

North Korea under Tightening Sanctions

I. OVERVIEW

Outwardly, the Democratic People's Republic of Korea (DPRK, North Korea) appears stable. However, the country has been shaken by constricting international sanctions, extremely poor policy choices, and several internal challenges that have the potential to trigger instability. International sanctions have reduced foreign exchange earnings, while humanitarian assistance, which feeds millions of North Koreans, has declined due to political factors and donor fatigue. In addition to sanctions, Pyongyang has been dealing with the internal pressures of a disastrous currency reform as well as a chronic and deteriorating food security problem. The aggregate pressure is already taking a toll on North Korea's human security and could have a number of unanticipated consequences for regional and international security.

Some analysts and policymakers believe international sanctions have pressured North Korea to seek a face-saving return to the Six-Party Talks and better inter-Korean ties. Although Pyongyang's opaque policymaking process makes it nearly impossible to understand regime motivations, the pressures of cascading and overlapping "mini crises" are unmistakable just as the country has had to face difficult succession issues. However, the DPRK has demonstrated an extraordinary ability to survive under pressure. Any of the current challenges – as singular problems – should be manageable. The state security apparatus and the barriers to collective action make a "revolution from below" virtually impossible. But despite the loyalty of elites in the party and the military, a sudden split in the leadership, although unlikely, is not out of the question. Signs of any fissures would not be observable from the outside until a power struggle, a coup d'état, collapse or similar crisis was already unfolding.

The first half of 2009 was marked by bellicose and defiant posturing from the North, but in the latter half of the year, Pyongyang began to express a desire to improve ties with the Republic of Korea (ROK, South Korea) and the U.S. Frequent shuttle diplomacy has led to speculation that the Six-Party Talks could reconvene soon and that an inter-Korean summit could be held in 2010 or 2011. On the other hand, the [North] Korean People's Army (KPA) has been conducting a winter exercise that is expected to last until late March. The KPA has issued

several provocative statements and in late January 2010 fired live artillery rounds towards South Korean islands off the west coast. The shells landed in the sea in the vicinity of the Northern Limit Line (NLL), the western sea boundary that Pyongyang does not recognise. Nevertheless, despite KPA rhetoric, there have been no unusual troop movements or mobilisations.

Human security has not been at the top of the North East Asian security agenda given the prominence of traditional security issues, historical legacies, and strong sovereignty norms. It is generally defined along two dimensions: freedom from want; and freedom from fear. Throughout most of East Asia, even undemocratic countries have sustained relatively strong economic growth for long periods; living standards have thus improved in many countries that have experienced little or no progress in expansion of civil liberties and human rights. In contrast, North Korea's human security has been a long-term crisis. Human rights abuses and economic deprivation have been widely documented, but the international community has no effective policy instruments to produce improvements. The recent tightening of economic sanctions, compounded with domestic problems, is exacerbating the DPRK human security tragedy. This does not mean the international community is responsible for North Korea's current plight, of course: the DPRK government itself holds the key to easing the human security crisis.

The Korean peninsula has lived with the threat of war for over half a century. Mutual deterrence is robust, but inadvertent escalation or miscalculation is always possible. The balance of power has shifted against Pyongyang, and the DPRK leadership is not likely to start a war it knows it would lose. However, the leadership's motivation to survive could result in more dangerous proliferation activities as sources of foreign exchange – both legitimate and illegitimate – disappear. Kim Jong-il's political machine requires hard currency to operate, and there are several signs that the regime is increasingly desperate to earn it.

II. SANCTIONS AND DPRK FOREIGN POLICY REDIRECTION

A. DPRK PROVOCATIONS

In late 2008, North Korea began a series of provocative actions that raised tensions on the Korean peninsula to the highest level in several years. After leader Kim Jong-il suffered a stroke in August 2008, and the Six-Party Talks reached an impasse in December 2008, Pyongyang became increasingly defiant and hostile towards the international community and South Korea.¹ The reasons for this belligerence are not clear, but many analysts believe the actions were related to domestic politics, particularly the deteriorating health of Kim Jong-il and plans surrounding the transition to a third generation of leadership.

The DPRK has experienced only one transfer of power since it was founded in 1948, and no successor has been designated officially. However, Kim has likely chosen his third and youngest son, Kim Jōng-ūn, as heir. In March 2009, elections were held for the Supreme People's Assembly (SPA), the 687-seat unicameral legislature, which does little more than rubber stamp Kim Jong-il's directives.² The following month, the SPA amended the constitution to elevate and institutionalise Kim Jong-il's ideology of *sŏn'gun* ("military first") as a national guiding principle on par with his father's *chuch'e* (or "self-reliance").³

The SPA also expanded the National Defence Commission (NDC) from eight to thirteen members, and appointed Chang Sōng-t'aek, Kim Jong-il's brother-in-law, to that body in an apparent effort to increase its capacity to handle state affairs and guide a future leadership transition.⁴ Chang is considered a close confidant who would serve in effect as a regent until Kim Jōng-ūn, who is in his late twenties, could establish his credentials and authority.⁵ Furthermore, Kim Kyōng-hŭi, Kim Jong-il's

younger sister and Chang's wife, recently has been making frequent public appearances after having been out of the spotlight for years.⁶

On 5 April 2009, the DPRK launched a long-range missile in a failed attempt to place a small satellite into orbit.⁷ On 14 April, the UN Security Council responded with a presidential statement condemning the launch, even though some council members desired stronger action in the belief that it had violated Security Council Resolution 1718, which was adopted following North Korea's October 2006 nuclear test.⁸ However, Pyongyang felt it had the sovereign right to conduct the missile launch, since it had acceded to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and Other Celestial Bodies (Outer Space Treaty) on 12 March 2009.⁹

DPRK media reported that the Ŭnha-2 placed the *Kwangmyōngsōng-2*, an experimental communications satellite, into orbit even though it failed to do so. The event received extensive coverage for weeks in North Korea as evidence of progress towards the goal of becoming an advanced nation (*kangsōngdaeguk*). Mass rallies were held around the country in a show of national pride and congratulations to the leadership, which champions the missile program as a core element of national defence and state science policy. When the Security Council condemned the launch, the foreign ministry responded within hours that its statement was a "brigandish and hostile act and violent infringement of international law". The ministry also declared the DPRK would never again participate in the Six-Party Talks.¹⁰ Shrill rhetoric was followed by North Korea's second nuclear test on 25 May and a large-scale ballistic missile exercise on 4 July.

¹ See Crisis Group Asia Briefing N°91, *North Korea's Missile Launch: The Risk of Overreaction*, 31 March 2009; Crisis Group Asia Report N°169, *North Korea: Getting Back to Talks*, 18 June 2009; and Crisis Group Asia Report N°168, *North Korea's Nuclear and Missile Programs*, 18 June 2009.

² The SPA usually meets once a year in April for a few days to pass the national budget and a handful of legislative items.

³ Article 3 of the new DPRK constitution declares "the *chuch'e* idea and the military first idea ... to be the guiding principles of the DPRK". Article 100 establishes the chairman of the National Defence Commission as the supreme leader of the DPRK, and grants the NDC chairman a number of extraordinary powers to control state affairs.

⁴ Kim Hyun, "Kim Jong-il paves way for successor: analysts", Yonhap News Agency, 10 April 2009.

⁵ There is little credible information about Kim Jōng-ūn. He reportedly attended a school in Switzerland in the 1990s and

is now working in the NDC. Blaine Harden, "North Korea's Kim Jong Il chooses youngest son as heir", *The Washington Post*, 3 June 2009; and Bill Powell, "North Korea's Next Kim: Dad's Favorite, Kim Jong Un", *Time*, 1 June 2009.

⁶ Kim Kyōng-hŭi is the director of the KWP Light Industry Department. Yoo Jee-ho, "Pyongyang enacts major changes in power structure", *The JoongAng Ilbo*, 18 February 2010.

⁷ In August 1998, North Korea also attempted a satellite launch to coincide with an SPA meeting and constitutional revision to formalise Kim Jong-il's ascension to power.

⁸ The resolution included, "the Council decides that the DPRK shall suspend all activities related to its ballistic missile program". For background on the debate over the UN Security Council response, see Crisis Group Asia Briefing N°179, *Shades of Red: China's Debate over North Korea*, 2 November 2009.

