

The Economic Geography of North Korean Drug Trafficking Networks

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INTRODUCTION

How has the involvement of the North Korean state influenced the geographic development of North Korean trade networks, and the ways in which they are integrated with the global economy? Talking about North Korean integration into the global economy may at first seem a bit odd. In 2012, the Australian Foreign Minister Kevin Rudd described North Korea as “reclusive, isolated, and paranoid,” and “a throwback to a former era. A bizarre mix of 1984-style state control, personality cult, whacky ideology, and military bravado,” a common assessment among Western observers (Rudd, 28 January 2012). Yet four months earlier, Rudd had warned about the threat posed by North Korea precisely because of its extensive trade activities:

“We should not be lulled into a false sense of security by the dire state of the country's economy. In fact, North Korea's weapons programs are a source of funding for the regime. It sells its weapons secrets for hard currency that keeps the regime's coffers stocked. Countries like Syria and Iran are buyers.” (Rudd, *Daily Telegraph*, 27 September 2011)

His assessments provided an interesting contrast: a country that is one of the most isolated in the world survives in part (and poses a threat to the rest of the world) by engaging in international commerce, and hence being tied into the global economy. The goal of this article is to explore this seeming paradox at the heart of how many observers think about North Korea's political economy by diving into the relationship between the North Korean state and North Korea's trade.

I focus on one particularly illustrative type of trade network: those engaged in drug trafficking. While illicit commerce may seem at first to be an odd case with which to investigate North Korea's integration into the global economy (and indeed, the geography of illicit networks is a field that has been covered only sporadically in the literature (Hall, 2010, 2013)), drug trafficking networks emanating from North Korea are especially interesting because they have faced very different institutional environments in the past two decades, with the North Korean central state at first throwing its support behind drug production and export, and then withdrawing that support. Using a global value chain framework, this shift allows us to compare the geographic characteristics of North Korean trade networks under conditions of both state-led

economic activity, and private enterprise, and to bring a systematic approach to analyzing at least some illicit networks to the international political economy literature.

In the rest of the paper, I first examine the literature on North Korea's economic survival: the changes wrought by the troubles the country has faced over the past two decades, and North Korea's internal and external economic survival mechanisms. North Korea has survived in part because of (often unwilling) economic decentralization and creative ways of engaging the global economy, thus allowing us to make contributions to the literature on illicit globalization. Second, as a way of characterizing this engagement, I apply concepts from the literature on global value chains to North Korean trade networks (and more specifically those engaged in illicit commerce). Third, I use the analytical framework to examine the spatial distribution and governance structure of North Korean drug trafficking networks in two time periods. The first occurred in and after the March of Suffering, the famine that struck North Korea in the mid- to late-1990s, and its aftermath (from 1994 until approximately 2005), when the formal North Korean economy essentially ceased to function, and the central state turned to drug trafficking as a means of economic survival. The second occurred during the (modest) revival of the North Korean economy since 2005, and the efforts by the North Korean central state to crack down on drug production within the country. Access to a favorable institutional environment and state resources was associated with a spatial distribution of drug trafficking activities that was both territorially concentrated (within North Korea) and territorially dispersed (in Europe, the Middle East, and Southeast Asia), while the North Korean state sought to control (in a type of vertical integration) as much of the value chain as possible. In the second period, the North Korean central state deprived many drug trafficking networks of state support, leading to networks with territorial distributions of production, distribution, and retail concentrated within both North Korea and adjacent countries such as China, Japan, and South Korea, and more complex business relationships with various levels of the North Korean state, leading to a more distributed capture of value along the value chain. Finally, I conclude with a discussion of the implications of this paper for the study of the geography of illicit and quasi-illicit commerce in a globalized economy.

NORTH KOREA'S ECONOMIC SURVIVAL AND ILLICIT GLOBALIZATION

The economic survival of North Korea for the past twenty years has not always been taken as the most obvious outcome of the country's troubles. In the decade following the Cold War, a number of analysts argued that North Korea's economic collapse would precipitate a more general collapse of the state (Eberstadt, 1999, Pollack and Lee, 1999). Although North Korea's economy did in fact collapse in tandem with the famine, the state bent but did not give (Haggard and Noland, 2007a, Noland et al., 2000, Eberstadt, 2007), and North Korea economy ostensibly grew from 2000 (with significant downturns) to recover by 2012 to Cold War levels (Bank of Korea, 2013).

North Korea's continued economic survival can be attributed to a combination of factors. First, since the fall of the Soviet Union, China has propped up North Korea with food and fuel aid, and by running interference for the DRPK during crises (Scobell, 2004). Second, North Korea extracts aid from other countries through its nuclear program and its steady litany of provocations (Chung, 2010). Third, North Korea has created a situation where its provocations (and the accompanying *status quo*) are preferable to its collapse for all of the relevant external actors, notably China, South Korea and the US (Cha, 2012).

Yet, over and above politically-driven factors, North Korea's survival has to a large extent been predicated on fundamental changes in the North Korean economy, and in the relationship between the state at all levels, the economy, and the population. Three (mutually reinforcing) threads in understanding the post-Cold War North Korean economy argue that North Korea has survived, in these understandings, precisely because it is no longer an autarkic, centrally planned command economy.

The first thread focuses on the disaggregation of the North Korean economy into constituent parts. As the formal command economy collapsed following the withdrawal of Soviet aid at the end of the Cold War, parallel economies requiring less organizational complexity and coordination by the central state emerged. The specific nature of these economies is up for debate. Habib (2011) divides North Korea's economy into five parallel economies, the first the remnants of the formal command economy, the second the military economy, the third the 'illicit economy', by which he means the largely state-led effort to bring in hard currency through the production and sale of drugs, counterfeit cigarettes, counterfeit money, and the like, the fourth the 'court economy' that provides imported luxury goods to the central state elite, and the fifth the informal, marketized economy by which ordinary people unconnected to the state survive. Chung (2012) likewise divides the economy into the formal and informal sectors, although he goes further and argues that the party-run 'court economy' is in fact specifically designed to put substantial goods and foreign exchange under the control of the supreme leader. In this thread, the North Korean regime is dependent on proceeds generated from the military and party economies, while the population's survival depends on the informal economy and the remnants of the formal economy that still function.

The second thread emphasizes the rise of the informal economy as a coping mechanism to deal with collapse of the formal economy. After the Public Distribution System ground to a halt during the March of Suffering and ceased to provide enough food to avoid starvation, and state social control mechanisms loosened up, ordinary North Koreans who survived did so in part by engaging in informal trading, often in markets that sprang up around the country to sell food and consumer goods, and that were run by women (since the men were still required to attend their state-assigned jobs) (Haggard and Noland, 2007a, 2010a). While the state initially tolerated the markets during the March of Suffering because it had little other choice, and officially embraced some aspects of the market in its 2002 reforms, it was deeply uncomfortable with the implications of market activity for social, economic, and political control, and from 2005 cracked down, beginning with a return to the Public Distribution System in 2005, increasing restrictions on markets and who could use them in 2008 and 2009, and culminating in the December 2009 currency reform that was apparently designed to destroy the assets of won-based private traders, and force workers back to their work units (Haggard and Noland, 2010a). Despite the crackdowns, the markets have not disappeared (Park et al., 2012), and indeed some aspects of the informal economy, such as the level of bribes paid by traders to operate, seem to have remained relatively stable (Kim, 2010).

