

North Korea, Apparel Production Networks and UN Sanctions: Resilience through Informality

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Abstract: The strengthening of multilateral international sanctions against North Korea has raised questions as to how effective they are in exerting pressure on the country's economy. In this paper, we address this question by examining their impact on the country's integration into regional and global apparel production networks. North Korea has in the past decade become an increasingly competitive exporter of apparel on the basis of consignment-based processing arrangements. Official trade data shows a sharp drop in North Korean exports of clothing since the sectoral ban in 2017. There is evidence to suggest, however, that exports have continued on a more informal and clandestine basis. North Korea's integration into apparel production networks has also taken the form of the dispatch of workers to factories in China's northeastern border regions. Yet there is evidence that the recent sanctions imposed on such practices has similarly led to illicit practices such as working on visitors' visas, often with the help of Chinese enterprises and local government. The resilience of North Korea's integration into apparel production networks follows a capitalist logic and is result of the highly profitable nature of apparel production for all actors concerned and a correspondingly strong desire to evade sanctions. As such, the analysis contributes to the literature on sanctions that suggests that the measures may contribute to emergence of growing informal and illicit practices and to the role of the clandestine economy.

Key Words : North Korea, China, Production Networks, Sanctions, Border Economy, Sino-North Korean Relations

요약: 본고는 북한이 임가공사업과 인력송출을 통해 중국 주도의 지역·글로벌 의류 생산네트워크에 편입되는 과정과 구조적 특성을 밝히면서, 강화된 국제사회의 대북 제재조치가 미친 영향을 파악하고자 한다. 2017년 하반기 채택된 UN안보리 결의안에 북한산 섬유제품의 수입금지와 해외 파견 북한 노동자의 송환이 포함되면서 2010년대 들어 급증했던 중국기업의 대북 위탁가공거래와 노동력 활용은 크게 위축되었다. 그러나 북·중 접경지역 경제교류에는 오랜 기간 불법적인 요소들을 포함한 다양한 비공식적 거래방식이 공존하고 있다. 대북 경제제재 강화에 따라 합법적 교류창구가 닫히게 되면서, 규모는 감소하였지만 북한의 의류 위탁가공생산과 노동부문의

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2017S1A5A8021617).

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북·중 협력은 음성적 영역으로 전환·진행되고 있다. 북한의 지역 및 글로벌 생산네트워크 편입의 실태를 분석한 본 연구는 대북 경제제재의 실효성과 북한경제 변화에 대한 시사점을 제시할 것이다.

주요어: 북한, 중국, 생산네트워크, 대북 제재, 접경지역, 북·중 경제관계

1. Introduction

Following the collapse of the second United States–North Korea summit in Hanoi in February 2019, negotiations surrounding North Korea’s nuclear programme once again became deadlocked and the stringent international sanctions regime against North Korea remained in place. There has been much debate, however, as to how far these sanctions have been effective. Some observers have cited sanctions as having successfully brought North Korea to the table, and indeed, Kim Jong Un had reportedly made a request for sanctions relief at the Hanoi summit as part of a possible deal with the US (Min and Han 2020). Yet if sanctions effectiveness is defined in terms of actual policy change on the part of the target state, then the fact that negotiations quickly became bogged down in familiar issues of the sequencing of concessions suggests that they failed to bring Pyongyang to the point where it was prepared to concede to US demands.

This failure might not be surprising. The mainstream sanctions debate has largely focused on the question of whether sanctions are effective instruments of statecraft or not. Even the most optimistic accounts, however, tend to find a rather a low efficacy rate for sanctions. Indeed, one major study frequently cited as representative of the “optimistic camp” in terms of sanctions efficacy

placed their success rate at just 34 per cent of all the cases examined (Hufbauer, Schott, and Elliott 1990, 92–93), with other studies putting their success rate even lower (Pape 1997). The reasons for limited efficacy of sanctions are numerous. The relationship between economic pressure and the desired policy change is by no means straightforward. As Lee Jones has argued, sanctions typically ‘work’ by affecting struggles for power and resources amongst coalitions of socio-political forces. The latter’s composition, power, resources and strategies are all impacted differentially by economic pressure, and thereby serve to differentially shape their struggles for state power, and by extension, the nature of the targeted state itself (Jones 2015, 39–40). In this respect, the highly authoritarian and monolithic nature and apparent lack of inter-elite competition within the North Korean political system would seem to make it a ‘least likely’ case for the success of sanctions (Chen 2017).

Yet, sanctions also frequently fail to have even the desired economic impact. The degree to which the sender state is able to ensure that other states, particularly allies, support the sanctions is seen as crucial to their success (Mayall 1984, 639; but see Drezner 2000). However, the economic impact of sanctions can be significantly undermined through the existence of a ‘black knight’ that provides alternative sources of trade (Early 2011). Even when sanctions do receive widespread sup-

port, such as through adherence to UN resolutions, other mechanisms of evasion may be found, such as through smuggling. Indeed, as Hufbauer et al. themselves point out, "... a sieve leaks like a sanction. Ingenious new trading relationships, devised by domestic and third-country firms, flower because it is difficult to trace the origin and destination of traded goods" (Hufbauer, Schott, and Elliott 1990, 106). Through encouraging such evasion strategies, sanctions may therefore have negative unintended outcomes. They may, for example, contribute to the criminalisation of the state, economy, and civil society of both the targeted country and its immediate neighbours, thereby fostering a symbiosis between political leaders, organised crime, and transnational smuggling networks (Andreas 2005). As such, sanctions may not only fail to achieve their stated political objectives, they may contribute to the expansion of the informal and illicit economy.

The aim of this paper is to examine such processes in the case of the UN multilateral sanctions and their impact on the North Korean apparel sector. As is well known, following the collapse of the economy in the 1990s, North Korea's subsequent recovery and economic growth was predicated upon two inter-related processes, namely a domestic process of marketisation and the burgeoning trade with China. While marketisation was initially a grassroots "self-help" response to the collapse of the central planning and the public distribution system, it quickly came to encompass a variety of economic sectors and effectively restructured the state's relationship to society. Many of the newly emergent market dynamics were co-opted and formalised by the state

through its somewhat erratic and cautious programme of economic reform. Sino-North Korean trade, on the other hand, was driven first and foremost by the booming Chinese economy as well as the increased profit orientation of North Korean enterprises and their desperate need for foreign exchange. The rapid growth in North Korean exports from the early 2010s was constituted by mineral resources, and in particular, anthracite. As a developmental strategy, reliance on mineral exports faced the kinds of challenges seen across the developing world, namely vulnerability to volatile international prices. However, the decline in mineral exports due to falling Chinese demand was partly offset by North Korea's integration into global apparel production networks. Indeed, apparel manufacturing represented the fastest growing sector of the North Korean economy. By 2015, North Korean clothing exports to China reached around \$800 million, accounting for 32 percent of the country's total exports to China. Furthermore, Chinese apparel enterprises located in border regions of Liaoning and Jilin Province made increasing use of dispatched North Korean labour, thereby alleviating labour shortages in China's northeast.