⁹ Crisis Group Briefing, *North Korea's Missile Launch*, op. cit.

¹⁰ "DPRK foreign ministry vehemently refutes UNSC's 'Presidential Statement'", KCNA, 14 April 2009. The response was unusual because of its swiftness. DPRK government replies usually take days not hours.

B. TIGHTENING SANCTIONS

The second nuclear test resulted in the adoption of Security Council Resolution 1874, which strengthened international sanctions and in effect multi-lateralised the Proliferation Security Initiative (PSI), the U.S.-inspired effort designed to interdict weapons of mass destruction (WMD) and related cargoes. The resolution banned all North Korean arms exports, and national authorities were authorised to inspect suspicious DPRK ships.¹¹ However, Pyongyang expected international sanctions to follow the test and was prepared to bear the anticipated costs.¹²

Following the failed satellite launch in April, the Security Council sanctions committee imposed sanctions on Korea Mining Development Trading Corporation (KOMID), Korea Ryōnbong [Yōnbong] General Corporation, and the Tanch'ŏn Commercial Bank, as well as their subsidiaries. After the nuclear test, the committee in July sanctioned the DPRK's Namch'ŏn'gang Trading Corporation, Korea Hyōksin Trading Corporation, the General Bureau of Atomic Energy, Korean Tangun Trading Corporation and Iran-based Hong Kong Electronics, as well as five North Korean citizens. The five are now subject to an international travel ban and a freeze of any foreign assets. They include: Ri Je-sŏn, director of the General Bureau of Atomic Energy; Yun Ho-jin, director of Namch'ŏn'gang Trading Corporation; Hwang Sŏk-ha, Chief of the Scientific Guidance Bureau in the General Bureau of Atomic Energy; Ri Hong-sŏp, former director of the Yōngbyŏn Nuclear Research Centre; and Han Yu-ro, director of Korea Ryongaksan [Yong'aksan] General Trading Corporation.¹³

Pyongyang was probably confident it could largely circumvent the sanctions. The DPRK has established complex networks of temporary shell companies for international transactions, and the sanctioned individuals do not travel abroad and are very unlikely to hold foreign assets. However, the leadership might not have anticipated the impact of the sanctions on conventional arms exports. The DPRK ship *Kangnam 1* departed North Korea in mid-June suspected of carrying small arms to

Burma but returned late in the month without completing its journey.¹⁴ Meanwhile, Washington expanded the number of North Korean entities subject to U.S. sanctions and urged all countries to enforce the Security Council resolutions.¹⁵

On 9 June, the South Korean government announced that it was imposing economic sanctions against DPRK entities for the first time, targeting firms with suspected ties to the nuclear and missile programs. However, the financial sanctions were only symbolic, since the entities have no assets in South Korea or South Korean banks. As a follow-up measure, the defence ministry announced on 30 June that it was drafting plans to interdict DPRK ships if necessary as part of Seoul's obligation to enforce Resolution 1874 and meet its commitments under the PSI.¹⁶

Japan, which had been a major trading partner in years past, has imposed a virtual trade embargo against North Korea for proliferation reasons, but also for the abduction of Japanese citizens in the 1970s and 1980s.¹⁷ Cash remittances from Japan, a major source of hard currency in the past, have dried up, and Tokyo has tightened export controls to prevent Pyongyang from acquiring dual-use technologies for weapons programs. Japanese sanctions against the DPRK are based on cabinet measures, but they need approval from the Diet, which is in full support.¹⁸ In August 2008, Japan and the DPRK agreed

¹¹ The ban also includes "technical training, advice, services or assistance". Arms imports are banned except for minimal small arms for self-defence. Resolution 1718 established a sanctions committee to oversee the implementation of the sanctions.

¹² North Korean diplomats told Chinese foreign ministry officials they expected sanctions after the test, but it would be worth it in the long-run because of the security benefits. Crisis Group interviews, Beijing, July 2009.

¹³ "List of entities, goods and individuals subject to the measures imposed by paragraph 8 of resolution 1718 (2006)", United Nations Security Council Resolution 1718 Sanctions Committee, updated 16 July 2009, www.un.org/russian/sc/committees/1718/1718_list_of_entities.pdf.

¹⁴ Burma reportedly was warned of the consequences of accepting a North Korean arms shipment, which reportedly was to be financed through a Malaysian bank. "N. Korea using Malaysian bank to deal weapons with Myanmar", Yonhap News Agency, 4 July 2009.

¹⁵ On 30 June, Namch'ŏn'gang Trading Corporation was slapped with U.S. sanctions, followed by Korea Hyōksin Trading Corporation on 30 July, and Korea Kwangson Banking Corporation on 11 August. A number of North Korean entities are subject to sanctions under U.S. statutes and Executive Order 13382, but Washington has sought to tighten and expand sanctions after the 2009 nuclear and missile tests. Korea Kwangson Banking Corporation was sanctioned because it has provided financial services for Tan'chŏn Commercial Bank and Korea Hyōksin Trading Corporation, a subsidiary of the Korea Ryongbong General Corporation, which are also under U.S. sanctions for proliferation activities.

¹⁶ South Korea joined the PSI on 26 May 2010, one day after North Korea's second nuclear test.

¹⁷ "Japan decides to impose additional sanctions on N. Korea", Kyodo News, 10 April 2009, Open Source Centre (OSC) Document ID: JPP20090410969028; and Emma Chanlett-Avery, "North Korea's Abduction of Japanese Citizens and the Six-Party Talks", Congressional Research Service, 19 March 2008.

¹⁸ The Japanese public strongly supports sanctions against the DPRK. "Weekly Fuji Poll: 78.8% Say Japan Should Tighten Sanctions Against North Korea", Fuji Television (survey

to form a committee to investigate past abductions of Japanese citizens. Tokyo said that once this was done, it would lift its ban on Japanese visits and charter flights to the DPRK.¹⁹ However, this would only be a small step towards normalising economic ties and would have a negligible effect on North Korea's economy.

Just as Taro Aso replaced Yasuo Fukuda as Japan's prime minister in September 2008, the DPRK announced it was "suspending implementation of the August agreement" on abductions. Aso is generally regarded as more hawkish than Fukuda on North Korea, but Pyongyang should not have anticipated a policy shift; the incoming government had not yet acted on North Korea policy, and there was no real policy space to ratchet up sanctions. Whether Pyongyang wanted to weigh the intentions of the incoming Aso government or simply used the transition as a pretext to back out of the agreement is uncertain.

When the Democratic Party of Japan (DPJ) came to power in September 2009, Prime Minister Hatoyama expressed a desire to improve relations with neighbours. However, there is little prospect of normalising bilateral economic ties under present conditions, and despite what many perceive to be disarray in Japan's foreign and security policies under the DPJ government, the domestic politics on the abduction issue have not changed.²⁰ In sum, Tokyo is committed to enforcing UN and unilateral sanctions until there is a significant policy shift in Pyongyang on the nuclear and abduction issues, which means Japan will not be a source of hard currency for Pyongyang anytime soon.

All UN member states are legally required to enforce the sanctions, and national authorities are authorised to stop and search DPRK ships if they are suspected of carrying illicit cargo. The multilateral sanctions regime targets all North Korean arms exports. Japan and South Korea, which had been significant economic partners in the past, are committed to enforcing international sanctions and are imposing unilateral sanctions as well. The sanctions are targeted at the DPRK leadership with the objective of pressuring it to return to denuclearisation talks and to fulfil its non-proliferation commitments.²¹

conducted on 9 April and aired on 12 April 2009), 11 April 2009, OSC Document ID: JPP20090412033008.

¹⁹ The cabinet vote is by consensus and Diet approval requires a simple majority. There is no political support for lifting sanctions unless Pyongyang stops proliferating and makes a "sincere effort" to resolve the abduction issue. Crisis Group interview, Tokyo, 4 February 2010.

²⁰ Crisis Group interview, Tokyo, 4 February 2010.