The third thread focuses on North Korea's trade with the outside world as a mechanism for survival, both in terms of formal, licit trade (Kim, 2008, Haggard and Noland, 2007b, Choi et al., 2003, Park, 2009) and illicit trade (Chestnut, 2007, Nanto and Perl, 2007). North Korea does maintain formal trade connections with a number of countries, although in the years since United Nations and Japanese sanctions took hold following North Korea's first nuclear test in 2006, followed by suspension of the growth in South Korean investment in 2008, the country has found it increasingly difficult to maintain a wide range of formal trade relations (Frank, 2006). The

result is increasing reliance on market-oriented trade relations with China specifically (Kim, 2006, Haggard and Noland, 2007b, Yoon and Lee, 2013), and dependence on mineral exports (which have never been sanctioned) (Thompson, 2011). Despite Chinese government encouragement, Chinese companies themselves have been wary of investing in North Korea, and large companies have largely avoided the country in the absence of a favourable institutional framework for governing trade and protecting investments (Haggard and Noland, 2012, Haggard et al., 2012, Thompson, 2011), and lack of infrastructure in northeastern China, particularly in Yanbian Korean Autonomous Prefecture bordering North Korea (Freeman, 2011).

Taken together, the literature describes a North Korean economy that, whatever its formal description, has evolved into an economy that is neither autarkic nor all that centrally planned. It is an economy where integration into markets, whether through domestic commerce, or through international trade, is a key tool for the survival of both state and non-state trade networks. It is also one where the lines between formal and informal trade, and between licit and illicit, are blurred, to the point of demanding new understandings of how North Korean economic integration with the outside world works.

It is the illicit trade networks – those that traffic in weapons, missile parts, drugs, and counterfeit goods -- that emanate from North Korea that have aroused much interest from outside observers, inasmuch as one of North Korea's mechanisms for economic survival has been to tap into illicit globalization. Looking at North Korean illicit networks contributes to our understanding of illicit globalization.

Explicitly geographic perspectives on transnational illicit activities are still relatively new, and 'explorations of the geographies of organized crime, its distribution across space and concentration within regions, are at best implicit and patchy aspects of the literature' (Hall 2013: 374). Much of the debate on illicit globalization has focused on the retreat of the state in the face of technological advances, thus allowing illicit flows to overwhelm states' ability to stop them (Naim, 2010, Strange, 1996). Yet it is not clear that states are all that weak compared to illicit networks (Andreas, 2011), with national boundaries often posing significant obstacles to illicit networks attempting to move around the world, particularly when they lack easy access to commercial logistical networks (Hastings, 2008, Hastings, 2010). Nor is it clear that state are all that hostile to at least some illicit networks. States often allow 'illicit' trade networks to operate as compensation for political support or as alternative income arrangements (Friman, 2009) or provide them with the resources necessary to operate, thus having a substantial effect on their structure and spatial distribution (Hastings, 2012). Even when the highest levels of the state are genuinely hostile to the illicit networks, other parts of the state may have more accommodating, complex relationships with illicit networks.

As a result, it may be better to think of the state's relationship with illicit networks as being one of market regulation and resource provision, just as with licit networks, and one that varies in hostility over time and space: 'illicit' goods moving through a transnational chain can move in and out of 'licitness' (Hall 2013). This is especially important inasmuch as the 'illicit' aspects of economic globalization are often ignored or moved into their own discrete category separate from that of licit trade (Andreas, August 2004, 2011), despite the considerable ambiguities inherent in the dividing line between licit and illicit (Hall 2013). The question then becomes one of what role the state plays in illicit globalization. Because North Korean drug trafficking has existed across two relatively distinct time periods – the first in which the central state used its resources to encourage trafficking, and the second in which the central state

cracked down on trafficking – it is an ideal case through which to examine the effect of the state on illicit networks’ structure and geographic scope.

Data

North Korea necessarily presents data issues. The information for this article is derived from a variety of sources, among them Western news and government reports of North Korean drug trafficking, and South Korean newspaper articles that often feature interviews with defectors and North Koreans inside the country with access to Chinese mobile phones. In practice, this privileges information from North Koreans living near the Chinese border, which, ‘fortunately’, is where much of the drug trafficking occurs. I also tapped into Chinese government and media sources about drug trafficking busts on the Chinese side of the border during the period (2005-2011) when the local Chinese governments were sufficiently worried about drugs coming from North Korea that they used the media to report on their counter-trafficking efforts.

All sources have problems with bias and missing or inaccurate data. I handled this in several ways. First, I minimize most numbers cited about North Korea, numbers that can, at best, be only guesses, and at worst are politically driven exaggerations (Andreas and Greenhill, 2010), and focused on the process by which at least some North Korea drug trafficking chains work. Second, I collected information on specific trafficking incidents about which concrete information could be known, and for which the sources were speaking against interest (China officially does not acknowledge problems in its relationship with North Korea, so when those problems *are* reported in the local press, they are generally accurate). In most cases, these incidents were those reported in the Chinese media and identified by dates (i.e. the “5.20” operation). Finally, I supplemented the written information with interviews with experts on North Korean issues in South Korea.

NORTH KOREAN DRUG TRAFFICKING NETWORKS AS VALUE CHAINS

I characterize North Korean drug trafficking networks using concepts from the literature on globalized economic networks, especially but not solely the literature on global value chains (Gereffi and Fernandez-Stark, 2011, Gereffi, Henderson, and Sturgeon, 2005, Gereffi and Kaplinsky, 2001). North Korean drug trafficking networks are rather unusual examples of these globalized economic networks, but are examples nonetheless. The global value chain framework and its predecessor, the global commodity chain (Gereffi 1995; Gereffi and Korzeniewicz 1994) have been criticized on a number of grounds, including their emphasis on linear flows and processes for adding value, when the reality is much more complex and dynamic (Dicken et al., 2001: 99). While it is true that value chains are embedded in social, political, economic networks at every stage, suggesting that a more complete vision would conceive of North Korean trade networks as global production networks, or ‘the nexus of interconnected functions and operations through which goods and services are produced, distributed, and consumed’ (Henderson et al., August 2002: 445), the drug trade in particular is best viewed as a value chain because it is an industry where a given quantity of drugs does pass in a linear flow from the producer, through middlemen, to the retailer, and then consumer, with mark-ups in ‘value’ with each step along the way (see also Pereira 2010).

In the global value chain framework, chains are characterized along four dimensions (Gereffi and Fernandez-Stark, 2011). First, the input-output structure of the chain consists of the nodes (firms) within the chain that pass along information, services and resources while adding

value between production (and the inputs) and the retail consumer. Second, the geographical scope of the chain consists of the spatial distribution of those nodes. Third, governance structure of global value chains consists of the ‘authority and power relationships between firms that determine how financial, material, and human resources are allocated and flow within a chain’ (Gereffi and Korzeniewicz, 1994: 96-97), or, in other words, how the chain is coordinated and controlled. Finally, the institutional framework consists of the way in which ‘local, national, and international conditions and policies shape the globalization process at each stage in the chain.’ (Gereffi and Korzeniewicz, 1994: 96-97). Each dimension of drug trafficking networks will be discussed in turn.