Unsurprisingly, the marked strengthening of multilateral sanctions in 2017 had a damaging impact on these emergent cross-border production networks. Indeed, official Chinese customs data began to record North Korean apparel exports at zero from January 2018.¹⁾ As we argue, however, outsourcing by Chinese enterprises to North Korea saw a shift from legitimate official arrangements to increasingly informal and illicit forms. It is indeed the case that often the boun-

dary between licit and illicit in North Korea is blurred since many supposedly “illicit” activities are only regarded so because they are outlawed by sanctions (Hastings 2016, 13). North Korea’s production of clothing for export would be a legitimate activity were it not for the sectoral ban under UN Security Council Resolution 2375. In order to maintain this trade, however, overtly illegal methods are often deployed, such as cross-border smuggling. The dispatch of North Korean labour to China has also increasingly deployed illegal methods such as working on short-term visitor visas or permits. In this respect, the UN sanctions have contributed to the further informalisation and even criminalisation of the cross-border economy. While North Korea has been frequently noted for its illicit activities, this paper suggests that this process of economic “normalisation” through the pursuit of a development strategy that has been tried and tested elsewhere in Asia has been forestalled due to the stringent international sanctions regime.

2. North Korea’s Integration into China-Centred Apparel Production Networks

While North Korea had long been subject to US unilateral sanctions, multilateral sanctions under the auspices of the UN were not imposed upon the country until after Pyongyang’s first nuclear test in October 2006. However, these latter sanctions initially fell under the category of “smart sanctions” (Cortright and Lopez 2002), in that

they did not seek to impose a broad trade embargo on the country but instead targeted those elements of the North Korean system with close ties to the country’s weapons programme. Between 2006 and 2013, UN Security Council Resolutions 1695, 1718, 1874, 2087 and 2094 imposed bans on the export to North Korea of any items potentially related to the nuclear and missile programme as well as on a broader range of military goods. They also banned North Korean exports of arms and materiel that might benefit the country’s defence sector, placed travel bans and asset freezes on individuals and entities connected to the nuclear programme, and sought to target North Korean elites more broadly through a ban on exports to North Korea of luxury goods. The sanctions also included a range of measures permitting and then mandating the inspection of potentially sanctions-breaking shipments to and from North Korea.²⁾

The paradox is, however, that during the first decade of the UNSC’s multilateral sanctions regime, North Korea saw an unprecedented deepening of its engagement with the regional and global economy, and in particular, an expansion of its trade and investment relations with China. As indicated in Figure 1, Sino-North Korean trade saw a rapid increase from US\$ 1 billion in 2003 to \$5.63 billion in 2011, and then again to \$6.55 billion in 2013.³⁾ This also involved a significant reduction of North Korea’s chronic trade deficit with China, largely as a result of the sharp increase in North Korean exports. Indeed, in 2013 and 2014, North Korean exports centred around coal, iron ore, clothing, and seafood, amounting to a value of nearly \$3 billion. In particular, an—

thracite became North Korea’s largest export, with exports to China peaking at \$1.38 billion in 2013.

Minerals therefore played a central role in North Korea’s growing export trade, leading to questions as to whether North Korea’s political economy should be viewed through the lens of the resource curse. In this view, not only does the country’s reliance on mineral exports leave it vulnerable to shifts in international prices, but can also have adverse political consequences such as the degradation of institutions and the corruption and enrichment of elites (Haggard and Noland 2017, 68–69). This view would seem to neglect, however, the extent to which North Korea also became increasingly integrated into China–centred regional apparel production networks on the basis of labour–intensive manufacturing. These networks operated on the basis of consign–ment–based processing (CBP), whereby Chinese

enterprises would supply the necessary funds, production equipment and materials while North Korean enterprises would provide the labour and production site. The finished products would then be re–exported back to China, thereby represent–ing a partial reduction in North Korea’s hitherto heavy dependence on mineral resource exports (Choi et al. 2015). Indeed, according to Chinese customs statistics, North Korean CBP– based clothing exports to China grew from about \$67 million in 2007 to \$741 million in 2014, and there– after subsequently peaked at \$799 million in 2015. That same year, clothing exceeded 30 percent of North Korea’s total exports and was dominated by non–knitted products (HS 62), including shirts, blouses, jackets and coats. Due to China’s enact– ment of a ban on North Korean coal exports from February, clothing became North Korea’s largest export item in 2017.

In North Korea, these cross–border apparel

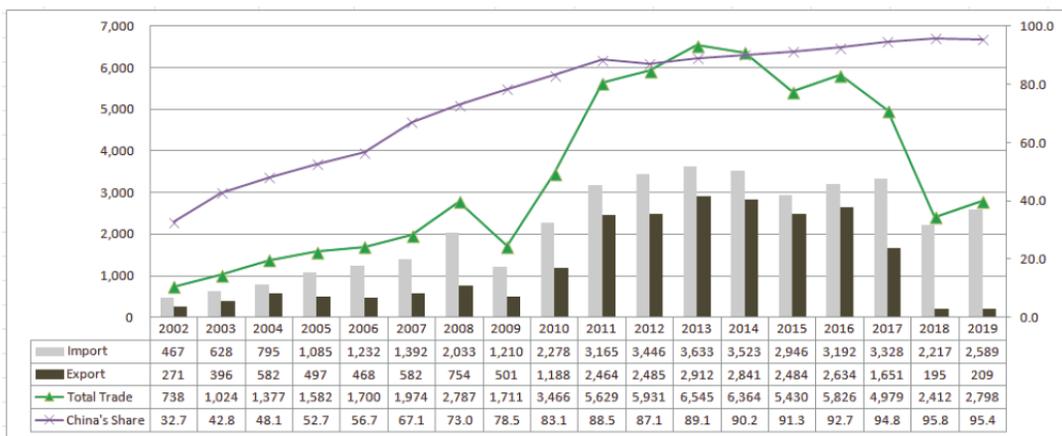


Figure 1. North Korea’s Official Trade with China, 2002–2019

Units: Million US\$, %. Source: China Customs data. China’s share of total North Korean trade is based on estimates made by the Korea Trade-Investment Promotion Agency. Note: China Customs statistics appear to have omitted North Korean data between August and November 2009. Chinese exports of crude oil have also been omitted from official customs data since 2014.

production networks consisted of large factories located in the country's major cities as well as small and medium-sized factories in the provinces. The former included key clothing manufacturers such as Potonggang Clothing Factory in Pyongyang, Taedonggang Clothing Factory in Pyongsong, and Sonbong Clothing Factory in Rason (KDB 2015, 623–24). However, each province and county had traditionally established its own textile factories for the purpose of supplying local needs. With the growth in the cross-border trade, these factories also became involved in the export trade. In addition, the majority of North Korea's large state trading companies, such as Daesong, Kumgang, Daehung, Rungrado, Bonghwa, and Unha, became involved in clothing exports. The Unha General Trading Company owned by the Central Workers Party's Light Industry Department specialised in clothing production and managed around twenty export-oriented clothing factories.⁴⁾

For North Korean entities, the key motivation for engaging with these cross-border production networks was unsurprisingly the earning of much needed foreign exchange. For Chinese enterprises, on the other hand, the advantage of CBP-based production was that it enabled them to utilise low-cost North Korean labour without the need to make investments and manage factories directly within the country. The fact that the materials were supplied by the Chinese enterprises meant that the North Korean apparel sector was highly import-dependent. Indeed, North Korean imports of artificial filament fibre (HS 54) from China increased from \$79 million in 2010 to \$187 million in 2016, while knitted goods (HS 60) in-

creased from \$26 million to \$85 million during the same period. The toll processing costs paid by the Chinese enterprises to their North Korean partners would then constitute the latter's profits and were calculated mainly in terms of per unit labour costs (e.g. \$1.5 per item of clothing). The costs of the various inputs supplied by the Chinese enterprise would then be deducted from the overall fees.