²¹ Sanctions under Resolution 1718 prohibit the transfer of luxury goods to the DPRK, since Kim Jong-il uses them to reward regime loyalists. This is difficult to enforce, especially since there is no consensus on what constitutes a "luxury

good", and enforcement would require intrusive inspections of all cargo entering the DPRK, which China will not do. Nevertheless, some "luxury goods" have been seized en route to the DPRK. For example, Italian customs officials confiscated expensive liquor and two yachts in 2009. "Italy seizes luxury liquor bound for N. Korea", *The Chosun Ilbo*, 14 September 2009.

C. FOREIGN EXCHANGE PROBLEMS

However, they also contribute to a growing shortage of foreign exchange, which has spill-over effects on the economy and society.

As the enhanced sanctions regime took shape in 2009, North Korea's sources of foreign exchange have been drying up. In recent years, the DPRK has run an annual trade deficit of about \$1 billion that must be financed. North Korea's balance of payments is not transparent, since the government publishes no statistics. However, the deficit appears to be financed with long-term credits that no one expects to be repaid, aid or grants and a number of illicit activities.²²

South Korea had been an important source of aid under Presidents Kim Dae-jung (1998-2003) and No Mu-hy n (2003-2008). However, South Korean humanitarian assistance in the form of food and fertiliser has virtually disappeared under the Lee Myung-bak government. Since taking office in February 2008, President Lee has insisted that Pyongyang submit a formal request for food and fertiliser aid, but none has been forthcoming. The North rejected the South's offer to provide 50,000 tons of food in 2008, but in January 2010 accepted 10,000 tons of corn that Seoul had offered in October 2009.²³ However, in early March, this had not yet been received due to logistical problems, and it was unclear whether it would arrive in time to affect the approaching period of shortages before the fall harvest.²⁴ The reduction of aid means the North must use foreign exchange to buy food on the international market, seek other donors or let people starve.

²² North Korea does not have foreign exchange reserves to draw upon and is not a member of international financial institutions that could provide financing for balance of payments deficits. Foreign direct investment, another potential source of foreign exchange, has been insignificant. In recent years, China and South Korea have been the most important sources of long-term credits for food and fertiliser imports.

²³ The amount is insignificant given the magnitude of North Korea's food shortage. The previous South Korean government provided 500,000 tons of food and 300,000 tons of fertiliser per year. "N. Korea accepts S. Korean food aid: Seoul official", Agence France-Presse, 15 January 2010; "North Korea accepts food aid from South Korea", BBC News, 15 January 2010; and Choe Sang-hun, "South Korea offers food aid to North", *The New York Times*, 26 October 2009.

²⁴ "South Korea's planned food aid for North Korea hits snag", Yonhap News Agency, 6 March 2010.

Over the last two years, inter-Korean economic transactions have shifted towards a commercial basis; however, their total value has declined. According to the South Korean Customs Service, inter-Korean trade for the first half of 2009 fell 26.6 per cent compared to the first half of 2008 (\$649.85 million compared to \$884.79 million).²⁵ It rebounded in the second half to reach \$1.7 billion for the year, with the North registering a \$200 million surplus, but overall was still down 8.5 per cent compared to 2008.²⁶

South Korean cash remittances from tourism have also disappeared with the closure of the Mt. Kūmgang and Kaesōng City tourism projects following the shooting and death of a South Korean tourist by a KPA soldier in July 2008. Hyundai-Asan, which runs the tours and has a large stake in the Kaesōng Industrial Complex, has been suffering big losses as a result.

In early August 2009, Hyundai Group Chairwoman Hyōn Jōng-ūn travelled to Pyongyang and met with senior officials including Kim Jong-il to discuss economic cooperation. During her trip, North Korea announced that it would allow the resumption of the two inter-Korean tourism projects, and released a South Korean employee who had been detained in Kaesōng since 30 March 2009. However, the South Korean government has not permitted the tours to resume. Its official position is that North Korea has not agreed to cooperate in a joint investigation of the tourist shooting and that security guarantees for South Korean visitors are inadequate. But government sources say Seoul's real policy is to block resumption of the tours until there is some progress on North Korean denuclearisation.²⁷

North Korea's illicit transactions have also been hit, reducing foreign exchange earnings. According to a Crisis Group source, North Korean contraband, such as counterfeit cigarettes and narcotics, have mostly disappeared from Japan recently because Chinese organised crime groups have displaced their North Korean competition.²⁸ Furthermore, conventional arms shipments, another significant source of foreign exchange, have been seized as contraband in accordance with Security Council Resolutions 1718 and 1874. Even though the DPRK has

declared the resolutions illegitimate,²⁹ export earnings from arms sales almost certainly will decline given the likely impact of sanctions on the demand side. Prospective buyers must now weigh the risk of their purchases being seized in transit.³⁰

Pyongyang's appeal to reopen the inter-Korean tourism projects is just one of several signs the DPRK is under pressure to increase its hard currency earnings. In November 2009, DPRK foreign ministry officials told Crisis Group that their government was eager to normalise economic relations with the U.S. and that an improvement on that front would have a positive effect on political relations.³¹ The following month, Business Executives for National Security, a U.S. group headed by a former four-star general, visited Pyongyang and met with high-level officials who said recent legal changes are favourable for foreign direct investment.³² North Korea also has relaxed restrictions to allow American tourists to visit the DPRK year round.³³ Furthermore, the DPRK's joint New Year's editorial clearly emphasised the economic tasks for the country.³⁴

D. ARMS TRADE

Arms exports are an important source of foreign exchange for North Korea, but the total revenue is unknown. Media often cite an estimate of \$1 billion per year, but this is almost certainly exaggerated.³⁵ Some analysts estimate

²⁵ "Inter-Korean trade tumbles amid growing tensions", Yonhap News Agency, 21 July 2009.

²⁶ "Inter-Korean trade drops in 2009", *The Chosun Ilbo*, 19 January 2010.

²⁷ The amount of progress necessary is unclear, but at a minimum, Pyongyang's return to the Six-Party Talks and a demonstration that it is bargaining in good faith to implement the Six-Party Talks Joint Statement of September 2005. Crisis Group interview, ROK government official, Seoul.

²⁸ Crisis Group interview, Japanese counter-terrorism official, Tokyo, 5 February 2010.

²⁹ "DPRK foreign ministry declares strong counter-measures against UNSC's 'Resolution 1874'", KCNA, 13 June 2009.

³⁰ UN sanctions also apply to military technology, services and training, which Pyongyang also provided in the past. For example, North Korea trained Zimbabwe's notorious Fifth Brigade in the 1980s. How much revenue it has received for such services is unclear.

³¹ Crisis Group interviews, Beijing, November 2009.

³² Bomi Lim, "North Korea tells Greenberg, Perot it would welcome investment", Bloomberg, 24 December 2009; "Sojourn of US businessmen delegation in Pyongyang", KCNA, 17 December 2009; "U.S. businesses explore investment in N. Korea", Yonhap News Agency, 17 December 2009.

³³ U.S. tourism is very small compared to the potential revenue from South Korea tourists. However, Pyongyang's willingness to welcome Americans, expand the areas for travel and permit movement by train to China is another sign of the desire to increase foreign exchange earnings. Crisis Group email correspondence with Walter L. Keats, president of Asia Pacific Travel, Ltd., 31 January 2010.

³⁴ "Joint new year editorial of leading newspapers in DPRK released", KCNA, 1 January 2010. The DPRK New Year editorial announces state guidelines and policies for the coming year.

³⁵ The air shipment of surface-to-air missiles and small arms seized in Bangkok in December 2009 is said to have been worth about \$18 million. North Korea would have to make an equivalent shipment every week to reach \$1 billion per year,

North Korea's hard currency earnings from illicit activities to be in the range of \$500 million to \$1 billion per year, but no one has produced credible figures to account for all activities and the portion of weapons-related exports. Estimating North Korea trade figures for regular non-military trade is problematic for several reasons, particularly since the government does not publish trade data.³⁶ Efforts to assess trade patterns are now further hampered by China's October 2009 decision to stop publishing bilateral trade statistics with North Korea because of the scrutiny and controversy over its aid to Pyongyang.³⁷

Estimating revenue from North Korean arms exports is even more problematic. Both buyers and sellers have an incentive to hide the transactions, especially since all North Korean arms exports are now banned. In the past it was much easier to fabricate shipping documents to avoid detection, but now all North Korean cargo draws scrutiny. In the underworld of illicit arms trafficking, it is very difficult to track and confirm the true identity of suppliers and end users, as well as the true value of the transactions. However, as traditional government buyers³⁸ might be deterred from conducting weapons transactions with it, Pyongyang has a greater incentive to seek alternative buyers, such as terrorist groups or international crime organisations.