Thinking of North Korean drug trafficking networks as value chains has several advantages. First, it allows us to engage in systematic analysis of different aspects of illicit networks: we can categorize the different types of economic links between nodes in the chain, see where value is captured along the chain, and highlight the role of the state at different points along the chain, or the influence of the state on the structure and operations of the chain as a whole. Second, global value chain analysis is typically applied to legitimate business networks engaged in legitimate production, often in territories with regulatory environments designed to attract their business. By applying global value chain analysis to illicit networks as well, we can observe both types of networks within the same theoretical framework, allowing us to examine rigorously when and how our assumptions about the operations and structure of licit networks work with illicit networks, and when they do not.

Input-output structure

As with any economic network, although the networks that engage in drug trafficking can be described with various levels of detail and complexity, for the purposes of this paper, it is useful to think of the nodes in the value chain from production to retail. My highly stylized and simplified understanding of drug trafficking has three major components. First, in the production phase, producers import or otherwise obtain precursor goods (in the case of crystal methamphetamine produced in North Korea, this might include amphetamines imported from China), cultivate components if necessary (for example, poppy cultivation in preparation for making opium or heroin), and the process the ingredients into useable forms. Second, in the distribution phase, the useable drugs are transported by a series of middlemen through the country of origin. Unlike legitimate goods, whose movement across borders is often encouraged by states to the point that it is not unusual to think of borderless worlds, drugs (and other illicit goods) face challenges moving across international boundaries due to state hostility to their trade (Hastings, 2008, 2010). The drugs are then moved through third countries and across international boundaries until they reach the destination country. Third, the middlemen then pass off the drugs to actors who will eventually sell the drugs to street consumers. In practice, the movement of the drugs between the producers and street-level distributors is what occupies most of the nodes in drug trafficking networks (Kenney 2007, Zhang and Chin, 2007).

Geographic scope

Gereffi and Korzeniewicz (1994) think of territoriality as the territorial disaggregation or agglomeration of firms within global commodity chains or global value chains, in part because spatial agglomerations can take advantage of (or lead to) regional economic development, and in part because physical proximity is useful in establishing and maintaining certain relationships. Dicken et al. (2001: 95) argue for understanding the geographic scope of

networks in terms of multiple overlapping scales in which they operate, and in which they affect other actors and are in turn affected by other actors (at the local, national, regional, or even global levels).

In the case of North Korean trade networks, it may be useful to think of the physical locations of the nodes in the networks not only relative to each other, but also relative to North Korea. Within North Korea, levels of economic development, and attention from the state, vary dramatically, with Pyongyang at the pinnacle, and the northeastern provinces traditionally at the bottom. Institutional conditions also vary in the special economic zones within North Korea as well as, informally, along the border with China (and to a lesser extent Russia). Outside of North Korea, it would be useful to categorize the territories in which by their proximity to North Korea itself, allowing us to think about the different geographic scales at which networks may operate, and the varying resources and knowledge they would need to operate at each scale. In terms of increasing distance from North Korea, these territories would consist of: (1) northeastern China, particularly the provinces of Jilin and Liaoning; (2) the rest of China, including Hong Kong and Macau; (3) the rest of northeast Asia, including Japan, South Korea, and Taiwan; and (4) the rest of the world. The issue then would be in which territories, in a given iteration of a North Korean drug trafficking network, different actors are located, and why they are located there.

Governance structures

The actors within the North Korean business community can be categorized by the scale of their business operations, the sophistication of their transactions, and nature of their relationship to the North Korean state. At the lowest level are the private traders (mostly women) who do business in North Korean won in the informal markets that have sprung up as survival mechanisms in the North Korean countryside. Aside from bribes to local officials when necessary, they probably have little connection to the state. Second are the private traders who do business in hard currencies, such as Chinese *yuan*, US dollars, or Euros, who may have to pay more substantial rents to local and mid-level officials to operate (Author Interview, August 2012a).

Third are what might be called hybrid traders – actual state officials who use their position to go into business for themselves, and private traders with more substantive connections to state institutions, either because they have formed networks with local officials seeking rents in exchange for permission to operate and access to certain state resources, or because they have bought their way to state status (Lim and Yoon, 2011). A private trader with a black market opportunity, for example, might partner with a licensed state organization that can buy and sell in China. The trader can then be given ranks in state organization and invest money through them, akin to Chinese ‘red hat’ companies who buy status as state firms to take advantage of certain business incentives (Author Interview, August 2012a).

Fourth are state-owned entities with trading licenses. With the collapse of the North Korean economy after the end of the Cold War, and the years of famine in the late 1990s, even state entities (albeit at the provincial and local level) were told to fend for themselves, or more specifically, they were told to engage in profit-making enterprises that could then be taxed by the central state. The results is that state-associated organizations (that is, party, state, and military organizational units) often have subordinated trading corporations which are quite entrepreneurial and use state connections to make money through anything sellable (Author Interview, August 2012a). Some can export resources, build partnerships with foreign investors, or establish enterprises outside of North Korea, subject to the central state’s power to grant

licenses to do business overseas. Others let their workers work in the market in exchange for a portion of the proceeds, which is then taxed by the central state (Author Interview, September 2012).

Finally, there are the trading entities of the central state – the highest levels of the military, party, and cabinet, and the agencies, such as Bureaus 38 and 39, specifically tasked with trading both mundane goods, natural resources, weapons, and other goods for the purpose of bringing in foreign exchange to support the top echelon of North Korean society (Chung, 2012).

These different types of actors engage in economic transactions designed to move goods and information along the value chain and capture value. Gereffi et al., (2005: 83-84) think of the relationships between nodes within global value chains as falling into categories that range from arms-length market relationships, which may persist over time, but where the costs of finding new partners is low, through intermediate types, to hierarchical relationships, in which the buyers and suppliers (or nodes in the network) have an in-house managerial relationship. While Gereffi, Henderson and Sturgeon (2005) conceive of these different governance structures as deriving from the nature of transactions and the sophistication of suppliers (or buyers) in a given industry, application of the categories requires some modification for illicit goods.

Illicit drugs themselves are relatively simple to produce (given the right equipment and inputs) relative to many of the industries discussed elsewhere in the literature, which eliminates many of technological expertise issues discussed by Gereffi, Henderson, and Sturgeon (2005). Drugs are, within reason, commodities, and by far the largest number of nodes in a drug trafficking chain is located in the distribution phase, not the production or retail phases. The primary reasons for governance within a drug trafficking network would be to ensure supply of precursors and quality production, to ensure the ability to operate, to maintain operational security (and prevent defection), and to find and ensure contact and coordination between buyers and sellers at a given point in the chain (Kenney 2007, 2009). Within the very broad global value chain context, aside from market relationships, and hierarchical relationships, we can also think of relational value chain connections, in which the two nodes interact on the basis of trust, reputation, and non-economic linkages such as ethnicity or social ties (Gereffi, Henderson, and Sturgeon, 2005). The purpose of these relational links would not be, as with Gereffi et al (2005), complex transactions and significant tacit knowledge transfer (although there is some of that drug trafficking), but because of the need for trust and security from defection. In drug trafficking networks, the onward ‘firms’ may be dependent on the previous node for supply, and subject to a high level of control and monitoring. On the other hand, governance of networks may be fragmented, with the non-economic linkages providing the connections between nodes in the chain, as is the case in the drug trafficking networks operating between China and Myanmar (Zhang and Chin, 2007; Chin, 2009). The specific types of connection between nodes in a network depend on the institutional environment in which they find themselves, and the nature of the actors themselves.

