

Markets and Famine in North Korea

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North Korea is no stranger to food shortages, even famine. With global agricultural prices soaring, the country is set to experience yet another famine.

American political scientists Stephen Haggard, Marcus Noland and Erik Weeks look at the critical need for policy changes if the country is ever to resolve its chronic battle with hunger.

IN THE 1990s, as many as a million North Koreans died in one of the worst famines of the 20th century. Unlike the dramatic recent natural disasters in Burma and China, North Korea's current food crisis, a product of self-destructive policies, bad weather, and global food price increases, has metastasized largely beyond public view, abetted by Pyongyang's penchant for secrecy.

Permanent resolution of North Korea's chronic food problems requires revitalization of its industrial economy. Genuine opening would enable the country to earn foreign exchange and import bulk grain on a commercially sustainable basis, just as South Korea, China, and Japan do. But the North Korean regime remains extraordinarily sensitive to the domestic political implications of liberalization; if anything, the government appears to have tacked away from reforms.

Although it is scant comfort, the crisis of 2008 is unlikely to approach the magnitude of the 1990s famine. In that earlier episode, the regime allowed the food situation to deteriorate for years virtually out of sight of the rest of the world. In contrast, the recent conclusion of a large food aid deal with the United States is likely to blunt the current calamity. However, it is highly unlikely that the US aid or the moderation of global food prices will entirely stave off hunger-related deaths, and the failure to secure adequate fertilizer during the spring planting season has set in motion a dynamic that will carry the crisis into 2009.

FOOD BALANCES

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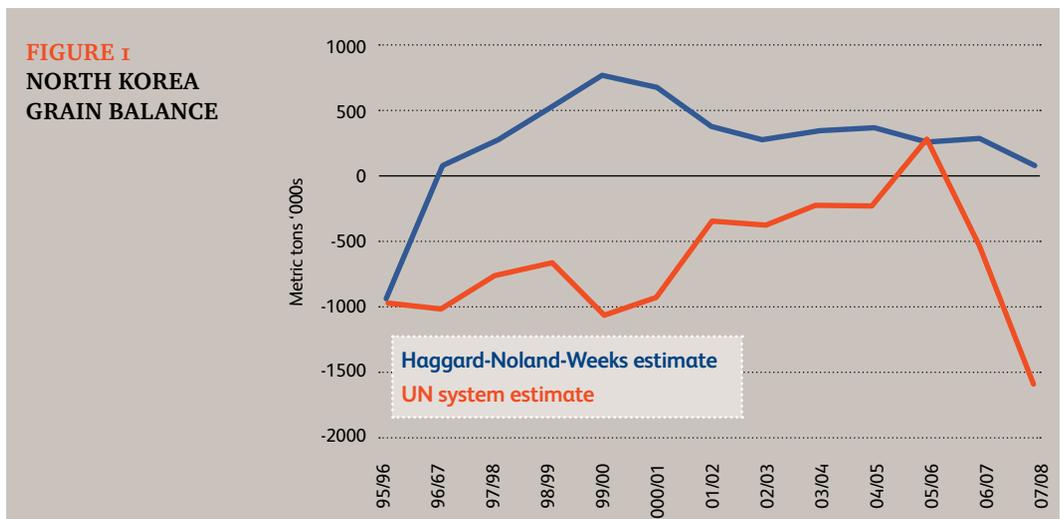
North Korean government beginning in 2005. On the back of improved harvests and generous aid, primarily from South Korea and China, the state banned the private trade in grain. In doing so, the government effectively criminalized the primary mechanism through which most North Korean families secured food in the wake of the last great famine, namely, the market. The government also confiscated grain in the rural areas. Having disrupted both the consumer and producer sides of the food economy, the government also shut down the activities of the World Food Program and other relief agencies operating in the hinterland, neutering the outside world’s early warning system. Local harvests declined, victim to farmers’ coping behavior, fertilizer shortages, and floods in 2006 and 2007.

Following the missile and nuclear tests in 2006, the South Korean government of President Roh Moo-hyun suspended critical donations of fertilizer well before the election of conservative Lee Myung-bak in December 2007. China also responded strongly to the missile and nuclear tests, voting for UN sanctions and limiting bilateral assistance as well. The North responded to the election of Lee Myung-bak with vitriolic attacks on the new administration and a refusal to accept food aid, despite the government’s stated willingness to supply it on request.

Just as aid from these two important patrons began to dry up, global food prices began their relentless rise and the regime’s capacity to import grain commercially was attenuated.