As with mineral exports, the growth in the Sino-North Korean apparel trade was largely governed by capitalist dynamics. While the overall framework for economic relations between the two countries reflected both Beijing and Pyongyang's strategic priorities, the substance of day-to-day exchange was determined by the decisions of profit-oriented entities at the grassroots level (Gray and Lee 2018, 124). As such, the rapid growth in North Korean apparel exports was driven by China's economic boom and its burgeoning demand for clothing imports. China's overall clothing imports had grown from less than \$2 billion in 2009 to more than \$6 billion in 2015.⁵⁾ This reflected a surge in labour costs within China, partly as a result of a deliberate government strategy to shift away from low-wage production for export. For instance, in 2010, the legal minimum wage saw an average increase of 23 percent, and in 2011, increased further by 16.7 percent (Jin, Lee, and Lim 2012, 11).

In addition, Northeastern China had since the late 1990s become a key site of outward migration, both to other provinces and abroad, thereby exacerbating severe regional labour shortages. In 2004, for example, Liaoning Province ranked as the second largest labour-sending province na-

tionwide (Biao 2007, 69–70), thus posing a serious challenge to labour intensive manufacturers. Dandong in Liaoning Province, for example, saw a resulting decline in the number of apparel companies in the city from 120 to 70 in the early 2010s (Choi et al. 2015, 105). As such, North Korea came to perform the role of what David Harvey refers to a “spatial fix” for China’s apparel industry (Harvey 2001, 24). While North Korea ranks relatively lowly in terms of its overall importance to China’s external trade, it nonetheless emerged as China’s second–largest source of apparel imports, accounting for 13.2 percent of all Chinese clothing imports in 2014, 14.2 percent in 2015, and 11.9 percent in 2016.⁶ As will be discussed below, some enterprises in the northeastern border regions also began to hire dispatched North Korean workers, often with the support of local governments.

As shown in Table 1, the majority of North Korea’s clothing exports were in the first instance to enterprises based in Liaoning and Jilin Provinces. Liaoning received around \$639 million of North Korean apparel in 2015, thereby ac-

counting for about 80 percent of all North Korea’s clothing exports. Jilin Province received around \$154 million of North Korean apparel in 2015 and \$72 million in 2016. For example, the Hunchun Yunda Knitting Clothing Company in the Yanbian Korean Autonomous Prefecture in Jilin Province had from 2005 engaged in CBP–based outsourcing to North Korean factories, such as those operated by the Unha Clothing Company based in Rason, North Hamgyong Province (Lim 2012, 71). By 2015, a total of eleven companies based in Hunchun were outsourcing production to Rason–based clothing factories under CBP arrangements (Bae and Yoon 2015, 170).

While China’s northeastern border cities functioned as gateways for Sino–North Korean trade, this did not mean that they were the final destination for North Korean clothing exports. Garment products brought into these border cities were typically delivered to enterprises located elsewhere in China and then either sold in the domestic market or exported overseas. The aforementioned Hunchun Yunda Knitting Clothing

Table 1. China’s Clothing Imports from North Korea, by Region

(Value unit: US\$ 1,000)

	2014			2015			2016		
	Region	Value	%	Region	Value	%	Region	Value	%
1	Liaoning	654,463	88.31	Liaoning	638,706	79.90	Liaoning	639,554	88.41
2	Jilin	74,612	10.06	Jilin	154,264	19.29	Jilin	72,202	9.98
3	Shandong	8,672	1.17	Shandong	3,832	0.47	Shandong	7,682	1.06
4	Tianjin	1,134	0.15	Shanghai	1,073	0.13	Shanghai	1,931	0.26
5	Shanghai	954	0.12	Jiangsu	733	0.09	Jiangsu	1,815	0.25
6	Zhejiang	739	0.09	Tianjin	462	0.05	Tianjin	188	0.02
7	Heilongjiang	412	0.05	Beijing	205	0.02			
8	Beijing	33		Zhejiang	18				
9				Guangdong	10				

Source: China Customs data

Company, for example, acted as subcontractor for the Youngor Clothing Group, one of China's largest manufacturers of men's clothing. Chinese border city enterprises were usually small and medium-sized businesses without their own brands. Due to the complexities of dealing with the country, it was rare for large well-known Chinese brands to establish contracts directly with North Korean enterprises. It was only the border city enterprises that had the experience in dealing with North Korea and could serve as intermediaries by visiting North Korean production sites to supervise production quality and ensure timely delivery. After finished products were shipped to China, these enterprises would carry out final production tasks such as quality inspections, ironing, and packaging, and then deliver the garments to their buyers (Lee et al, 2017, 344-45). However, North Korean apparel products were also often re-exported beyond China to global markets, in which case they would first be transported to bonded warehouses in Dandong and before being shipped to their final destination.

Indeed, the North Korean garment industry in some cases was integrated with the supply chains of several well-known international brands. One of the key markets for North Korean apparel exports was South Korea. In 2010, the so-called "May 24th" sanctions imposed following the suspected North Korean sinking of a South Korean naval ship prohibited CBP-based production in North Korea by South Korean companies, with the exception of the Kaesong Industrial Complex until it too was closed in 2016. As a result, the role of Chinese enterprises as intermediaries in inter-Korean production networks increased. As

Seung-Jae Kim's (2020) research has shown, in September and October 2018, the South Korean home shopping company CJ O Shopping sold casual clothing items under the brand name "Feltics" through its television channel and online store. There were suspicions, however, that jackets sold as "Chinese-made" were actually manufactured in North Korea. CJ O Shopping had allegedly subcontracting to a Seoul-based clothing company which had in turn entered into an arrangement with a Chinese clothing company based in Jiangsu Province. This latter company then established a toll processing contract with a Dandong-based clothing company which ran a small factory in the city that hired around 80 North Korean dispatched workers.⁷⁾ However, a significant portion of the production order was also subcontracted to a garment sewing factory in Pyongyang. As such, around 20,000 jackets made in North Korea were delivered to Dandong in August 2018, and after undergoing quality inspection and packaging, were then shipped to South Korea (Kim 2020, 13-19). In 2018, this Dandong clothing company also reportedly delivered 300,000 items of clothing for Li-Ning, a well-known Chinese sports brand, as well as 50,000 items of South Korean brand clothing.⁸⁾

The overseas market for North Korean-made goods was not limited to South Korea, however, and reached Europe, the United States, and other Western countries. Due to the very nature of these production networks, the exact extent of North Korea's clothing exports beyond China is not easy to ascertain. Anecdotal evidence suggests, however, that in several cases, well-known international brands were manufactured in North Korea.