Institutional framework

North Korean trade networks, and especially drug trafficking networks, operate within the context of the laws and regulations of state institutions in multiple countries, especially but not limited to North Korea, as well as sanctions regimes put in place by the United Nations, Japan, South Korea, and various Western nations, and enforced by a number of other countries. While typical analysis envisions institutional frameworks as designed to encourage and support certain types of firms, their operations, and more generally development, institutional

frameworks relative to North Korean business networks are designed to both encourage and discourage. Outside of North Korea, the institutional environment may be indifferent (for North Korean businesses operating legally in China, for instance), or outright hostile (for North Korean illicit activities in China, or for most operations in countries with sanctions against North Korea), with specific state institutions, such as monetary authorities, customs agencies, intelligence agencies, and foreign ministries, actively attempting to subvert North Korean commerce. The institutional environment outside of North Korea for the drug trade has remained relatively constant over the past two decades. At no time have the recipient countries – China, Japan, South Korea, and Australia, among others – shown anything but hostility to the export of heroin and crystal methamphetamines from North Korea.

Within North Korea itself, given the irrelevance of the rule of law, the specific laws and regulations in place are perhaps beside the point. Of perhaps equal or greater relevance are the ever-shifting informal power relationships that determine what is allowed, encouraged, discouraged, or stamped out at any given time, lubricated with patron-client networks and rents. The state has grudgingly come to accept an informal, flexible economy, as the formal planned economy has essentially fallen apart (Author Interview, August 2012b, Kim, 2010). This informal understanding provides a good deal of the ‘institutional’ framework within which North Korean firms operate. The state extracts rents from the population's informal market income. Like a "food chain" low-level officials (who would be the ones extracting bribes from average citizens) pay higher-level officials for positions and business opportunities. While the state still officially assigns workers to their positions, there is some room for flexibility and discretion (Author Interview, August 2012b). State officials have ample ways to make money within North Korea's institutional framework, provided they do not lose factional battles or run afoul of higher officials. As a result, the environmental conditions in which drug trafficking networks in North Korea are likely to operate will depend to a large extent on the attitude of the central state toward drug trafficking, as well as the location and level of involvement of the various state, hybrid, and non-state actors in the chain, and the informal networks in which those engaged in drug trafficking are embedded. All are apt to change over time.

This is not the first scholarly article on North Korean drug trafficking (Yun and Kim, 2010, Lim and Yoon, 2011, Lankov and Kim, 2013), nor is it the first to see that drug trafficking can be analyzed using spatial network approaches (Pereira, 2010) or more generally a geographic perspective (Allen, 2005, Rengert, 1996), but it is the first to place North Korean drug trafficking networks in an economic geography theoretical framework. Adopting this framework has several advantages specifically for analyzing North Korean trade networks, particularly drug trafficking networks. First, while economic geographers generally assume that global economic networks are composed of legitimate firms engaging in legitimate production, with much of the empirical literature that has applied frameworks being focused on legitimate industries (such as automobiles and textiles), there is nothing per se that prohibits the basics of the framework from being applied to ‘illicit’ industries (Hall, 2013).

Licit and illicit economic activities are not only not mutually exclusive, but have little meaning to a state like North Korea, which after all denies the fundamental legitimacy of much of the international system. Conceptually, many studies of the North Korean economy (or, more generally, studies of North Korea's survival strategies and assessments of the threat North Korea may or may not pose) separate North Korea's extramural activities into legitimate and illicit categories – Haggard and Nolan (2007), for instance, have an appendix on ‘illicit activities’ that

is separate from the main text. Many North Korean smuggling and money laundering activities are, after all, considered ‘illicit’ because of sanctions and because North Koreans are involved, not because of any quality inherent to the activities themselves, and would likely be considered ‘legitimate’ in most other contexts. ‘Illicit’ activities can be accounted for within the framework not by categorizing any particular good or activity as ‘illicit’ or ‘legitimate’ but by varying the institutional framework of the territories in which nodes operate. ‘Illicit’ activities would necessarily face markedly more hostile state attention (outside, and occasionally inside North Korea), restrictive regulations, and even active attempts to shut them down.

Second, the framework allows us to approach the complex question of North Korean state involvement in economic networks in a more rigorous way. While nearly all of the literature on North Korea’s illicit economic activities, and much of the literature on North Korean efforts to bring in legitimate foreign exchange implicitly assume it is the North Korean central state that is at the core of these activities, it is not clear that this is still an ideal way to think about the economic networks emanating from North Korea. The implicit assumption behind much of the discussion of North Korean drug trafficking is that North Korea’s ruling clique adequately controls and deploys, through front companies and using North Korean (and other countries’) ships and planes, the networks necessary to produce and distribute illicit goods (Chestnut, 2007, Hurst, 2005, Nanto, 2009, Nanto and Perl, 2007, Perl, 2007). While this may have been true during the March of Suffering period, it was certainly not true after 2005. While the North Korean state has cracked down on private markets and has (apparently) cut down significantly on illicit cross-border trade since 2005 (Haggard and Noland, 2009, Haggard and Noland, 2010b), those networks have not disappeared entirely.

As a result, it is less useful to ask whether a trade network emanating from North Korea is ‘state’- or ‘non-state’-centric than how state institutions at various levels are involved as actors, what their role is in the governance structure of the network, and how they are involved in setting the institutional environment in which the network is operating. The North Korean state (at all levels) is not only – through its state-owned enterprises -- an economic actor, but also provides much of the institutional environment under which all North Korean economic actors operate, as well as much of the governance structures that shape and control North Korean economic networks, both inside and outside of North Korea.

CHANGES IN NORTH KOREAN DRUG TRAFFICKING NETWORKS

Drug trafficking provides a good case study of variation in the geographic scope and governance structures of North Korean trade networks in different institutional environments, specifically changes in the institutional environments that changed the access drug trafficking networks had to state resources (such as transportation and trading companies), and state prerogatives (such as diplomatic immunity and diplomatic posts). Analysing the changes in North Korean drug trafficking also gives us insight into how the networks associated with ‘illicit’ globalization are affected by changes in the institutional frameworks in which they operate.