There is real uncertainty about the extent of distress in North Korea. Basic information is treated as a state secret. At the simplest level, we do not know how many North Koreans there are—estimates range from 20 to 24 million—rendering all estimates of human consumption needs suspect. On the supply side, there is little accurate knowledge about local harvests: official pronouncements tend to exaggerate shortfalls when more assistance is needed. In March 2008, the Food and Agricultural Organization, diplomatically constrained to acknowledge politicized North Korean figures, revised its estimates of the last harvest downward by a whopping 25 percent. If the UN system’s figures are correct, North Korea is already experiencing famine.

Our preferred alternative is based on the US Department of Agriculture’s estimate of local production (which jibes with South Korean estimates) and adjusts the UN’s human demand numbers to account for the country’s historical consumption patterns and other sources of food in the diet. These estimates produce a more plausible story (Figure 1, below). The country experienced a significant shortfall during the famine period, some comfort margin in the ear-



ly years of this decade, and then steady erosion in supply after the policy changes of 2005 and the escalation of the nuclear crisis in 2006. Our figures suggest that by late spring, that comfort margin was less than 100,000 metric tons or about 12 days of minimum human needs.

PRICES

Given the uncertainty in these quantity estimates, prices may provide a more accurate indicator of distress. World cereal stocks have fallen to a 25-year low and global prices have risen at a pace not seen since the world food crisis of the mid-1970s. North Korean authorities do not, of course, provide information on local market prices; to the contrary, they have squelched the outflow of such information. Nonetheless, a number of factors have allowed researchers to assemble data on prices: the growth of trade across the Chinese border; the operation of NGOs out of China, in-

terms and for multilateral and bilateral aid agencies to access grain to meet their commitments. As a result, the government is finding it harder and harder to provide food through the public distribution system, directly impacting North Korean households, which have become more dependent on markets to secure food. At current prices, the average North Korean monthly salary buys about two kilograms of rice or three kilograms of corn.

The simplest explanation for these price movements is that North Korean markets are surprisingly integrated with global markets; this is an important finding, showing that the North Korean economy is increasingly affected by external developments. However, as Figure 2 also shows, global trends are greatly magnified in North Korea by the perfect storm of conditions that have hit the country over the last year: production shortfalls associated with

TABLE 1
GRAINS PRICES IN MAJOR NORTH KOREAN CITIES MARCH AND MAY 2008
 Source: Good Friends North Korea Today

	Corn Prices (NKWon)			Rice Prices (NKWon)		
	March	May	% Change	March	May	% Change
Chungjin	1000	2200	120	1825	3800	108
Hamheung	950	2300	142	1900	3800	100
Wonsan	900	1800	100	1900	2900	53
Sinuiju	n/a	1900	n/a	1600	3000	88
Pyongyang	1000	1700	70	1850	3200	73

cluding South Korean ones; and the spread of technologies such as illicit cell phones in the border areas. These data —fragmentary and imperfectly observed—indicate that food prices have nearly tripled over the last year. Grain prices have increased even more rapidly, rising faster than either world food prices, or our estimate of economy-wide inflation (Figure 2, page 37).

Rising world prices make it more difficult for North Korea to import grain on commercial

the floods and ongoing problems in the agricultural sector; political strains emanating from a deterioration in aid relationships and the corresponding adjustment of market expectations; and a host of self-defeating policy responses that we consider in more detail below.

Table 1 (above) reports data from five cities:

- Chungjin, Hamheung and Wonsan are in the eastern part of the country; price trends there are particularly noteworthy because the indus-

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trialized East Coast was hit particularly hard by the famine of the mid-1990s.

- Sinuiju is an important port on the Chinese border, and as the main transit point trade with China it should reflect some of those advantages.
- Pyongyang, finally, is the capital city and the seat not only of political power but of the core of the regime's support; it has long been considered a privilege to live in the city and we might expect its residents to be protected from adverse price developments.

Although there are regional variations, the price increases between March and May are uniformly large. Moreover, the regional differences do not provide comfort. There appear to be some advantages in proximity to the Chinese border, but the increase in rice prices in Sinuiju is substantial.

A particularly striking finding is the fact that Pyongyang does not appear protected from these price changes. Of course, incomes in Pyongyang are higher too, making it easier for households to manage price increases than in poorer parts of the country. Moreover, a substantial but unknown share of Pyongyang residents, including government officials, military personnel and

workers in favored state-owned enterprises, have access to supplies through the public distribution system where their needs are prioritized. However, for those Pyongyang residents outside of these privileged networks, or to the extent that privileged channels of supply are also feeling stress, residents of Pyongyang are as exposed to the market as households elsewhere in the country. Begging children are now observed in the city's poorer neighborhoods.