In the 2000s, the Dutch clothing company C&A and Germany's Gerry Weber were reportedly involved in imports of North Korean clothing (GPI Consulting 2017, 1). Similarly, Icepeak products, a brand of L-fashion Group Oy in Finland, were manufactured at a factory in Pyongyang and exported to Finland and Poland via an intermediary clothing company in Dandong (Kim 2020, 54). In February 2016, it was reported that clothing products of Rip Curl, a leading Australian company selling surfing and ski clothing, were manufactured at the Taedonggang Clothing Factory in the North Korean city of Pyongsong via an intermediary Chinese enterprise.⁹ In this case, as many as 4,000 North Korean items of clothing produced under the company's brand name and tagged as "Made in China" were reportedly shipped to Europe, Australia, Canada, Argentina, and Chile.¹⁰

Suspensions were further raised that North Korean workers based in China were also involved in the production of apparel products for world-class sports brands.¹¹ According to Seung-Jae Kim (2020), for example, a New York company that signed clothing manufacturing license agreements with Nike, Adidas and Reebok subcontracted to a South Korean apparel company, which in turn re-subcontracted to two Chinese factories in Tumen and Hunchun, in Jilin Province. From 2012 to September 2016, these latter two factories produced clothes and shipped them to the United States. Indeed, these Chinese enterprises manufactured Adidas and Reebok-branded clothing during the busy summer months between 2010 and 2016 through CBP-based arrangements with North Korean garment sewing

factories in Rason and Chongjin (Kim 2020, 86–101). As such, the oft-opaque nature of production under global production networks enabled clothing manufactured in North Korea to reach overseas consumer markets.

3. Apparel Production and the Transformation of the North Korean Political Economy

North Korea's integration into China-centred apparel production was built on the country's earlier experience of manufacturing textiles for export. North Korea had long been engaged in exports to the Soviet Union and Eastern Europe. As part of the country's efforts at diversifying its overseas markets and increasing its foreign exchange earnings, the Law of Equity and Contractual Joint Ventures was enacted in September 1984. However, investments were largely limited to pro-Pyongyang ethnic Koreans in Japan, who engaged in CBP-based outsourcing to North Korean enterprises (KDB 2015, 617). The apparel sector was adversely affected by the economic crisis of the 1990s and saw a marked deterioration in production capacity, but the sector underwent recovery and subsequent growth due to rising South Korean and Chinese investment in the 2000s.

The significant potential of the country's clothing sector led the North Korean authorities to place great emphasis on CBP-based apparel production as an expedient means of acquiring foreign currency. As Ok Sam Ri argued in a 2013

edition of *Kyŏngje Yŏn'gu*, the economic journal of the North Korean Cabinet:

“Building a high level of processing capacity in the clothing sector means, in short, securing production conditions necessary to create international value ... Today, there is fierce competition at the international level to reduce the cost of products in trade activities and to gain more profits by constantly increasing labour production efficiency. Under such conditions, failure to build and constantly raise sound processing capacity in the practice of the clothing processing trade will not only result in the loss of the economic benefits of trade activities, but also the loss of international market demand” (Ri 2013, 49-50).

This integration into China-centred production networks was also greatly facilitated by qualitative shifts in the nature of the North Korea’s political economy and by reforms to its economic management system. As noted, the economic crisis of the 1990s was followed by a process of grassroots marketisation, which had its origins in the emergence of markets selling food and basic necessities but subsequently progressed to the manufacturing, retail, transport and service sectors, as well as the real estate and construction sectors. The authorities also provided an institutional basis for this process, albeit within certain limits. With the July 1st “economic improvement” measures in 2002 and the establishment of the general markets in 2003, the rights and responsibilities of individual enterprises were expanded and SOEs’ performance came to be as-

sessed according to their “earned income” (*pŏnsuib*). Under this system, North Korean SOEs were expected to be self-sufficient and responsible for their own performance (Lim 2016, 82). As a result, North Korean enterprises began to show greater interest in foreign trade, and because apparel production for export was such a profitable business, there was growing competition amongst North Korean trading companies and factories to establish contracts with Chinese partners. As a North Korean defector who previously worked as a manager of a Sinuiju-based trading company:

“In North Korea, the conditions for doing work related to the toll processing of clothing are the most favourable indicator for companies. There are many people in North Korea who can do such work. There’s a lot of competition amongst people, so it is somewhat hard to get in ... So, in North Korea, managers of trading companies have been focused on getting contracts in recent years. They think it is a big deal to establish business rights in fields that utilise North Korean manpower. ... The higher authorities evaluate them as doing well when contracts are successfully concluded. If you reach a contact with foreign companies, you can do business for a long time.”¹²⁾

In addition, the Socialist Enterprise Responsibility Management System (SERMS) was formally announced in May 2014 and became a central part of the Kim Jong Un government’s reform programme. At the 7th Party Congress in May 2016, Kim argued that “...Factories, enterprises and cooperative organisations should establish

management strategies in accordance with the requirements of the SERMS and should actively and creatively engage in enterprise activities, thereby, normalising, expanding and developing production. We must make sure that conditions are fully guaranteed so that management rights granted by the state can be fully utilised.”¹³ The authorities emphasised that SOEs should increase their own capabilities in order to secure funds and raw materials as a means of normalising production and generating profits. North Korean economic publications also stressed that SOEs were now given the right to make their own decisions concerning production, sales and finance management, and were thus expected to devise their own plans. Given these increased rights and material incentives, enterprises were also expected to support the livelihood of their employees as well as contribute to the national budget (Kang 2018, 56–57; Kim 2015, 72–73). Under the SERMS, enterprises were also granted rights to engage directly in foreign trade and establish joint ventures with overseas companies. Article 37 of the Enterprise Law, as amended in 2014, stipulated that individual enterprises should actively conduct foreign economic activities through utilising their trade, joint venture, and cooperation rights, and enter into independent contracts with foreign companies to procure the funds, raw materials, and facilities necessary for their own production (Kim 2015, 72–73). As a result, the North Korean trading companies and garment factories had strong motivations to increase production and generate profits through cooperation with Chinese enterprises.

4. Impacts of International Sanctions on the Sino-North Korean Cross-border Economy

As North Korea’s external trade reached unprecedented levels, its integration into global production networks suggested that it was following the footsteps of other developing Asian countries. As such, the first decade of UN multilateral sanctions did not appear to have exerted any major macro-economic shocks on the country. However, the multilateral sanctions regime was subsequently strengthened to the extent that by late 2017, sectorial export bans had been placed on mineral resources, seafood and textiles. The overseas dispatch of North Korean labour was also prohibited, and workers were to be repatriated by the end of 2019. Joint ventures with North Korean entities were also proscribed and restrictions were placed on the export of energy to the country (see Table 2). Collectively these sanctions sought to cut off trade and investment flows with North Korea, thereby blocking the country from earning foreign exchange that might support its nuclear programme.