In terms of institutional environment, North Korea is one of the few states in modern times to sanction drug production, resulting in variation over time in the level of hostility exhibited by domestic institutions toward drugs. As with many other North Korean export industries, the North Korean central state not only defines much of the institutional environment for drug trafficking networks, but has also served as an economic actor in its own right. Drug production was encouraged (and possibly even required) by the North Korean state between 1992 and the early 2000s (Yun and Kim, 2010, Perl, 2007, Hurst, 2005, Nanto and Perl, 2007,

Kan et al., 2010). While North Korean diplomats had been implicated in a number of smuggling incidents since the 1970s, and poppy cultivation in North Korea had been ongoing since the Japanese occupation, official large-scale state production of drugs, first heroin, and later crystal methamphetamines, apparently ramped up in the early 1990s on the order of first Kim Il-Sung, and then Kim Jong-il, as a way of raising hard currency in the aftermath of the loss of subsidies from the Soviet Union. State-encouraged drug production and trafficking was thus at its height in the mid- to late 1990s and early 2000s (Perl, 2007).

However, whether due to international pressure or concern over spreading drug addiction within North Korea itself, the North Korean central state apparently abandoned large-scale drug production as a matter of formal policy some time between 2004 and 2007. The central state's turn against drug use and trafficking seems to have begun in earnest in North Korea at least by August 2005, with crackdowns in Sinuiju, Hamheung, and Pyongyang. Where drug users used to be sent to labor camps for detoxification, they were now sent for longer sentences at prison camps (Kwon and Kwak, 2005). The state was actively cracking down on drug production and drug addicts by 2007 (DailyNK, 13 August 2008, Kim, 28 February 2008) (as well as, at the same time, placing restrictions on private traders within the country). For instance, the annual US presidential report on countries of concern in drug trafficking stopped mentioning North Korea after 2007. The last verified drug trafficking incidents with official North Korean state involvement were in 2004, and the scholarly and analytical literature devoted to North Korean drug trafficking dried up around the same time (US Department of State, 2012).

In the next two sections I argue that in a friendly institutional environment, the geographic scope of North Korean drug trafficking networks was not only broadened considerably (which is not surprising), but also operated at both global and national scales. In a more hostile environment, networks were pushed into distributing nodes along regional lines. Likewise, governance in the state-led environment before 2005 was characterized by hierarchical and some relational links, and reduced numbers of middlemen, allowing the central state to monitor production, and capture a high proportion of the value derived from drug trafficking. After the central state began cracking down, the value captured by the central state directly decreased, but the locations where value was captured became more diffuse, with the actors involved starting off near the bottom of the governance structure in terms of state involvement, but gradually moving up the ladder as a means of ensuring their operations' continuation.

Central state encouragement of drug trafficking (1992-2005)

Geographic scope

The spatial diffusion of drug production within North Korea during the March of Suffering period differed based on the type of drug being produced. Central state-sanctioned ice production was territorially concentrated around two pharmaceutical factories, one in Hamheung, and the other in Ranam, Chongjin. This stands in contrast to opium and heroin production, which was territorially diffused throughout the country due to the requirement that farmers set aside a certain proportion of the land they worked for poppy cultivation. By 1998, an estimated 3000-4000 hectares of land were under cultivation (Perl, 2007: 8). A favourable institutional environment meant that the production nodes could establish ties with partners far afield: state entities invited businessmen with experience in drug production and trafficking to North Korea to discuss potential business deals and, in the case of those from the Golden Triangle, were brought in as consultants to improve North Korea's heroin and opium production (Solomon and Dean, 23 April 2003).

The geographic scope of the distribution phase of the trafficking network was also often kept quite close to North Korea, or at least minimized much of the need for North Korean traffickers to interact with or evade other states themselves. North Korean military, fishing, and cargo vessels would often leave port in North Korea (often from Nampo in the southwest or Rajin in the northeast), and meet with onward criminal middlemen in North Korean territorial waters or the territorial waters of neighboring states (Kan et al., 2010: 9-10). The middlemen were themselves members of organized crime syndicates in South Korea, Japan, and Taiwan who would take delivery of the drugs at sea in their own vessels, return to their home countries, and then distribute them to retailers. The result is a network with little territorial spread by the North Koreans themselves, but a fairly robust ability to transport and the distribute drugs within the destination countries. In June 2002, for instance, the Taiwanese fishing vessel *Shun Chi Fa* travelled to North Korean waters, where it received 174 pounds' worth of heroin bricks from sailors on a North Korean gunboat before returning to Taiwan. Likewise, a North Korean vessel sunk by the Japanese coast guard off the coast of Kyushu in December 2001 was found to have a cell phone that had made a number of calls to a Korean-Japanese organized crime figure (Solomon and Dean, 23 April 2003).

North Korean state entities also ran routes using their own resources within Northeast Asia. North Korean merchant vessels took drug shipments directly to neighboring countries along legitimate commercial shipping routes. The North Korean cargo ship *Man Gyong Bong-92*, for instance, which ferried between North Korea and Niigata, Japan for decades before being banned in 2006, reportedly carried drugs from Wonsan in North Korea on a regular basis in the late 1990s to Korean Japanese criminal syndicates (Suetsugu, 22 August 2003). There were also documented cases of drugs entering China and Russia by land across the North Korean border by putative employees of North Korean state entities. In February 1995, for instance, two employees of a North Korean state logging company were arrested in Vladivostok, Russia near the North Korean border with eight kilograms of heroin (Bach, 20 May 2003).

At a greater distance from North Korea, the spatial distribution of the trafficking networks closely tracked with the locations of the branch offices of North Korean state trading entities, as well as North Korean diplomatic outposts, which served as territorial hubs for transportation and coordination. From the 1970s until 2004, there were dozens of incidents in which North Korean diplomats were caught smuggling drugs of various types from their diplomatic postings, leading to a trafficking network with a spatial distribution approximating that of North Korea's diplomatic and business presence around the world, particularly in Europe, the Middle East, and East Asia. Diplomats posted to Sofia were involved in at least two trafficking incidents into Eastern Europe and the Middle East during the period, with the first incident an attempt to smuggle 55 kilograms of rohypnol from Bulgaria to Prague in 1999, and the second an attempt to smuggle drugs through Turkey to the rest of the Middle East in 2004. North Korean diplomats in Egypt, Moscow and Berlin were also implicated in trafficking between 1995 and 2004. In East Asia, the Chinese government stymied at least three North Korean trafficking incidents in the period, the first out of the Beijing embassy in July 1994, the second in Shanghai in January 1995, and the third in Shenyang in February 1999, in which a consulate employee was attempting to sell several kilograms of heroin (Perl, 2007: 6-7).

In sum, North Korean drug trafficking networks during the March of Suffering period operated on several different scales simultaneously – drugs moved across the land border with China and Russia, into nearby Northeast Asian countries, and through countries further afield that had a North Korean state business or diplomatic presence. North Korean-controlled parts of

the networks, however, for the most part had what could be termed a bimodal distribution, with either the North Korean section ending in North Korea itself (or in waters outside of Korea), or spreading far from North Korea through specific locations in which the North Korean state had a presence.

