 percent in 2015, but had already fallen by 24.2 percent in the previous year. Of the top five import items, only filament fabrics, which are the main raw materials for export-oriented RMG production, and soybean oil fell by a smaller percentage than the decrease in the overall North Korean imports from China. The import of rice and maize dropped most heavily over the last two years. One possible explanation is that North Korea has become more self-sufficient and less in need of grain imports under Kim Jong-un's "North Korean Style of Economic Management," but this is not likely the case in 2015 since the country's major agricultural areas suffered historical droughts over the year. In any case, it is important to figure out how the downturn of China-North Korea trade might affect each import item and the overall composition of North Korean imports from China, as North Korea relies heavily on China for the import of food and consumer goods that are closely related to ordinary people's livelihood.

CONCLUSION & IMPLICATIONS

China-North Korea trade has decreased in 2014-2015, and the downturn is very likely to continue in the near future. The primary causes of the recent decrease, namely the decline in North Korean mineral exports and the suspension of some of the existing cooperation platforms between the two countries, do not seem to be reversing. The possibilities once opened by the new infrastructure built under China's Belt and Road Initiative are largely closed after North Korea's fourth nuclear test. North Korea might be sensitive yet not so fragile to the prolonged downturn of China-North Korea trade, and will possibly further reduce imports and enlarge the export of labor-intensive products to minimize the damage.

The expected downturn has become almost inevitable after the adoption of the new UN Security Council resolution on North Korea (UNSCR 2270), which contains the toughest set of sanctions imposed by the UNSC in more than two decades and many rigorous provisions unprecedented in the North Korean sanctions regime. In particular, provisions like mandatory cargo inspections and sectoral sanctions on North Korean trade in natural resources will impact China-North Korea trade the most, as they will increase transaction costs and further accelerate the decrease of North Korean mineral exports to China. Chinese Foreign Minister Wang Yi emphasized on multiple occasions China's commitment to fully implement the sanctions resolution.²⁶ This came before President Xi Jinping reconfirmed China's stance that "all parties should implement the resolutions of the UN Security Council on the Democratic People's Republic of Korea in a complete and strict way"²⁷ when meeting with President Obama during the fourth Nuclear Security Summit. The resolution provisions are reportedly being carried out strictly at Chinese ports and border checks so far, and the Ministry of Commerce and the GACC jointly announced on April 5 a list of mineral products embargo against North Korea²⁸ to provide more detailed guidance on sanction enforcement. Until North Korea returns to the negotiating table and makes sincere efforts to meet the international community's demand for denuclearization, these sanction provisions will continue to add to the downward pressure of China-North Korea trade.

In relation to the prospect of the new sanctions regime, the findings of this paper deserve attention at least in three aspects. First, further studies are needed to reveal the mechanism of how North Korea has been financing its trade deficit with China, in order to better assess the role China can play to influence North Korea's behavior under the new sanctions regime. This is not to say China is not the key player in sanction enforcement. The point is that it would be problematic to evaluate China's role only based on its trade volume with North Korea, while balance of trade is an equally, if not more important indicator of North Korea's source of hard currency. Even if we take into account China's FDI to North Korea, which was \$86.20 million in 2013 and \$51.94 million in 2014,²⁹ there is still a large deficit with China that North Korea should have had financed from surpluses elsewhere, which would be highly relevant to the possible effectiveness of sanctions. Secondly, the further decrease of China-North Korea trade is not unexpected to North Korea, regardless of the new UN resolution. While enhanced sanctions can undoubtedly accelerate the decrease of North Korea's export to China, it is not as certain how this will affect, at least in the short term, North Korea's balance of trade or net income of hard currency, considering its flexibility in import control and recent efforts to pursue self-sufficiency of consumer goods as shown in the recent decrease of China-North Korean trade. Not least, North Korea's major import items from China are highly sensitive to the decrease of North Korean export revenue. Most of these items are closely related to ordinary people's livelihood and humanitarian needs, which are important contents of the new sanctions resolution in addition to the goal of denuclearization. As such, it would be important to figure out the mechanism of change of these major import items and how such changes might affect the livelihood status of the North Korean people, in order for the comprehensive and concerted implementation of the new sanctions resolution.

ENDNOTES

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