This strengthening of sanctions coincided with China’s increased enforcement of multilateral sanctions as a result of Beijing’s own concerns about the destabilising consequences of North Korea’s nuclear programme as well as the threat of US “secondary sanctions.” Previously, Chinese enforcement of sanctions was somewhat lax as a result of concerns that a stringent economic blockade of North Korea would lead to the instability of the regime and thus negatively impact

Table 2. UN Multilateral Sanctions and Their Sectoral Targets

UNSCR 2270 (March 2, 2016)	<ul style="list-style-type: none"> • ban on NK exports of coal, iron, iron ore, gold, titanium ore, vanadium ore, and rare earth materials (though with exemption for 'livelihood purposes').
UNSCR 2321 (November 30, 2016)	<ul style="list-style-type: none"> • NK iron and iron ore exports permitted if for livelihood purposes. • export bans placed on copper, nickel, silver, and zinc, helicopters, vessels, and statues. • annual cap on the amount/value of coal exports.
UNSCR 2371 (August 5, 2017)	<ul style="list-style-type: none"> • complete ban on coal, iron, iron ore, lead and lead ore exports, seafood. • ban on new joint ventures with NK entities, or expansion of existing investments. • ban on the hiring of additional NK dispatch workers.
UNSCR 2375 (September 11, 2017)	<ul style="list-style-type: none"> • cap on sales of refined petroleum, crude oil and natural gas liquids to NK. • ban on NK textile exports. • ban on new work permits for overseas NK workers. • ban on existing joint ventures with NK entities.
UNSCR 2397 (December 22, 2017)	<ul style="list-style-type: none"> • limit on NK's imports of petroleum to 500,000 barrels per year. • crude oil capped at current levels. • repatriation of all NK workers abroad within 24 months.

Sources: UN Security Council Documents on North Korea

<https://www.securitycouncilreport.org/un-documents/dprk-north-korea/>

upon China's own interests (Chi et al. 2017, 297). However, the introduction of the quantitative cap on North Korean coal exports in November 2016 was followed by the Chinese government's decision to halt its imports of North Korean anthracite the following February, stating that North Korea had already exported the maximum permitted amount for that year. Furthermore, Beijing announced measures to halt all imports of North Korean mineral resources, seafood and clothing when they were banned by the new sanctions in 2017. Official Chinese customs statistics clearly show the impact of the new sanctions and China's more stringent enforcement of them on North Korea's external trade. Sino-North Korean trade fell to \$2.41 billion in 2018. Although there was a slight increase to \$2.8 billion in 2019, this was still than half that of 2016. More striking, how-

ever, is the decline in North Korea's exports to China, from \$2.63 billion in 2016 to \$195 million in 2018, though again rising slightly to \$209 million in 2019. As a result, the country's trade deficit with China grew to \$2.02 billion in 2018 and again to \$2.38 billion in 2019.

Due to the sanctions, North Korean exports to China of coal, iron ore, apparel and seafood officially come to a halt since 2018, thereby bringing about a sharp decline in its foreign currency earnings. Furthermore, sales to North Korea of industrial machinery, electronic equipment, metals and vehicles were all banned under Resolution 2397, and as a result, North Korean imports from China saw a relative shift towards food products (soybean oil, rice, flour, sugar), plastic materials for construction (flooring, tubes), parts for watch assembly, and clothing raw materials (KITA 2020,

3-4). International sanctions thereby exerted a significant shock on the North Korean economy and served to disrupt the country's Five-Year Strategy of National Economic Development (2016–2020).¹⁴ As noted in the introduction, the economic impact of multinational sanctions since 2016 appeared to underpin Kim Jong Un's request for the lifting of the UN sanctions at the Hanoi summit in 28 February 2019.

The sharp drop in Sino–North Korean trade since 2017 did not mean, however, that there was a complete cessation of CBP-based trade between the two countries. Official statistics suggest that, on the one hand, exports saw a relative shift towards new items that were not subject to UN sanctions, such as watches, wigs, laboratory equipment, footballs and shoes, which accounted for about 50 percent of total official exports to China (KITA 2020, 6). Indeed, in 2019, watch exports amounted to a value of \$50 million, an increase of 58 percent from the previous year. The CBP-based nature of these networks was apparent in the fact that North Korea imported watch parts from China to a value of \$70 million in 2019. North Korea exports of wigs to China also reached \$29 million in 2019. It seems unlikely, however, that the export of such goods was large enough in scope to cover the apparent loss of exports earnings in clothing.

Yet, is it the case that North Korea's apparel exports really ground to a halt, as the official statistics suggest? The answer to this question can perhaps be found in examining North Korea's import statistics. While North Korean textile exports were subject to UN sanctions, textile imports were not. In 2018, North Korean textile imports from

China did see a decline, but textiles remained the country's largest imported item. Furthermore, in 2019, imports of artificial filament textiles (HS 54) from China, which are used as material for apparel sewing, increased by 37 percent to a value of around \$189 million.¹⁵ This was comparable to the \$187 million in artificial filament imports in 2016 prior to the implementation of UN Resolution 2375. North Korea's imports of knitted fabrics (HS 60) at a value of about \$90 million in 2019 also exceeded the \$85 million of 2016. While imported Chinese textiles could conceivably be directed at production for North Korea's domestic markets, the fact that the public's purchasing power had reportedly seen a significant decline as a result of the sanctions suggests that CBP-based production continued to take place and that North Korean apparels found their way into China through smuggling. Informal trading practices such as smuggling, cash payment and spot transactions that had already become widespread following North Korea's economic crisis in the 1990s (Lee and Gray 2017) continued to be prevalent in the border regions despite the tougher sanctions. Indeed, the 1,300km Sino–North Korean border provided numerous opportunities for such smuggling, either at its eleven official custom points or at unofficial crossing points.

Following North Korea's fourth and fifth nuclear test in 2016, the Chinese authorities did crack down on smuggling and other illicit trading activities involving North Korea. For example, in September 2016, the authorities arrested Ma Xiaohong, president of Hongxiang Industrial Development Company, for engaging in illegal transactions with North Korea. In May 2017,

Dandong and Tumen Customs strengthened their inspections of the import and export trade with North Korea,¹⁶⁾ and in June that year, the Dandong municipal government announced a further crackdown on smuggling in the border regions.¹⁷⁾ However, following the warming of relations between Kim Jong Un and Xi Jinping, these measures were relaxed somewhat and there were signs that North Korean products were again finding their way into Chinese markets. For example, there were increased sales of North Korean seafood in the markets in Liaoning and Jilin Provinces, although the origins of the seafood were often disguised.¹⁸⁾ Furthermore, from the summer of 2018, the number of Chinese tourists crossing the border to visit North Korea saw a sharp increase. Although tourism was not banned under the UN sanctions, the Chinese authorities had nonetheless cracked down on the practice. The resurgence of tourism thus suggested a broader loosening of restrictions. In addition, the number of cargo vehicles and merchants travelling to and from North Korea to China in 2018 reportedly more than doubled in comparison to 2017 levels.¹⁹⁾

With regards to the apparel sector, in order to continue CBP-based production in North Korea, some Chinese enterprises engaged in smuggling by loading sanctioned industrial equipment and materials onto North Korea-bound vehicles together with non-sanctioned items. Clothes manufactured in North Korean factories were packed in sacks and then in many cases smuggled on small and medium-sized fishing boats back across the Yalu River to Dandong, often aided by professional smuggling gangs.²⁰⁾ Smuggling of goods into

China also took place by vehicles across the shallow waters in the upper area of the Yalu River, and through various unofficial crossing points on the Tumen River. Indeed, North Korean trading companies and government agencies reportedly conducted large-scale smuggling operations involving more than 200 to 300 tons of goods.²¹⁾ Though it is unlikely that the increase in illicit trade was able to compensate for the decline in official trade, there seems little doubt that such practices served to lessen the direct economic impact of sanctions.