Governance structure

Most sources cite central state involvement with drug trafficking during the March of Suffering period as being connected with Bureau 39, the office of the Korean Workers' Party dedicated to bringing in hard currency income to the Party through both domestic businesses, such as foreigner hotels in Pyongyang, foreign businesses, such as the Pyongyang restaurant chain (with branches mostly located in China and Southeast Asia), legitimate exports, such as agricultural and forestry resources and mining, and illicit exports, such as drugs and counterfeiting. Bureau 39 is said to control a large number of companies, including Daesong Bank and Zokwang Trading, that function as the public interfaces between the North Korean central state and the global economy (at least for the purposes of bringing in income specifically to the Party and the Kim family). The Kim family then uses the income from Bureau 39's enterprises to buy foreign luxury goods (with the purchases themselves often done through Bureau 39), top up personal slush funds, and otherwise ensure the support of elite members of the North Korean government, Party, and military (Chung, 2012, Perl, 2007: 7-8).

Within the upper echelons of Bureau 39, one would expect that the governance of economic transactions would be hierarchical, with a high level of oversight – indeed, Kim Jong-il is said to have appointed his high school friend as head of Bureau 39 in 2009, presumably to protect his interests (Chosun Ilbo, 28 April 2010, Chosun Ilbo, 15 February 2011). And during the March of Suffering, the central state actually ordered farmers to set aside a certain proportion of their land for poppy cultivation (Paddock and Demick, 21 May 2003). North Korean heroin developed a reputation as being unusually pure, suggesting if nothing else an attention to detail lacking in many non-state heroin producers. Ice production seems to have developed directly from hiccups with heroin production. In the mid-1990s, after the heavy rains that caused the flooding officially (if erroneously) blamed for the March of Suffering itself (Haggard and Noland 2007), the North Korean state added two pharmaceutical factories engaged in crystal methamphetamine production in Chongjin and Hamheung to make up for the loss of the poppies washed away in the floods (Kim, 29 February 2004, Perl, 2007: 7). All this suggests that production in North Korea was kept in-house, and regulated by the central state.

Governance of distribution from North Korea was more complicated. Reports from suspects captured by Japanese and Taiwanese law enforcement in the early 2000s suggest that the criminals who trafficked the drugs into Japanese and Taiwanese waters received those drugs off of North Korean state officials directly operating military, fishing, and cargo vessels freely within North Korean territorial waters (Solomon and Dean, 23 April 2003). The ease with which Asian criminals were invited to North Korea to discuss business deals with North Korean officials, as occurred with Taiwanese gangsters in 2003 (Hsu, 5 January 2004), suggests high-level state involvement, as does the use of state resources. To be fair, it is possible that the interface between North Korea and downstream traffickers occurred at the level of state entities engaged in international trade as a means of raising income, rather than at the central state level. Since the early 1990s, every state entity in North Korea has been expected not only to meet their operating costs, but also to bring in sufficient outside income to meet an annual quota of “loyalty funds” that must be sent to the supreme leader. (Chosun Ilbo, 28 April 2010) Employees of North

Korean state entities posted overseas are expected to provide their superiors with luxury goods when they return to North Korea (Newcomb, 20 March 2011). The need for loyalty funds seems to have driven a good deal of the economic activity by state entities during the March of Suffering, and drug trafficking naturally enjoyed high profit margins.

The ability of state entities to establish relationships directly with foreign traffickers in North Korea itself, and the access that North Koreans trafficking in drugs had to state resources – whether it was diplomatic prerogatives such as diplomatic immunity, access to diplomatic pouches, and embassies and consulates free of outside intervention, or transportation equipment such as oceangoing vessels owned state trading companies has several implications for network governance. First, the drug traffickers were able to maintain vertical integration between production and distribution up until the point the drugs left North Korea, minimizing quality control issues and uncertainty about production.

Second, North Korea never developed the ability to distribute drugs at the street level (the actual retailers engaging in market transactions), but North Korean state entities were able to capture a high proportion of the ‘value’ derived from the production, transportation, and sale of drugs by controlling the process from production up until the distributors in the recipient countries took possession. The producers themselves, such as the poppy farmers, for example, theoretically were supposed to have captured value from production, but they often were not paid by the state (Spaeth, 9 June 2003), allowing higher levels of the state to capture more value. Judicious use of state resources, such as state-owned vessels to transfer drugs at sea, or state-sanctioned ports to ship drugs directly out of North Korea, allowed North Korean drug traffickers to minimize the number of middlemen between production and retail, as well as diminish the costs associated with evading law enforcement in recipient countries.

The linkages outside of North Korea between the North Korean state entities and the onward nodes in the networks – the Asian criminal elements, by and large – seem to have been built to a large extent on relational ties of various sorts, including ethnic connections, and proximity to long-standing branch offices. The Japanese contact for the North Korean vessel sunk off Kyushu in 2001, for instance, was an ethnically Korean resident of Japan (Shimbun, 13 May 2006), the middlemen who handled the cargo off the *Man Gyong Bong-92* were ethnically Korean (Suetsugu, 22 August 2003), and members of Chosen Soren, the North Korean resident organization in Japan, were implicated in a methamphetamine trafficking scheme in February 2000 (Perl, 25 January 2007: 7).

The 2003 *Pong Su* case, in which Australian authorities captured a North Korean cargo ship that had delivered a large shipment of heroin to waiting drug couriers on a beach west of Melbourne, presents an especially illuminating example. While it is unclear where the heroin itself was from (chemical tests indicated similarities and differences with known Southeast Asian heroin (Collins et al., 2006), the trafficker who actually brought the heroin ashore (and survived – an unidentified companion drowned in the attempt) claimed to be a Chinese citizen of Korean ethnicity from near the border with North Korea, and had boarded the ship either in China or on the intermediate stop in North Korea (R v Ta Song Wong, 2006). The network coordinator was apparently from Macau (Adams, 23 November 2003), and coordinated the operation from Kuala Lumpur. Macau was for many years (and certainly during the *Pong Su* episode) a base for the North Korean state entity Zokwang Trading Company and a number of other North Korean non-market activities (Lintner, 18 January 2007). While Zokwang was not implicated in the incident, coordination with a Macau-based trafficking syndicate that used ethnic Korean traffickers suggests that North Korean state entities such as Pong Su Shipping were more comfortable

engaging in business with actors with whom they had non-market relationships, and in locations where they had prior experience.

The governance structure of North Korean trafficking networks during the March of Suffering period suggests that the central state and state entities captured value by controlling the actors within the value chain through hierarchical relationships and minimizing the number of middlemen. When North Korean traffickers interfaced with onward nodes that would distribute and sell the drugs, they often found and interacted with the criminal elements through relational transactions. The criminal elements would then in turn take care of the much more complex logistical challenges associated with final distribution.

Central state hostility toward drug trafficking (2005-Present)

Geographic scope

Within North Korea, since the central state crackdown began in 2005, production clusters for crystal meth in particular have been subject to path dependence. The two state-run production centers from the North Korea state's experiment with state-led drug trafficking, Chongjin and Hamheung, have continued to be the center of the two main territorial agglomerations for ice production and distribution within the country, although evidence suggests that production has spread within those areas outside of the factories and into private factories. By 2008, unofficial production had spread to Pyongsung, Dancheon, and Nampo. There were allegations that state-run production in Hamheung continued to function as of 2011 (DailyNK, 29 November 2011), when it was reported that the Chinese government requested (strongly) that North Korea shut down remaining drug production factories. According to a South Korean newspaper, the central state did respond by shutting down a portion of the production in Heungnam (a suburb of Hamheung). It is unclear whether this production was from a state-run factory (Phoenix Weekly, 8 December 2011).