1. Interdictions

As the multilateral sanctions regime took effect, DPRK arms shipments were seized. In July 2009, the United Arab Emirates (UAE) detained the *ANL-Australia*, which reportedly was headed for Iran with conventional arms. Iran and the DPRK have a long-term military relationship

that includes cooperation to develop ballistic missiles,³⁹ but the final destination for this cargo might have been elsewhere, since Iran can produce the weapons that were confiscated. Iran has been on the U.S. State Department's list of state sponsors of terrorism since 1984 and was described recently as the most significant state sponsor.⁴⁰ It is possible that Tehran, with its long-term ties to and support for some terrorist groups, could be cooperating with the DPRK to trans-ship small arms to non-state actors. Hizbollah (Lebanon) and the Tamil Tigers (Sri Lanka) reportedly acquired North Korean arms in the past, and there are rumours that Mexican drug cartels have also obtained them.⁴¹

In August, the Indian coast guard stopped and searched the DPRK ship *Musan* on the high seas after it tried to flee, but no illicit cargo was found.⁴² And on 22 September, South Korean authorities searched four shipping containers that originated in North Korea and entered Pusan aboard a Panamanian-flagged vessel. The containers had been trans-shipped through China, but they held no contraband.⁴³ These cases demonstrate the increased costs of legitimate DPRK trade, which could deter any business enterprise contemplating transactions with Pyongyang.

In late February 2010, the press reported that in November 2009 South Africa seized a shipment of DPRK-made tank parts that were destined for the Republic of the Congo.⁴⁴ The parts were for 1940s and 1950s vintage Soviet T-54 and T-55 tanks that have subsequently been produced elsewhere. The parts were trans-shipped though China and transferred in Malaysia to a ship operated by the French shipping company CMA CGM. The shipping documents listed the components as "bulldozer parts",

but there is not that much ship and air traffic. However, services, technology, training, licensing, data and other intangibles can be transferred without surface ships or aircraft, so these transactions raise earnings while being difficult to detect. Annual export revenue from weapons sales is probably about \$100 million. "North Korea's Arms Export", *Kanwa Asian Defense*, no. 61, 1-30 November 2009, pp. 24-25, OSC Document ID: CPP20091102702018, 2 November 2009.

³⁶ Some scholars and analysts have used mirror statistics to estimate North Korea's balance of payments, but their results are incomplete due to a number of data problems. It is extraordinarily difficult to estimate national income, balance of payments and other North Korean economic trends without data. For a discussion on the difficulties, see Nicholas Eberstadt, "Our Own Style of Statistics": Availability and Reliability of Official Quantitative Data", in *The North Korean Economy* (New Brunswick, 2009), pp. 17-59.

³⁷ Chris Buckley, "China hides North Korea trade in statistics", Reuters, 26 October 2009.

³⁸ Major purchasers of DPRK arms have included Iran, Pakistan and Syria.

³⁹ According to a defector who worked as a scientist in the DPRK ballistic missile program until about five years ago, ten to twenty North Korean scientists and aerospace engineers have maintained a continuous presence in Iran since the 1980s. Crisis Group interview, Seoul, 14 January 2010.

⁴⁰ "Country Reports on Terrorism 2008", Office of the Coordinator for Counterterrorism, U.S. Department of State, April 2009.

⁴¹ Rocket-propelled-grenades (RPGs), a common DPRK small arms export, have been confiscated from at least two Mexican drug cartels. Crisis Group interview, Japanese counterterrorism official, Tokyo, 5 February 2010; Fernando Meraz, "Mexican Magazine Reports Classified Army Gun-running Information", *Milenio Semanal*, OSC Document: LAP2008 0316345002, 16 March 2008.

⁴² "North Korea ship crew uncooperative: India investigators", Reuters, 9 August 2009; and Sreeram Chaulia, "Wary India frisks North Korean freighter", *Asia Times*, 21 August 2009.

⁴³ Tony Chang, "S Korea searched suspicious NK containers: sources", Yonhap News Agency, 5 October 2009.

⁴⁴ Also known as "Congo-Brazzaville"; not to be confused with the Democratic Republic of the Congo (formerly Zaire).

but the French firm reported the suspicious cargo to South African authorities, who seized the cargo and notified the sanctions committee.⁴⁵

With controls tightening around arms shipments on the high seas, North Korea may have turned to air shipments as an alternative. DPRK transport aircraft have the range to reach Burma or Pakistan if they pass over China, or Iran if transiting through China and Pakistan. Pyongyang decided against using its own aircraft for an arms shipment in December 2009, probably as an added measure for concealment. However, a chartered Il-76 aircraft was seized in Bangkok on 12 December and found to be loaded with about 35 tons of North Korean weapons, including surface-to-air missiles and rocket-propelled grenades (RPGs).⁴⁶

The aircraft was registered with a Georgian firm, Air West Ltd. The five-man crew – citizens of Kazakhstan and Belarus – claimed to believe the cargo consisted of oil drilling equipment. The crew subsequently was released from detention by Thai authorities. The shipment was arranged by SP Trading, a shell company established in New Zealand in July 2009. Union Top Management, Ltd., a shell company registered in Hong Kong, leased the aircraft for the shipment on 4 December.⁴⁷ The managers of these two shell firms have vanished. A Japanese official described the operation as similar to organised crime activities in Japan, where the Yakuza have become very adept at establishing shell companies and holding firms.⁴⁸

While the interdictions reflect an increasingly robust sanctions regime, many officials and analysts are concerned about possible unintended consequences. Kim Jong-il and the senior DPRK leadership need foreign exchange to maintain political control. They might be tempted to sell WMD-related intangibles such as technology, production know-how, or data from weapons testing – if they have not done so already. Both South Korean and Japanese officials have expressed concerns that North Korea could now be desperate and willing to

take greater risks to sell anything for hard currency.⁴⁹ Even if Kim Jong-il and his inner circle are risk averse and unwilling to sell WMD or WMD-related materials and technology, unauthorised sales could occur at lower levels of authority. In sum, the international community, as it enforces sanctions, must not only make clear to the North that any crossing of its red lines on WMD will have serious consequences, but also be prepared for potentially more dangerous smuggling attempts.

E. DPRK PROPOSALS FOR PEACE AND DIALOGUE

Kim Jong-il and the DPRK military may have gained enough confidence as a result of their nuclear and missile tests in 2009 to explore diplomatic initiatives, with a view to reducing regional tensions or, more likely, seeking foreign recognition of Pyongyang's declared nuclear status.⁵⁰ In addition to establishing a credible deterrent, another important DPRK foreign policy objective is to have economic sanctions lifted as soon as possible. This latter objective has probably become increasingly urgent as the economy has continued to deteriorate.

On 25 July 2009, Sin Son-ho, DPRK ambassador to the UN, said Pyongyang was not opposed to dialogue with Washington and was ready to discuss issues of mutual concern at anytime.⁵¹ Only ten days later, former U.S. President Bill Clinton travelled to Pyongyang and met with Kim Jong-il. The two discussed a number of issues, and Clinton obtained the release of two American journalists who had been detained in March 2009 and later tried and convicted for entering the country illegally and engaging in "activities harmful to the DPRK".⁵²

A similar opportunity occurred for unofficial dialogue between the two Koreas, when former South Korean President Kim Dae-jung died on 18 August. Kim Jong-il expressed condolences and dispatched a delegation to his funeral in Seoul, led by Kim Ki-nam, secretary of the Korean Workers' Party (KWP) Central Committee. It

⁴⁵ Louis Charbonneau, "South Africa says intercepted N.Korea arms shipment", Reuters, 23 February 2010.

⁴⁶ "Huge N Korea arms cache seized", *The Bangkok Post*, 13 December 2009; Patrick Barta, Daniel Michaels and Simon Louissou, "Officials probe Auckland firm's role in seized arms cache", *The Wall Street Journal*, 17 December 2009.