This illicit trade in CBP-based clothing was, however, effectively suspended in February 2020 when the entire border was closed due to the Coronavirus pandemic. According to China's export data, artificial filament fibre exports to North Korea dropped to \$16 million by July 2020, a decline of 84 percent compared to the same period the previous year. Pyongyang suspended the issuance of visas for Chinese nationals and cracked down on smuggling and the illegal movement of traders across the border. From April 2020, there was a partial resumption of cargo shipments, although imported goods from China mainly consisted of urgent food items and medical supplies. As such, the pandemic and the closure of the border meant that the operations of North Korean garment sewing factories largely ground to a halt, and the resumption of the CBP-based clothing production and trade depended on the ending of the coronavirus pandemic and/or the subsequent easing of border controls.

5. The Continued Employment of North Korean Workers in Chinese Factories

As noted, UN multilateral sanctions since 2017 progressively placed limitations on the dispatch of North Korean workers abroad to the extent that all UN member states were required to expel North Korean workers by the end of 2019. This reflects the fact that the overseas dispatch of workers had become a key means whereby North Korea sought to earn foreign currency. Since the early 2000s, the number of countries where North Koreans worked grew rapidly. Dispatched North Korean workers were reportedly working in 45 countries, including Russia, the Middle East (Kuwait, the UAE, Qatar, Oman), Africa (Angola, Nigeria, Algeria) and Eastern Europe (Poland) (Lee, Lee, and Kim 2019, 441-42). However, China was consistently the host country of the largest number of North Korean workers. It was estimated that there were around 80,000 North Koreans working there,²²⁾ with many of these in the country's apparel sector.

Chinese border city manufacturers employed significant numbers of North Koreans in order to overcome regional labour shortages. In 2016, there were estimated to be around 30,000 North Korean workers in the Dandong region alone (Choi 2016, 104). In addition, around 9,000 North Koreans were employed in factories in the Yanbian Korean Autonomous Prefecture in Jilin Province.²³⁾ Chinese firms typically employed fewer than a hundred North Korean workers, but from the mid-2010s, large-scale apparel factories

employing North Korean workers were also increasingly common. For example, in 2015, the Youngor Clothing Group, headquartered in Ningbo City in Zhejiang Province, built a men's clothing factory in Hunchun of Jilin Province (Bae and Yoon 2015, 170). More than 1,500 dispatched North Korean workers were hired at the site in just one year, and as of July 2016, North Koreans accounted for more than 70 percent of the total workforce. Youngor's Hunchun factory also had plans to employ several thousand more North Korean workers,²⁴⁾ and by the first half of 2018, there were around 3,000 North Korean workers in the factory.

The dispatch of North Korean workers was also promoted by the regional authorities in northeast China as a means of addressing labour shortages. An example of this was the establishment of the Choson Industrial Zone in Tumen in August 2011. With the approval of the Jilin Provincial Government, the Tumen City authorities signed an agreement with the North Korean Joint Venture and Investment Committee to hire 20,000 North Koreans. As such, in the spring of 2012, North Korean workers dispatched by Choson Rungrado Company, Kyonghung Company, and Choson Computer Center began working there.²⁵⁾ By June 2015, the number of North Korean dispatched workers in the Choson Industrial Zone had increased to 2,680, and in 2017, more than 6,000 North Korean workers were employed by about twenty Chinese companies (Lee 2016, 9; Lee, Lee, and Kim 2019, 445).

Since UN resolution 2397, however, the official dispatch of new North Korean workers to China came to an abrupt halt, and as a result of the

Chinese government's efforts to enforce these sanctions, increasing numbers of North Korean workers returned home. There is anecdotal evidence to suggest, however, that a considerable number also remained in China despite the deadline, suggesting not only a loophole in terms of the enforcement of international sanctions but also weaknesses in terms of China's employment registration system for foreign citizens. As with economic exchange more broadly, the employment of North Korean workers in China took place through a mixture of formal and illicit hiring practices. Prior to the enactment of the 2017 sanctions, there were two main routes by which North Korean workers could obtain factory work in China: (1) legally by means of an official work permit, and (2) illegally through either a temporary "pass-through" system for border residents or a short-term visitors' visa.

In the case of the legal route, North Korean workers were subject to the Regulations on the Management of Employment of Foreigners in China, and the Exit and Entry Administration of the People's Republic of China. For Chinese firms seeking to hire foreign workers through the government's official work permit system, it was necessary to obtain a work permit certificate issued by the Ministry of Human Resources and Social Security, and a residence permit certificate issued by the Public Security Bureau. As such, the employment of North Korean workers required following the administrative procedures of both the relevant municipal and provincial governments. Work visas were initially issued for one year though could be extended for up to three years through renewals (Lee and Ouellette 2018,

134-37). For this reason, North Korean workers with an official permit would normally return to North Korea after two or three years of working at a Chinese factory.

However, large numbers of North Korean workers were also employed outside of the Chinese government's formal procedures. North Korean citizens are permitted to enter China on short-term visas of up to three months for the purpose of visiting relatives or tourism. While it is illegal for North Koreans on such visas to work whilst in China, the local authorities tended to turn a blind eye towards such practices. Given that these authorities did not have the right to extend visas, the workers needed to return to North Korea when their visa expired. As such, they typically made repeated renewals of their visas by visiting North Korean border cities such as Sinuiju or Rason and then re-entered China the following day. Chinese enterprise managers actively assisted in this process, thereby enabling the workers to spend between two and three years working at the company. In certain cases, however, North Korean workers were able to renew their visas by forging the necessary paperwork to make it appear that they have made the trip to North Korea (Lee, Lee, and Kim 2019, 448-49). A similar method was to take advantage of a temporary border pass certificate known as the 'Cross River Pass.' This Pass allowed North Koreans to cross the Yalu or Tumen Rivers to visit close relatives on the other side for a maximum stay of one month (Oh 2019, 20). While the use of the Cross River Pass was officially limited to residents in the border regions, they were in reality widely issued across the country. Thus, Chinese companies frequently

employed North Korean workers with temporary border passes, and local governments often turned a blind eye towards practices.