Interestingly, none of the production centers, either before or after the crackdowns began, were anywhere near the North Korean border with China. The routes taken in transporting the drug from production to the river crossing into China are unclear, although the crossing points themselves, such as Hyesan and Hoeryeong, have a number of traits that make them attractive as drug trafficking points. First, certain areas such as Hoeryeong were exit points for North Korean refugees during the March of Suffering; illicit movement continued after the famine eased (Chosun Ilbo, 11 March 2005). Second, parts of the Tumen River dividing China and North Korea are shallow in summer and covered by ice in the winter, allowing relatively easy crossing year-round (Phoenix Weekly, 8 December 2011). Third, the border cities have inhabitants who are comparatively knowledgeable about the logistics of crossing the border, and who may be disproportionately addicted to drugs (and are thus available to serve as drug mules), as indicated by the North Korean state's focus on border cities in many of its crackdowns (Kim, 7 February 2011, Yoo, 27 August 2010, Kim, 18 January 2013). The availability of drugs and addicts in border cities is of course endogenous, but it does suggest that drugs move from North Korea to China in ways that are related to the social environment around them. Both the production and border-crossing points have developed networks of people involved in the 'industry' that have made it difficult for the central state to destroy, largely because there is no longer simply one route or network operating to smuggle drugs.

The actual crossing into China is done by drug mules who swim, wade, boat, or walk across the river, and deliver the drug shipment to Chinese partners, who receive the package at the river bank and then move it further into China. For distribution, in most cases, drugs are

moved by land until they reach a hub for transportation out of China. Drug shipments enter China across the Yalu River or the Tumen River from North Korea. With the exception of Dandong, these transshipment points are often small border crossings in relatively isolated sections of the border. One Taiwanese source cites Dandong in Liaoning province, and Sanhe and Kaishantun villages in Longjing county, and Changbai village in Changbai county (across from Hyesan in North Korea), all in Jilin province, as primary entry points for drugs (Phoenix Weekly, 8 December 2011) although there are other transshipment points as well. Spatially, the entry points share one of two characteristics: they are either major entry points for legitimate commercial goods (in the case of Dandong), or they are the border cities closest to the primary North Korean drug production centers and within heavily ethnic Korean areas of Jilin. In the case of the “5.20” drug trafficking incident in 2010, for instance, the drugs entered China through Dandong (Yanbian News Network, 5 September 2010), while in the 2010 “9.20” incident the smugglers brought in ice through Nanping village in Helong along the Tumen River (across from Musan) (Dongbei Jinghuo Xinwen, 27 March 2010, Zhou, 27 March 2010), and in the 2009 “2.11” incident, the smugglers moved through Longjing (Wang, 25 June 2009).

Once the drugs entered China, they were moved to intermediary points within Liaoning or Jilin before being distributed to other areas outside of northeastern China. In the case of the “5.20” incident, the main broker moved the drugs from Dandong to Yanji, Shulan, and Jilin city within Jilin, and to Qingdao in Shandong. In the “9.20” case, the coordinator Jin Xiangyun would pick up the drugs from his North Korean contact “President Chang” at Helong, take them to Yanji, and then check them as baggage on a long-distance bus to Qingdao. In the 2008 “4.01” incident, the mules were arrested in Dunhua, on the way from Yanji to Qingdao (Zhang, 28 April 2008).

Within China, then, the spatial distribution of crystal meth trafficking is fairly concentrated in the northeast, and in terms of transport and secondary distribution is even more concentrated within certain cities with good road links to the rest of China, such as Yanji, Dandong, and Changchun. The primary distribution cities to points outside of the country are then Qingdao and Dalian, given their convenient connections to South Korea and Japan, and in fact, most of the trafficking major incidents since 2006 seem to have ended up in those two cities.

As the main drug shipments move from the North Korean border to international departure points, smaller quantities are stripped and diffused through local networks to other parts of China, or to networks in China that would not otherwise be connected to North Korea. In the “9.20” incident, the coordinator, Jin Xiangyun, and his accomplice, Jin Longzhu, sold a portion of the drugs Jin Xiangyun had picked up from “President Chang” (Dongbei Jinghuo Xinwen, 27 March 2010, Zhou, 27 March 2010). Likewise, in the “5.20” incident, quantities of drugs were sold off in Shulan and Jilin before the main shipment reached Qingdao (Yanbian News Network, 5 September 2010).

In the international departure points, the drugs are then handed off to foreign buyers, who use mules to fly the shipments back to their home countries, where presumably the drugs enter the local distribution networks. The image painted through analysis of the major drug trafficking incidents in China since 2006, then, is one in which the involvement of the traffickers who had to deal with various levels of the North Korean state ended essentially just on the other side of the Yalu and Tumen Rivers, with North Korean émigrés or refugees (or both), Chinese citizens of Korean ethnicity, Han Chinese citizens, and Japanese and South Koreans moving the goods beyond until they reached their destination in China or elsewhere in Northeast Asia. Compared

to the state-encouraged drug trafficking networks of the March of Suffering period, contemporary networks occupy the middle range – with much of the network outside of North Korea, but little to no network nodes further afield than Northeast Asia.

Governance structure

For obvious reasons, the Chinese media does not report on the North Korean side of drug trafficking operations. However, other sources give some idea (taking into account incomplete information and potentially significant bias) to the governance of post-famine networks with North Korea. Within North Korea, during the ‘official’ period of drug production, private trader networks began as a result of theft by the workers at the plants in Hamheung and Ranam (Kwon and Kwak, 19 August 2005). Other state workers also started using their position and knowledge to produce ice outside the confines of the state entities, such as a professor at Hamheung University who was apparently manufacturing ice by himself (Kim, 28 February 2008).

What little information exists about the evolution of the drug trade networks within North Korea suggests that governance actually moved up the ladder of state involvement from private traders to local state entities, even as the central state was cracking down. Although the first ‘producers’ were theoretically private traders using their official positions for profit, within a few years, ice production seems to have spread up the ladder. Hamheung Chemical Engineering University and Hamheung Academy of Sciences came under suspicion of production, and thirty members of Hamheung’s Defense Security Command were punished for drug trafficking in February 2008 (Lee, 12 November 2009).