⁴⁷ Alex Frangos, Daniel Michaels and Jonathan Cheng, "Hong Kong firm leased plane carrying weapons", *The Wall Street Journal*, 22 December 2009; and Jocelyn Gecker, "NKorea weapons smugglers left trail around world", Associated Press, 25 December 2009.

⁴⁸ Crisis Group interview, Japanese counter-terrorism official, Tokyo, 5 February 2010.

⁴⁹ Crisis Group interviews, Seoul, 26 January 2010, and Tokyo, 5 February 2010.

⁵⁰ Domestically, North Korea clearly is recognised as a nuclear power. For evidence that North Korea has long used deception to acquire a nuclear weapons capability, see Walter C. Clemens Jr., "North Korea's Quest for Nuclear Weapons: New Historical Evidence", *Journal of East Asian Studies*, vol. 10, no. 1 (January-March 2010), pp. 127-154.

⁵¹ "NK shows interest in bilateral talks with US", *The Korea Times*, 25 July 2009.

⁵² "Kim Jong Il meets former U.S. President Bill Clinton", KCNA, 4 August 2009; and "Bill Clinton's N. Korea trip aimed at freeing journalists, not thawing ties: expert", Yonhap News Agency, 4 August 2009.

met with President Lee, Unification Minister Hyōn In-t'aek and other senior officials. The sessions were held in a cordial atmosphere, and the North Korean side expressed the desire to initiate dialogue and reconciliation.⁵³ Subsequently, secret talks were held in Singapore to discuss the possibility of an inter-Korean summit.⁵⁴

In early December, Ambassador Stephen Bosworth, U.S. Special Representative for North Korea Policy, travelled to Pyongyang for the first high-level bilateral talks since President Obama took office. Bosworth and Vice Foreign Minister Kang Sōk-chu discussed a wide range of issues, "including a peace agreement, the normalisation of bilateral relations, economic and energy assistance and the denuclearisation of the Korean Peninsula".⁵⁵ The U.S. described the talks as an effort to encourage the DPRK to return to the Six-Party Talks, but Pyongyang has made no commitment, and Washington insists all outstanding issues must be addressed in that process.

III. COPING WITH DOMESTIC CHALLENGES

Poor policy choices are exacerbating a number of domestic challenges that North Korea is facing in the context of sanctions and dwindling sources of foreign exchange. Human security is deteriorating, and the weakest and most vulnerable pay the highest price – children, the elderly, peasants and those classified as politically disloyal or wavering. None of the current domestic problems alone are sufficient to destabilise the regime. Revolution from below is virtually impossible, but the sum of mini-crisis could trigger splits in the leadership, especially if confronted with sudden succession. The international community must be prepared for a variety of contingencies.

A. STATE ECONOMIC OBJECTIVES

State economic policy is guided by the goal of becoming a "strong and prosperous country" (*kangsōngdaeguk*) by 15 April 2012, the 100-year anniversary of the birth

of "eternal President" Kim Il-sung. All state policies are also strongly influenced by Kim Jong-il's "military first" (*sōn'gun*) doctrine. The state focuses on three dimensions in its quest to become a *kangsōngdaeguk*: politics or ideology, military capabilities and the economy. Pyongyang apparently believes the DPRK is strong in the first two dimensions but acknowledges it is weak economically. In the "son'gun era", the military and national defence receive priority, and the KPA is supposed to set an example and lead efforts to improve the economy.

After 2009's nuclear and missile tests, Pyongyang has begun to focus more on the economy, but with orthodox policy instruments. The 150-day and 100-day labour mobilisation campaigns or "speed battles" implemented in 2009 along with the currency reform (discussed below) are clear indications that the state is unwilling to embrace reform and openness that could greatly increase productivity and allocate resources more efficiently.⁵⁶ Reform means relaxation of state control, which is problematic for the leadership, not least because it wants to differentiate the DPRK from its southern rival. Although the leadership must deliver economic progress to achieve political stability, it is trapped, because convergence towards a political economy similar to that of the ROK would be political suicide.

B. CURRENCY REFORM

At 11:00am on 30 November 2009, local KWP officials suddenly were informed that a currency reform would be implemented that afternoon. The state issued new currency from 1-6 December, but limited the amount of old money citizens could exchange, effectively wiping out any "illicit" household savings in North Korean wōn. The new currency was issued against the old at an exchange rate of 100:1, so, for example, old ₩1,000 bank notes were exchanged for ₩10 notes. It was the fifth time North Korea has issued a new currency – exchanges were also implemented in 1947, 1949, 1959, and 1992.⁵⁷

⁵³ Crisis Group interview, ROK government official, Seoul.

⁵⁴ The North Korean delegation expressed a strong desire to hold a summit, but Lee Myung-bak has stated there will be no cash transfers to the North in exchange for a meeting. Crisis Group interview, Tokyo, 4 February 2010; and Ser Myo-ja and Seo Seung-wook, "Speculation swirls about a South-North summit", *The JoongAng Ilbo*, 27 October 2009.

⁵⁵ Tony Chang, "NK, U.S. positive about recent talks: KCNA", Yonhap News Agency, 11 December 2009; "DPRK foreign ministry spokesman on U.S. Special Representative's Pyongyang visit", KCNA, 11 December 2009.

⁵⁶ In May 2009, North Korea announced a 150-day labour mobilisation campaign. Upon completion, it was immediately followed by a 100-day campaign that was concluded on 30 December. "150-Day Battle Is All Slogan and No Achievement", *The Daily NK*, 22 May 2009; Lee Sang Yong, "No Going Home during 100-Day Battle Harvest", *The Daily NK*, 22 September 2009.

⁵⁷ "북, 17년 만에 화폐개혁 전격 단행" ["North executes shocking currency reform after 17 years"], *The Daily NK*, 30 November 2009; and "북한 화폐 개혁 일지...총 5차례 진행" ["North Korea currency reform diary...the fifth in progress"], *The Daily NK*, 30 November 2009. In comparison, South Korea had currency reforms in 1953 and 1962. The South Korean wōn es-

The currency reform had multiple objectives: controlling price inflation; reasserting state control of the economy; weeding out corruption; eliminating or reducing market activities; and redirecting human resources to the formal state sector. A currency swap is a legitimate policy measure to control inflation if implemented alongside sound macroeconomic policies.⁵⁸ However, the DPRK reform had grave consequences, and Pyongyang has recognised it failed.⁵⁹

The reform reduced the amount of money in circulation by “confiscating excess savings”. The central bank initially limited the currency for conversion by an individual to ₩100,000 in old wŏn, or about \$40 at the black market rate.⁶⁰ The state increased the amount to ₩150,000 in cash and ₩300,000 in bank deposits after widespread protests.⁶¹ However, cash was exchanged at a rate of 100:1 and any bank deposits over ₩100,000 were exchanged at a rate of 10:1 up to the ₩300,000 limit.⁶² By limiting the amount of old currency that could be exchanged, the central bank reduced the money supply, which should have deflated nominal prices; however, the reform had the opposite effect, because government actions paralysed markets and encouraged sellers to hoard commodities and resources, as discussed below.

The surprise announcement and the severe limits on exchanging old currency had a devastating effect on any confidence that North Koreans had in the currency. In the case of the 1992 reform, rumours had led provincial cadres to stock rice, durables goods and anything they

essentially was pegged to the U.S. dollar before moving to a floating exchange rate in December 1997.

⁵⁸Stephan Haggard and Marcus Noland, “The winter of their discontent: Pyongyang attacks the market”, Peterson Institute for International Economics Policy Brief Number PB10-1, January 2010.

⁵⁹“N.Korea climbs down over anti-market reforms”, *The Chosun Ilbo*, 11 February 2010; 장용훈 [Chang Yong-hun] “北 화폐개혁 실패 인정, 최룡해 책임미서 작품?” [“The North’s acknowledgment of the currency reform failure, a product of Secretary Ch’oe Ryong-hae?”], Yonhap News Agency, 11 February 2010; Kim Mi-ok, “Kim Jong Il admits failure of currency reform upon [hearing] Ch’oe Ryong-hae’s honest remarks”, *Yŏllin Pukhan Pangsong*, OSC Document ID: KPP201002 11104002, 11 February 2010.