The tightening of UN sanctions in 2017 thus resulted in a significant reduction in the number of North Korean workers in China with official work permits but a subsequent increase in those working illegally (Lee, Lee, and Kim 2019, 449). In late December 2017, Beijing reportedly sent a document to the relevant local governments in Liaoning and Jilin Provinces mandating the repatriation of all North Korean workers within two years. The aforementioned Choson Industrial Zone in Tumen City also received the same government order (Kim 2020, 135). In the following year, it was also announced that local authorities would impose a fine of 5,000 Yuan per worker on companies and that North Korean workers would be immediately deported if managers did not voluntarily repatriate them after their contracts had expired. Furthermore, the local governments and police in the border cities launched period crackdowns on Chinese enterprises. In December 2018, for example, around 5,000 North Korean workers employed in eighteen factories in the Dandong region were reportedly forced to return to home (Kim 2020, 176-88).

Despite these periodic crackdowns, the illicit employment of North Korean workers continued. In March 2019, the Chinese government submitted a report to the UNSC's Sanctions Committee on North Korea which stated that, "more than half of the total DPRK nationals earning income" had returned home in accordance with the 2017 resolutions, although a precise number was not given.²⁶⁾ Beijing's position was that official work

permits were no longer granted to North Koreans, and that the remaining workers with formal employment contracts would be repatriated before the December 2019 deadline. However, Beijing made no statement in relation to those workers employed on an informal basis. Furthermore, following President Xi Jinping's visit to Pyongyang in June 2019, the pressure on employment of North Korean workers was significantly relaxed. Workers continued to enter China with short-term visas or Cross River Pass certificates to work in apparel sewing factories.²⁷⁾ Indeed, the August 2020 Panel of Experts report recognised the failure of member states to repatriate North Korean nationals and cited the increased issuance of non-working visas as a factor.²⁸⁾ One example given was that of a Dandong-based apparel enterprise that employed 190 North Korean nationals in August 2019, and 292 in January 2020. The company was also found to have imported North Korean clothing products in October 2019, suggesting that apparel production networks continued despite the sanctions.²⁹⁾

The continued hiring of North Korean workers reflected the fact that there remained strong demand amongst local Chinese manufacturers for low-wage North Korean labour. At around 2,000 Yuan per month, the wages of North Korean workers were around half that of local Chinese workers. The dispatch of North Korean workers also remained a highly profitable business for the North Korean trading companies, and indeed, there was strong competition between them. Around 40 percent of the wage costs was paid to the North Korean Ministry of Finance and around ten percent to the dispatching North Korean trad-

ing company, with the remainder going to the workers. While there have been numerous accusations regarding the poor human rights of North Korean overseas workers, there is nonetheless strong competition for such work on the part of the workers themselves as a result of the higher wages that can be earned and the opportunities for upward mobility upon return to North Korea. As a result, workers often paid bribes to government officials and trading company managers in order to be selected for overseas labour dispatch.³⁰⁾

6. Conclusion

Following a sharp decline resulting from the tightening of multilateral sanctions in 2017, Sino–North Korean trade saw a further reduction as a result of the Coronavirus–related closure of the border in 2020. In the first half of the year, official trade between the two countries was recorded at just \$410 million, a decline of 67 percent compared to the same period the previous year. Furthermore, the closure abruptly reduced opportunities for even the illicit smuggling of goods. As such, the two main impetuses for North Korea’s post–crisis economic recovery, namely marketisation and the country’s deepening economic relations with China, were greatly undermined by the pandemic. In addition, serious flood damage in the summer of 2020 led to further hardship for the North Korean population. The scale of these challenges was recognised by Kim Jong Un in his 10 October 2020 speech at the mili-

tary parade held on the occasion of the 75th anniversary of the Korean Worker’s Party: “On this planet at present, our country is the only one that is faced with huge challenges and difficulties, like dealing with the anti–epidemic emergency and recovering from the catastrophic natural disasters, when everything is in short supply owing to the harsh and prolonged sanctions. All of these hardships are undoubtedly a heavy burden and pain for every family and every citizen in our country.”³¹⁾

Nonetheless, North Korea appeared to be no closer to abandoning its nuclear weapons, and indeed, at the October military parade, Pyongyang defiantly showed off its new or improved inter–continental and submarine–launched ballistic missiles. Face with such challenging external circumstances, Pyongyang instead relied on tried and tested methods of mass mobilisation through launching an “80–day Battle.” The only promising development from North Korea’s perspective was the warming of relations with China, as apparent in Kim’s four visits to China in 2018 and 2019, and Xi Jinping’s return visit to Pyongyang in June 2019, suggesting that a strategy of muddling through remained a possibility for North Korea. Indeed, China’s enforcement of sanctions measures eased somewhat from the second half of 2018 as China’s relations with the US Trump administration deteriorated. Furthermore, in December 2019, the Chinese government submitted jointly with Russia a resolution to ease sanctions on North Korea to the UN Security Council. The draft reportedly included requests to remove the ban on North Korea’s exports of statues, seafood and clothing, and the overseas dispatch North Korean

workers.³²⁾

There seems to be little doubt, however, that multilateral sanctions will stay in place at least in the immediate term. As we have argued, however, while informal practices of economic exchange have undermined the economic impact of sanctions against North Korea, they have nonetheless served to further extend the realm of the illicit economy and have even involved the use of professional smuggling organisations. This reflects the fact that it is in the economic interests of all relevant actors for the trade to continue. Indeed, the expansion of the apparel sector in North Korea and the rapid growth of its CBP-based clothing exports to China prior to late 2017 were only very loosely determined by political relations between the two countries. Ultimately, the day-to-day substance of these relations was based on the profit-seeking activities of both Chinese and North Korean enterprises. The strong motivation for Chinese enterprises to utilise the North Korea's low-cost labour looks set to continue, while North Korean entities seeking to earn foreign exchange are likely to continue their utilisation of clandestine arrangements when legitimate avenues are closed off. Nonetheless, as our case study suggests, should sanctions be lifted, North Korea's integration into regional and global production networks is likely to deepen further and may serve as a mechanism for economic reconstruction and development.