Transportation and distribution have also moved up the governance ladder. The original private traders seem to have had something approaching a market relationship with onward nodes in the chain for transport and distribution (sacrificing sophisticated means of evading capture), but soon smugglers were moving toward interactions with state officials that allowed them to operate relatively freely (DailyNK, 13 August 2008). First, within North Korea and at the international borders, during crackdowns the central state has at times attempted to reassert its control over population movement by establishing checkpoints to check for travel and identification documents. This has had the effect of increasing opportunistic (but not necessarily long-term) rent-seeking by low-level state officials, as they are able to solicit bribes from traders they happen to catch (Choi, 23 January 2013). Second, state officials have established longer-term, more intensive relationships with traders. Inspection teams, ostensibly meant to crack down on private trade, including drug trafficking, often consist of National Security Agency, People’s Security Ministry, and prosecutor’s office workers, are susceptible to bribery (through the provision of expensive foreign goods) in exchange for ignoring transgressions by smugglers, and issuing ‘permits’ for future cross-border trading (Mok, 23 June 2011). Third, smugglers can establish longer-term relationships with border guards themselves, who tell smugglers when and where to go to avoid being captured. One analyst of North Korea estimates that for bulk goods, \$300 in bribes can allow a boatload of goods to cross (Author Interview, August 2012a).

North Korean state entities also engage in the drug trade as a means of surviving. Since they were first ordered to fend for themselves during the March of Suffering, state entities have been viewed as a source of net income by the central state, and as a result units at all levels are expected to meet quotas for hard currency income every year, a portion of which are passed up the hierarchy to the central state, as well as provide luxury goods as tribute to high-level officials, and particularly to the Kim family, on certain national holidays (Chung, 2012). The drug trade is attractive to local branches of state entities because the high per-unit profits of

crystal meth trafficking (relative to trading of more mundane goods such as natural resources and low value-added manufactured goods) allow a relatively small number of individuals to support the quota for a much larger work unit. By one estimate, the average branch office sees half of its workers engaged in drug trafficking. As with private traders, National Security Agency and People's Security Ministry officials can be bribed to look the other way at state entities' business, or even raise their own quotas for hard currency income through drug trade (Jin, 15 April 2010, Mok, 23 June 2011).

The actors that cross the border into China are invariably North Korean, but interestingly many of the coordinators and other nodes on the other side of the border are as well. The coordinator of the "5.20" operation, Park, was a 'foreigner' who entered China illegally in 2007 (Yanbian News Network, 5 September 2010), as was the coordinator in the "2.11" incident, Fang (Wang, 25 June 2009). It is unclear how these coordinators established and maintained business relationships with the North Korean smugglers coming from North Korea, but these relationships seemed to last over multiple smuggling incidents, suggesting costs to finding new suppliers. Jin Xiangyun, for instance, in the "9.20" incident, retrieved drugs from "President Chang" by the riverside six times over four months (Zhou, 27 March 2010), while in the "4.01" incident in 2008, the main perpetrators, Fang and Cai, took four deliveries over the course of four months (Zhang, 28 April 2008).

Familial ties and prior social ties are also important in solidifying the links in the chain, and in ensuring optimal operating conditions (such as the availability of safe houses). In the "5.20" incident, Park originally worked with her cousin Li in Dandong selling cosmetics, and when she smuggled crystal meth into China, used Li to distribute the drugs to buyers in Liaoning and Jilin. She also used her prior network of associates from her days working as a housekeeper and cook for factory workers in Shandong to distribute drugs in Qingdao (Yanbian News Network, 5 September 2010). Likewise, Jin Xiangyun, the coordinator of the "9.20" trafficking network, had another North Korean associate, Jin Longzhu, who used his relative Jin Hailian's rented house in Qingdao as a meeting place for the Chinese side of the network to pass the drugs to the South Korean side, which would physically smuggle the drugs out of the country (Dongbei Jinhua Xinwen, 27 March 2010).

Interestingly, the coordinators with direct ties to the smugglers from North Korea (essentially playing brokerage roles) are also often not the nodes in the network that engage in much of the retail (or onward trafficking), suggesting a certain level of specialization, and further diffusing the locations where value is captured as the drugs move from production to retail. In the "5.20" incident, while Park did have direct retail buyers, she also gave drugs to her cousin, and an associate named Zheng in Qingdao, to sell to street users (Yanbian News Network, 5 September 2010). Similarly, in the "9.20" incident it was Jin Longzhu, not the coordinator Jin Xiangyun, who served as the broker for the onward trafficking to the South Korean smugglers in Qingdao (Dongbei Jinhua Xinwen, 27 March 2010). Likewise, Fang of the "2.11" incident was able to coordinate the entry of the drug shipment into China, but ultimately it was her associate Park who found a suitable buyer through a friend of his in Yanji, resulting in four degrees of separation between Fang's supplier ("Little Brother") and the ultimate buyer (Wang, 25 June 2009).

Although it is an open question as to whether the North Korean central state still engages in drug production and trafficking, networks that operate seemingly without access to the resources of the central state do exist inside and outside of North Korea. While these network include private traders, they also include actors with considerably more complex relationships

with various levels of the state. Navigating such a complex institutional environment results not only in more actors within the value chain, but considerable diffusion of the value derived from production and trafficking, to include not only those directly integrated into the chain, but also those, such as border guards, who capture rents by providing secure conditions for operations. Unlike the central state networks, the new networks are horizontally integrated. Relationships between the actors within the chain run the range from market-based, fairly modular and hands-off, to deeply dependent on long-term experience and non-market ties, with relatively dense networks outside of North Korea relative to the March of Suffering networks.

CONCLUSION

There are several implications from this paper for our understanding of the relationship between the North Korean state and North Korean trade network's integration into the global economy. First, changes in state involvement were associated with changes in the governance and geography of the networks that had consequences for the societies around North Korea. While Japan and Taiwan saw dramatic drops in North Korean drug exports after 2004, China as both a transit point and a destination for North Korean-produced drugs bore the brunt of the change in geographic scope. Yanbian, for instance, saw 407 drug cases in 2006, with 10502 grams of ice confiscated (Yanbian Chaoxianzu Zizhizhou Difangzhi Bianzuan Weiyuanhui, 2009: 132). By 2010, this figure had more than doubled to 924 drug cases, with 20,700 grams of ice confiscated (Yanbian Chaoxianzu Zizhizhou Difangzhi Bianzuan Weiyuanhui, 2011: 132). Convincing a state to give up drug trafficking may, depending on the domestic context, merely result in a territorial shift and restructuring of drug trafficking networks rather than their disappearance. Second, while various analysts have argued the apparent drop in state-centered trafficking since the early 2000s may be due to the North Korean state using more plausibly denial means, the paper suggests that if indeed the North Korean central state is still engaged in drug trafficking, it is not using state resources outside of North Korea, and the central state is capturing a considerably smaller portion of the value of drug trafficking than before, although its 'taxation' system on state officials ameliorates this somewhat.

More generally, this article has implications for the study of illicit globalization. First, it is possible to examine (with some modification) illicit commercial networks such as drug trafficking networks as global value chains, allowing analysis of where value is captured within an illicit network, how the networks are governed, and where they are located. This opens up illicit networks to more systematic analysis than has been true in the past, and renders them analytically comparable. Finally, this paper suggests that licit and illicit commerce can be distinguished analytically by the nature of firms' relationship with the state – in one way, it may not be particularly useful to speak of any significant conceptual separation between licit and illicit (Hall, 2010, 2013). Because North Korea is a country where the definition of licit and illicit is fluid, it serves as an ideal case in which to examine both the effect of the state on illicit networks, as well as the ways in which licit and illicit international commerce differ, and the ways in which they are quite similar.

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