⁶⁰The DPRK official exchange rate was ₩135 per \$1. At this rate, ₩100,000 in old currency would be worth \$740.74. Kim Hyun, “N. Korea revalues currency for first time in 17 yrs: sources”, Yonhap News Agency, 1 December 2009.

⁶¹Moon Sung Hwee, “Public currency announcement broadcast”, *The Daily NK*, 1 December 2009.

⁶²장용훈 [Chang Yong-hun], “北, 화폐개혁 공식 확인..단행 나흘만” [“North, officially confirms currency reform...four days after execution”], Yonhap News Agency, 4 December 2009.

believed would hold value.⁶³ There were similar rumours prior to the December 2009 reform, but they had circulated for so long that people discounted them. Some of the new currency was printed with the dates 2002 and 2008, so a currency reform probably was in the works for some time.⁶⁴

Since the 1992 currency reform, the North Korean economy has changed significantly. The collapse of the Public Distribution System (PDS) in the wake of the famine in the mid-1990s led to extensive marketisation. Small-scale entrepreneurs left the crumbling state sector, and many became food suppliers, with most holding North Korean wŏn in cash to operate their businesses. Large-scale operators convert any assets to foreign currency, so they were mostly unaffected by the reform, but the “middle class” of small traders was devastated when their assets were wiped out.

Kim Jong-il may have also used the currency reform to crack down on corrupt officials. From mid-2007 to June 2008, the KWP implemented a large corruption investigation. Party offices were not delivering the funds or revenue they were supposed to or had provided to central authorities in the past. Kim Jong-il reportedly was not pleased when the investigation found that about 30-40 senior KWP members were corrupt. A crackdown ensued shortly thereafter.⁶⁵

Three days before the currency reform was announced, government and KPA officials were dispatched to inspect firms, warehouses, trade offices and military bases to uncover goods that were being diverted to the market. No facilities were exempt from inspection, and there was no time to hide inventory. The inspection was aimed at the “big traders” and wholesalers who had gained tremendous influence over local officials with their ability to pay bribes.⁶⁶ The consequences for any detained individuals and their seized merchandise are unclear.

Any anti-inflation objectives were negated by contradictory government policies. Markets and economic activities were paralysed as people waited for the government

⁶³Crisis Group interview, North Korean defector, Seoul, 4 December 2009.

⁶⁴“北, 화폐개혁 공식 확인..단행 나흘만” [“North, officially confirms currency reform...four days after execution”], op. cit. There may have been plans to issue a new currency with the July 2002 “Economic Management Reform Measures”.

⁶⁵Crisis Group interview, ROK government official, Seoul, 26 January 2010.

⁶⁶정권호 [Chŏng kwŏn-ho], “北, 화폐개혁 직전 외화벌이 기관 집중검열” [“North, mass inspection of foreign exchange earning entities just before currency reform”], *The Daily NK*, 11 December 2009.

to announce official prices and exchange rates for foreign currencies.⁶⁷ Uncertainty led to commodity hoarding, which immediately drove up prices, particularly for food. As economic activities resumed, few people would accept the new currency; almost all transactions were conducted with Chinese currency in the region near the Chinese border.⁶⁸ A government decree then banned the use of foreign currency from 28 December.⁶⁹ The government blamed rising prices on market activities, so markets were also banned; citizens were ordered to purchase all commodities in state shops at official prices.⁷⁰

In an effort to stimulate and revitalise the formal state sector of the economy, workers were promised unpaid back wages and a one-time reward or stipend of ₩500 for showing up in their work units. Poor citizens with no savings welcomed the news, and many supported the crackdown on traders, many of whom were perceived to have amassed illicit wealth. Remarkably, some wages in the new currency reportedly were set at the nominal rate of the old currency, meaning that some workers received an immediate 100-fold wage increase.⁷¹

By mid-January 2010, the economic turmoil was evident, as reports of rising starvation deaths worked their way up the party ranks. Kim Jong-il convened a meeting of KWP secretaries from the provinces, but only a single official disclosed the magnitude of the crisis. Ch'oe Ryong-hae, the party secretary for North Hamgyŏng Province, one of the hardest hit regions, told Kim the currency reform had had disastrous effects on society, the economy and the standard of living.⁷² The first head to

roll was that of Pak Nam-gi, planning and finance minister.⁷³ Kim Jong-il reportedly ordered the release of emergency food stocks and told party officials they would be held accountable for preventing starvation.⁷⁴

Kim issued a directive to release 5kg of rice per day to each neighbourhood unit [人民班] and 5kg-15kg to each work unit [作業班] in Kangwŏn, South Hamgyŏng and Yanggang provinces.⁷⁵ Chang Sŏng-t'aek, Kim's brother-in-law, apparently has been put in charge of resolving the problems caused by the currency reform disaster.⁷⁶ Emergency food supplies began to arrive in late January, and reports of deaths from starvation began to drop by early February. However, North Korea has a chronic, long-term food shortage, and the future supply of humanitarian aid from donors is uncertain. The state will need to ensure sufficient food in the spring and summer before the fall harvest. If serious food shortages emerge in the coming months, which is very likely, they could have sweeping implications for the senior leadership.

The government has now reversed its ban on the possession of foreign currency and permitted markets to reopen.⁷⁷ Prime Minister Kim Yŏng-il has apologised for the economic problems after the currency reform, blaming them on state planners who made errors in setting official state prices in December. He seems committed to central planning and said he is confident the state will resolve the food crisis this year.⁷⁸ However, most analysts believe it will be impossible for the state to overcome the economic and food supply problems

⁶⁷ According to a British Embassy official in Pyongyang, markets in the city were closed from 1 December until mid-January, and "foreigner shops" were closed the whole month of January. Crisis Group interview, Seoul, 4 March 2010.

⁶⁸ 김태홍 [Kim T'ae-hong], "北 국경지역, 새화폐는 종잇장... 위안화 거래" ["North border region, new currency is paper... transactions in yuan"], *The Daily NK*, 12 February 2010.

⁶⁹ According to a British Embassy official, the foreign currency ban was completely ineffective, as staff in Pyongyang shops continued to hold foreign currencies, Crisis Group interview, Seoul, 4 March 2010; Lee Sung Jin, "Use of foreign currency banned!", *The Daily NK*, 28 December 2009.

⁷⁰ 정권호 [Chŏng Kwŏn-ho], "北경제 사실상 아노미... 환율·물가 폭등세" ["North economy in state of anomie ... exchange rate and prices soar"], *The Daily NK*, 6 January 2010.

⁷¹ 박종국 [Pak Chong-guk], "北, 노동자 월급은 종전 수준 유지" ["North, worker monthly wages maintained at previous level"], Yonhap News Agency, 4 December 2009; Jung Kwon Ho, "Meetings on new bills scheduled", *The Daily NK*, 7 December 2009; "Weekly Newsletter no. 319 Hot Topics", Good Friends, December 2009.

⁷² 장용훈 [Chang Yong-hun] "北 화폐개혁 실패 인정, 최룡해 책임비서 작품?" ["The North's acknowledgment of the cur-

rency reform failure, a product of Secretary Ch'oe Ryong-hae?"], Yonhap News Agency, 11 February 2010.

⁷³ 최선영 [Ch'oe Sŏn-yŏng], "<北박남기 해임설..화폐개혁 희생양 되나>" ["Rumours of the North's Pak Nam-gi's dismissal... a sacrificial lamb for the currency reform?"], Yonhap News Agency, 3 February 2010.

⁷⁴ 정권호 [Chŏng Kwŏn-ho], "北, '아사자 발생 막아라' 긴급 구제 미 방출" ["North, 'stop starvation deaths' urgent release of rice aid"], *The Daily NK*, 19 February 2010.

⁷⁵ North Hamgyŏng Province was apparently excluded although it is also suffering from food shortages. However, the area is notable for its isolation and perceived status of being the location of less politically loyal citizens. Ibid. A neighbourhood unit consists of twenty households; the average household is four or five people, so this would be five kg of rice for 80-100 people. Work units consist of about ten to 70 people depending upon the type of enterprise. Crisis Group e-mail correspondence, ROK Ministry of Unification official, 4 March 2010.