Notes

- 1) On 11 September 2017, UNSC Resolution 2375 banned the export of textile products, with a grace period of 90 days.
- 2) See *Security Council Report*, "UN Documents for DPRK (North Korea)." <https://www.securitycouncilreport.org/un-documents/dprk-north-korea/>
- 3) The data of official China-North Korea trade used in this article are drawn from China Customs statistics, which are available in the Korea International Trade Association (KITA.NET) database. <https://www.kita.net/>
- 4) Unha clothing factories are located in Pyongsong (South Pyongan Province), Huichon, Sinuiju (North Pyongan Province), Sariwon (North Hwanghae Province), Haeju (South Hwanghae Province), Kanggye (Jagang Province), Hyesan (Ryanggang Province), Chongjin (North Hwanghae Province), and Rason SEZ. Based on a July 2018 interview with a North Korean defector who previously worked as an accounting office of Unha Export Clothing Factory in Sariwon.
- 5) China Customs statistics drawn from the KITA database.
- 6) China Customs data drawn from the KITA database.
- 7) *Maeil Business Newspaper*, 19 October 2020. "Suspicion of 'Made in North Korea' products by famous fashion brands in Korea ['Made in Pukhan' chep'um p'anmae, kungnae yumyöng p'aesyönböraendü üihok palsaeng]." <https://www.mk.co.kr/news/business/view/2020/10/1069342/>
- 8) *Chosun Ilbo*, 19 October 2020. "Basic House, turns out to be made in North Korea [Pukhansan yur'onghan peijik'ausü ... UN taebukchejae wiban üihok]." https://biz.chosun.com/site/data/html_dir/2020/10/19/2020101902349.html
- 9) *The Sydney Morning Herald*, 21 February 2016, "Surf clothing label Rip Curl using 'slave labour' to manufacture clothes in North Korea." <https://www.smh.com.au/business/surf-clothing-label-rip-curl-using-slave-labour-to-manufacture-clothes-in-north-korea-20160220-gmz375.html>
- 10) *The Inertia*, 3 April 2016. "Rip Curl Used North Korean 'Slave Labor'; Here's What They're Doing About it." <https://www.theinertia.com/business-media/rip-curl-used-north-korean-slave-labor-heres-what-theyre-doing-about-it/>
- 11) *YTN*, 8 January 2018. "To tighten financial channel... yet 'Nike' made by North Korean workers exported to the USA [Tonjul choejadöni...Puk küillojaga mandün 'naik'i mie such'ul]." https://www.ytn.co.kr/_In/0115_201801080507235953
- 12) Interview, June 2018.
- 13) *Rodong Sinmun*, 8 May 2016. "Party Central Committee report presented at the 7th KWP Congress – Kim Jong Un [Chosöndongdang che 7 ch'a taehoesöhan tang chunggang-

- wiwŏnhoe saŏpch'onghwabogo - Kimjŏngŭn.”
- 14) *Rodong Sinmun*, 12 April 2018. “The Cabinet’s work in Juche Year 106 (2017) and tasks for Juche Year 107 (2018) for the implementation of the Five-Year Strategy for National Economic Development [Kukkagyŏngjebalchŏn t’oen’gae-nyŏnjŏlyaksuhaengŭl wihan naegagŭi chuch’et’oet’oet’oen (t’oekt’oet’oet’oet) nyŏn saŏpchŏnggyŏnggwa chuch’et’oet’oet’oen (t’oekt’oet’oet’oet) nyŏn kwaŏbe taehayŏ].” http://rodong.rep.kp/ko/index.php?strPageID=SF01_02_01&newsID=2018-04-12-0005
 - 15) China Customs data drawn from the KITA database.
 - 16) *Yonhap News*, 17 May 2017. “China, strengthening trade crackdown in border regions of North Korea and China… Exhaustive investigation of goods carried by people from North Korea [Chung, Pukchungjŏpkyŏngŏ muiŏktansok kanghwat’ch’ulgyŏngja mulp’um chŏnsujosa].” <https://www.yna.co.kr/view/AKR20170517069800097>
 - 17) *KBS News*, 23 June 2017. “Strengthened smuggling crackdown in Dandong, bordering North Korea [Pukchung chŏpkyŏng’ tandungshi milsu tansok kanghwa].” <http://news.kbs.co.kr/news/view.do?ncd=3503788&ref=A>
 - 18) *Mumbwa Ilbo*, 27 July 2018. “Now in Dandong... smuggled North Korean goods and workers are overflowing [Chigŭm tandungenŭn … Puk milsup’um nodongja nŏmch’yŏnanda].” <http://www.munhwa.com/news/view.html?no=2018072701070103013001&naver=nh>
 - 19) *Chosun Ilbo*, 19 August 2018. “China’s traps to control North Korea, smuggling and tourism [Pukhan chojonghanŭn chunggugŭi tŏt milsuwa kwan’gwang].” https://www.chosun.com/site/data/html_dir/2018/08/17/2018081702411.html; *The Korea Economic Daily*, September 13, 2018. “Dandong clothes factory crowded with North Korean workers again... The deal is made by cash in Yuan [Tandung otkongjang tashi dwa kŭllojaro pukchŏk … kŏraenŭn wianhwa hyŏnch’al pakch’igi].” <https://www.hankyung.com/politics/article/2018091324711>
 - 20) Interviews with a Dandong-based businessman operating a garment factory and Chinese merchants engaging in trading business with North Korea, November 2019.
 - 21) *KBS News*, 3 January 2020. “Foreign currency depletion crisis in North Korea, engaged in smuggling [Oehwagogal wigi Pukhan, kukkamilsukkaji].” <https://news.kbs.co.kr/news/view.do?ncd=4355688>
 - 22) *Voice of America*, 29 July 2019. “US Congress new sanctions law aimed at the dispatch of North Korea workers … ‘an income of more than \$1 billion annually’ [Mi ũihoe sae chejaebŏp, Pukhan nodongja songch’ul kyŏnyang …]yŏn’gan 10ŏktallŏ isang suip.” <https://www.voakorea.com/korea/korea-politics/3963216>
 - 23) Interview with Hunchun municipal government official, July 2016.
 - 24) Interviews with factory managers, Hunchun industrial zone, July 2016.
 - 25) *JiLinXinWen*, 27 December 2013. “Tumen is fully promoting the development of China (Tumen) Choson Industrial Zone [Tomun chungguk (tomun) chosŏn’gongŏptanjibalchŏn chŏllyŏk ch’ujin].” http://www.jlxcwb.com.cn/econ/content/2013-12/27/content_127646.htm
 - 26) *Reuters*, 26 March 2019. “Russia, China sent home more than half of North Korean workers in 2018: U.N. reports.” <https://www.reuters.com/article/us-northkorea-sanctions-un-exclusive-idUSKCN1R70AT>
 - 27) *SBS News*, 22 December 2019. “China repatriated some of North Korean workers, but reluctant to take strong crackdowns [Chung, Puk nodongja ilbu songhwanhaetchiman kangnyŏk tansogen ‘nan’gam].” https://news.sbs.co.kr/news/endPage.do?news_id=N1005574316&plink=SEARCH&cooper=SBSNEWSSEARCH
 - 28) “Report of the Panel of Experts established pursuant to resolution 1874 (2009),” Paragraph 122. <https://undocs.org/S/2020/840>
 - 29) *Ibid.* Paragraph 136.
 - 30) Interviews with North Korean defectors previously engaged in foreign trade and labour dispatch, May and June 2018.
 - 31) *Rodong Sinmun*, 10 October, 2020. “Supreme Leader Kim Jong Un Delivers Speech at Military Parade.” http://rodong.rep.kp/en/index.php?strPageID=SF01_02_01&newsID=2020-10-10-0011
 - 32) *Kyungbyang Shinmun*, 17 December 2019. “China and Russia submit resolution sanctions relief to Security Council ... North-South rail and road sanctions exemption also demanded [Chung Rŏ, Nambuk ch’ŏlto toro hyŏmnyŏk p’oham ‘taebuk chejae wanhwa’ kyŏrŭian chech’ul].” http://news.khan.co.kr/kh_news/khan_art_view.html?art_id=201912170831001

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- 최초투고일 2020년 11월 27일
수정일 2020년 12월 16일
최종접수일 2020년 12월 22일