⁷⁶ 장용훈 [Chang Yong-hun], "北장성택, 화폐개혁 혼란 수습 주도" <RFA> ["North's Chang Sŏng-t'aek in the lead to control chaos from currency reform"], Yonhap News Agency, 12 February 2010.

⁷⁷ "N.Korea climbs down over anti-market reforms", *The Chosun Ilbo*, 11 February 2010; and "North Korea eases curbs on markets nationwide", Agence France-Presse, 18 February 2010.

⁷⁸ "Weekly Newsletter no. 330", Good Friends, February 2010.

without outside assistance.⁷⁹ Even extensive economic reform, which is unlikely, would not resolve the crisis in the short run, and the currency reform may have been a last-gasp effort to reassert state control of the economy. The relationship between the KWP and the North Korean people has probably been damaged irreversibly, which has serious implications for the long-term survival of the regime.

C. FOOD SECURITY

North Korea is poorly endowed for agricultural production.⁸⁰ The country is mountainous with 22.4 per cent arable land.⁸¹ Korea has suffered food shortages for centuries,⁸² and the southern part of the peninsula was the traditional rice basket before national division in 1945. After the Korean War, the DPRK collectivised agriculture and established a centrally planned economy with a Public Distribution System (PDS) to provide food at subsidised rates. The state devised a stratified system to distribute food according to age, occupation, geographic region and degree of political loyalty. State control of food has been an important part of political control under the DPRK regime, but the PDS broke down during the famine in the mid-1990s.⁸³

The agricultural sector also suffers from energy shortages (particularly since the end of Soviet subsidies), worn out capital equipment, a dilapidated transportation system, lack of fertiliser and distorted incentives from bad microeconomic policies. Farmland is also vulnerable to flood damage every year. North Korea's autarkic economic policy includes the goal of self-sufficiency in food, but its poor factor endowment dictates that it must earn foreign exchange through exports so that it can import food to resolve a chronic deficit of about one million tons of grain annually.

The World Resources Institute estimates that between 1998 and 2000, North Korea produced only about 73 per cent of its cereal consumption. Furthermore, about 80

per cent of food imports during that period was received as aid.⁸⁴ The UN's Food and Agricultural Organisation (FAO) estimates that between the periods 1990-1992 and 2003-2005, the number of undernourished North Koreans rose from 4.2 million to 7.6 million – one third of the population.⁸⁵ In December 2008, the World Food Programme (WFP) estimated that 8.7 million North Koreans, about 40 per cent of the population, would need food assistance during the marketing year November 2008-October 2009. It projected a deficit of 836,000 tons of cereals before the October 2009 harvest, even with commercial imports of 500,000 tons.⁸⁶

North Korea's food insecurity problems have been well documented, but accurate data are unavailable for current food stocks. The 2010 harvest will likely be suboptimal without South Korean fertiliser aid, which is not expected to be forthcoming. Most recent assessments are from NGOs and journalists who defected from the North but maintain contacts in the country. More complete information from organisations like the FAO and WFP suffers from time lags and data collection problems. For example, the WFP has been denied access to several areas and has been prohibited from employing Korean speakers as staff or monitors.

Recent anecdotal accounts of the food situation are grim, especially after the currency reform. Rice and corn prices dropped by about 20-25 per cent between September and December 2009, but soared immediately after the reform was announced.⁸⁷ As mentioned earlier, small traders holding North Korean currency tried to acquire foreign currency or any durable commodities that would retain value, and sellers hoarded food and other goods in anticipation of price inflation, exacerbating the cycle of food insecurity.

⁷⁹ Kim Sue-young, "North Korea's currency reform weakening regime", *The Korea Times*, 18 February 2010.

⁸⁰ Data problems make it difficult to estimate North Korean agricultural production, but it probably peaked in the late 1980s, followed by a steep decline in the 1990s.

⁸¹ "The World Factbook: North Korea", U.S. Central Intelligence Agency, 19 January 2010, <https://www.cia.gov/library/publications/the-world-factbook/geos/kn.html>.

⁸² Gregory Henderson, *Korea: The Politics of the Vortex* (Cambridge, 1968), pp. 50-51.

⁸³ Stephan Haggard and Marcus Noland, "The Distribution of Misery", in *Famine in North Korea: Markets, Aid, and Reform* (New York, 2007); and Andrew S. Natsios, *The Great North Korean Famine* (Washington, DC, 2001), pp. 91-97.

⁸⁴ "EarthTrends: Agriculture and Food– North Korea", World Resources Institute, 2003, available at <http://earthtrends.wri.org>.

⁸⁵ Food security problems of this magnitude always have disproportionate effects on children, the elderly and women. "Global Statistics Service - Food Security Indicators: Democratic People's Republic of Korea", Statistics Division, Food and Agriculture Organization of the United Nations, 7 August 2008.

⁸⁶ "8.7 Million North Koreans Need Food Assistance", World Food Programme, 10 December 2008, www.wfp.org/content/87-million-north-koreans-need-food-assistance.

⁸⁷ "Weekly Newsletter no. 307", Good Friends, December 2009; "Weekly Newsletter no. 311 Hot Topics", Good Friends, December 2009.

D. H1N1 FLU OUTBREAK

Despite its isolation, North Korea was also hit by the global H1N1 influenza (“swine flu”) pandemic. The disease spread to Sinŭiju, on the Chinese border next to Dandong, in November 2009. The DPRK government acknowledged the outbreak on 9 December, when it reported nine cases in Sinŭiju and Pyongyang to the World Health Organisation (WHO).⁸⁸ The South Korean government immediately offered to provide anti-viral medications and other medical supplies, which the North accepted.⁸⁹ The South also provided 200,000 litres of hand sanitizer in late February to help prevent the flu from spreading in unsanitary areas of the North.⁹⁰

The disease has affected many countries, and public health officials point out that common influenza strains cause deaths every year. The H1N1 strain is not considered extraordinarily serious, except for a few individuals who have a violent reaction to the virus and those with underlying health problems. In North Korea, widespread undernourishment, poor sanitation and an inadequate public health infrastructure⁹¹ mean a large number of people are vulnerable. In fact, public health is a major concern in the event of a North Korean collapse; the rapid delivery of medical supplies is part of the ROK government’s contingency planning in such a scenario.

The DPRK government reportedly released students for the winter break earlier than scheduled on 4 December because of the flu outbreak. Several deaths of young people, including college students and soldiers, were reported, but the government tried to conceal the information when it did not have the resources and medication to treat patients.⁹² There is no accurate data on the number of flu victims in North Korea, nor have there been any DPRK government reports of a major outbreak. The WHO reported on 14 December that all nine confirmed cases had recovered.⁹³

However, the South Korean NGO Good Friends has been reporting more cases and some deaths. One ROK official speculated that the DPRK acknowledgment of the outbreak could mean the situation is much worse than reported.⁹⁴ While Good Friends claims a more serious outbreak has occurred, a spokeswoman for the group said it was not difficult for Pyongyang to make the declaration. The disease had spread around the globe, and it was an opportunity to obtain free medical aid. It was also an opportunity to “let the public know it was a good idea to stay home and away from crowds for public health reasons” at a time when the regime was implementing the currency reform.⁹⁵

While the flu outbreak alone is not considered a public health crisis, it could bring attention to the dysfunctional public health care system that collapsed in the 1990s.⁹⁶ Common medications, medical and diagnostic equipment and even antiseptics are in short supply or non-existent in much of the country. Even the ability to provide potable water has declined significantly, leaving many citizens susceptible to waterborne diseases.⁹⁷

H1N1 flu is not a threat to regime stability per se, but a failure to manage the disease, compounded with other problems, could be perceived as part of overall government failure. While the WHO and ROK provision of antiviral medications and sanitation supplies is welcome, some critics argue the supplies are insufficient. KPA leaders could become alarmed if the disease were to spread uncontrollably through the ranks. If the state cannot deal with the outbreak, senior officers could interpret it as another sign of government failure, which could cause dissension.

⁸⁸ “Anti-A/H1N1 Flu Campaign Intensified”, KCNA, 9 December 2009; Kim Hyun, “WHO ‘closely’ working with N Korea to fight H1N1 outbreak”, Yonhap News Agency, 9 December 2009.

⁸⁹ Seoul delivered 500,000 doses of the antiviral medication Tamiflu at a cost of \$15 million on 18 December. Kim Hyun, “S. Korea sends antiviral drugs to N. Korea”, Yonhap News Agency, 18 December 2009.

⁹⁰ “S.Korea sends aid to N.Korea”, Agence France-Presse, 23 February 2010.

⁹¹ Crisis Group telephone interview, Kang Yu-gu, International Cooperation and Public Relations Team, Korea Institute for Health and Social Affairs, Seoul, 13 January 2010.

⁹² “Weekly Newsletter”, no. 311-1 Hot Topics, no. 314, December 2009, both Good Friends.

⁹³ Kim Hyun, “All N. Korean H1N1 flu patients cured: WHO”, Yonhap News Agency, 14 December 2009.

⁹⁴ Crisis Group interview, ROK government official, Seoul, 9 December 2009.

⁹⁵ Crisis Group interview, Erica Kang, spokeswoman for Good Friends, Seoul, 13 January 2010.

⁹⁶ 이상영, 황나미 및 윤강재 [Yi Sang-yŏng, Hwang Na-mi and Yun Kang-je], “남북한간 보건의료 교류-협력의 효율적 수행 체계 구축방안 연구 [A study of efficient ways of cooperation in health care and medicine between the two Koreas]”, Korea Institute for Health and Social Affairs, research report 2008-05, December 2008.

⁹⁷ According to a South Korean NGO, the percentage of North Korean citizens with access to potable water declined between 1994 and 1996 from 86 per cent to 53 per cent. At least 65 per cent of the people in rural areas are susceptible to waterborne diseases, and 50 per cent or more of Pyongyang’s tap water is vulnerable to contamination. “식수와 공중위생 [Potable water and public sanitation]”, 북한보건의료네트워크 [North Korea Public Health Network], no date, www.nkhealth.net/status/status-0501.html.

E. SUCCESSION PLANS

Kim Jong-il's stroke in August 2008 focused the regime's attention on the looming succession issue. Kim was groomed for the leadership position for two decades before his father's death in 1994. He reportedly has not been as meticulous in preparing for succession, but a detailed plan is surely in place. Apparently the third son, Kim Jong-un, has been selected to succeed his father and assigned a position with the National Defence Commission, placing him in the proper institution to assume power. Kim Jong-un is in his late 20s, inexperienced and too young to have established his own coalition of supporters, but the longer his father stays alive, the better his chances for taking control.

Institutional changes, including a constitutional revision and an expansion of the National Defence Commission in April 2009, have been implemented to ease the leadership transition. But the DPRK has experienced only one succession, and the next leader will face unprecedented challenges. It is unclear whether he will have the personal capacity and support to deal with them. In the short-term, a smooth transition will likely take place, but if Kim Jong-il's successor cannot improve the economy and provide adequate solutions for other crises, there could be a violent power struggle, leading either to the KPA taking direct control or regime collapse.

IV. CONCLUSION

UN Security Council Resolutions 1718 and 1874 have established a robust sanctions regime that has in effect fully multi-lateralised the Proliferation Security Initiative, which was designed to interdict WMD and WMD-related shipments on the high seas and in international airspace. However, the sanctions also apply to North Korean conventional arms exports, as well as exports of weapons technology, training or related services. Arms exports

have been an important source of foreign exchange, but export revenues are likely declining under the new sanctions regime. North Korea's traditional state customers may be dissuaded from future purchases as they consider the risks, increasing incentives for Pyongyang to seek alternative buyers such as terrorist or organised crime groups.

In recent years, the DPRK has sustained a chronic trade deficit of about \$1 billion per year that must be financed through loans, aid, cash remittances or foreign direct investment. However, both its legitimate and illicit sources of foreign exchange are drying up, which is putting more pressure on a regime that needs hard currency to survive. There are several signs that the government is seeking to increase its hard currency earnings, but with no real prospect of success.

Under these dire economic conditions and increasing political pressure, Pyongyang is facing several domestic problems that in isolation would be manageable but together could have serious consequences for regime survival. The leadership has little capacity to manage simultaneously the mini crises of currency reform, economic deprivation, worsening food security, declining public health and the looming succession. However, it is very adept at transferring the costs of economic sanctions and poor governance to the lower rungs of society. Revolution from below is extremely unlikely, and the Kim Jong-il coalition is very loyal. However, government failure could cause dissension within the senior leadership or the military. Although unlikely in the short-term, fissures in the senior leadership, particularly during a succession crisis, cannot be ruled out. Instability, a coup d'état or collapse would not be observable from the outside until well underway. Any of these scenarios could create a humanitarian emergency that would require international intervention.

Seoul/Brussels, 15 March 2010

APPENDIX A

MAP OF NORTH KOREA



APPENDIX B

ABOUT THE INTERNATIONAL CRISIS GROUP

The International Crisis Group (Crisis Group) is an independent, non-profit, non-governmental organisation, with some 130 staff members on five continents, working through field-based analysis and high-level advocacy to prevent and resolve deadly conflict.

Crisis Group's approach is grounded in field research. Teams of political analysts are located within or close by countries at risk of outbreak, escalation or recurrence of violent conflict. Based on information and assessments from the field, it produces analytical reports containing practical recommendations targeted at key international decision-takers. Crisis Group also publishes *CrisisWatch*, a twelve-page monthly bulletin, providing a succinct regular update on the state of play in all the most significant situations of conflict or potential conflict around the world.

Crisis Group's reports and briefing papers are distributed widely by email and made available simultaneously on the website, www.crisisgroup.org. Crisis Group works closely with governments and those who influence them, including the media, to highlight its crisis analyses and to generate support for its policy prescriptions.

The Crisis Group Board – which includes prominent figures from the fields of politics, diplomacy, business and the media – is directly involved in helping to bring the reports and recommendations to the attention of senior policy-makers around the world. Crisis Group is co-chaired by the former European Commissioner for External Relations Christopher Patten and former U.S. Ambassador Thomas Pickering. Its President and Chief Executive since July 2009 has been Louise Arbour, former UN High Commissioner for Human Rights and Chief Prosecutor for the International Criminal Tribunals for the former Yugoslavia and for Rwanda.

Crisis Group's international headquarters are in Brussels, with major advocacy offices in Washington DC (where it is based as a legal entity) and New York, a smaller one in London and liaison presences in Moscow and Beijing. The organisation currently operates nine regional offices (in Bishkek, Bogotá, Dakar, Islamabad, Istanbul, Jakarta, Nairobi, Pristina and Tbilisi) and has local field representation in fourteen additional locations (Baku, Bangkok, Beirut, Bujumbura, Damascus, Dili, Jerusalem, Kabul, Kathmandu, Kinshasa, Port-au-Prince, Pretoria, Sarajevo and Seoul). Crisis Group currently covers some 60 areas of actual or potential conflict across four continents. In Africa, this includes Burundi, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Kenya, Liberia, Madagascar, Nigeria, Rwanda, Sierra Leone, Somalia, Sudan,

Uganda and Zimbabwe; in Asia, Afghanistan, Bangladesh, Burma/Myanmar, Indonesia, Kashmir, Kazakhstan, Kyrgyzstan, Nepal, North Korea, Pakistan, Philippines, Sri Lanka, Taiwan Strait, Tajikistan, Thailand, Timor-Leste, Turkmenistan and Uzbekistan; in Europe, Armenia, Azerbaijan, Bosnia and Herzegovina, Cyprus, Georgia, Kosovo, Macedonia, Russia (North Caucasus), Serbia and Turkey; in the Middle East and North Africa, Algeria, Egypt, Gulf States, Iran, Iraq, Israel-Palestine, Lebanon, Morocco, Saudi Arabia, Syria and Yemen; and in Latin America and the Caribbean, Bolivia, Colombia, Ecuador, Guatemala, Haiti and Venezuela.

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Regional Offices and Field Representation

Crisis Group also operates out of over 25 different locations in Africa, Asia, Europe, the Middle East and Latin America.

See www.crisisgroup.org for details.