A final indicator of distress is that the relative prices of inferior foods have increased. As households lose access to rice, they turn to corn, barley and millet. When they lose access to grains altogether, they turn to grasses and foraging for other plant sources of food. The price of less-preferred corn is rising faster than that of more-preferred rice (Figure 3, page 37).

In short, all indicators point to deteriorating conditions.

THE DOMESTIC POLICY RESPONSE

The centrality of food to the maintenance of political power helps explain both the relentless aid-seeking by North Korea and why the government has been so reluctant to allow private farming and markets to allocate food. Not surprisingly, the regime has responded to the current crisis by moving away from reform and attempting to reimpose controls. This response may be rational from the perspective of a government seeking to both control access to food and maintain social control, but is clearly self-defeating from the perspective of citizens' welfare.

The complex institutions of the socialist food economy once again seem to be fraying. Prior to the great famine of the mid-1990s, the government set production quotas for cooperatives, distributed farmers' rations during the harvest, and distributed food to urban residents through the public distribution system at nominal prices. The army and some unknown share of the upper civil service supposedly enjoyed privileged access. Markets played virtually no role in the allocation of food.

During the famine, the North Korean economy began a process of marketization from

below as households tried to cope with ever-tightening shortages. Even when partly revived by the influx of foreign aid, the public distribution system never fully revived. Our calculations suggest that roughly 50 percent of total consumption in North Korea was sourced through the market in the early 2000s.

In August 2005, the government decided to reinstate official public distribution and to ban private trading in grain but almost immediately faced difficulties in meeting this commitment. Historically, the government's response to shortages has been to squeeze the countryside. In the wake of the 2007 floods, the government increased production quotas for the next crop cycle and began to crack down on the cooperatives. It also placed new restrictions on private plots, which constituted an important escape valve for farm households, in an effort to keep grain in the public channels. However, the more intense the levies on grain and the controls on private plots, the more likely farmers will respond by hiding and hoarding grain and farming unofficial plots surreptitiously.

A similar set of dilemmas face the government in the urban areas and in major work units. With the breakdown of the command economy and public distribution of food there are few incentives to show up for work and substantial incentives to migrate toward market-oriented activities. The government has responded not only with efforts to control trading in food, but through a wider assault on market activities. These efforts are unlikely to be successful. But they have nonetheless sewn uncertainty about alternative sources of livelihood for households just as food prices are requiring people to seek other sources of income and barter.

A final set of policy dilemmas relate to the land border with China. The dramatic increase in trade with China has resulted in the creation of dense business networks. These include major Chinese and North Korean enterprises, smaller Chinese-Korean businesses and North Koreans with relatives in China who are permitted to travel, albeit with the greatest of difficulty. The major land ports on the North Korean side

The centrality of food to the maintenance of political power helps explain the relentless aid-seeking of North Korean foreign policy.

of the border, particularly Sinuiju, have become not only trading centers but major distribution hubs for the rest of the country.

But the border poses a risk to both North Korea and China. As circumstances deteriorate, the incentives to move into China rise, either permanently or in search of business opportunities and food. *In extremis*, these movements could undermine the regime altogether, as was the case in Eastern Europe.

Not surprisingly, the onset of the current crisis has been accompanied by a dramatic crackdown on border crossing. The most dramatic signal sent by the regime was the public execution of 15 people, 13 of them women, in Onsung on February 20, 2008 on charges of human trafficking.

The economic implications of these new restrictions are impossible to estimate; the illicit border trade is relatively small and remittances passed through informal channels are unlikely to be very large either. However, the border has represented a partial escape valve. In recent months, larger trading entities in the land ports along the border, particularly in Sinuiju, have fallen under closer government scrutiny, necessarily affecting cross-border market activity as a result.

CONCLUSION AND POLICY RECOMMENDATIONS

The North Korean food crisis, now well into its second decade, presents a difficult set of ethical choices. The very ruthlessness of the regime and the numbing repetitiveness of its food problems make it difficult to mobilize humanitarian

assistance, particularly in the context of global shortages and in the absence of North Korean recognition of the problems it faces.

The United States has recently negotiated a very large food aid program to North Korea, totaling up to 500,000 metric tons; although humanitarian, there can be little question of the implicit connection to the ongoing nuclear talks. The negotiations over this food package resulted in some small North Korean concessions with respect to monitoring food delivery, which will involve both the World Food Program and a consortium of NGOs. But American rules governing food aid require that it be American

grain, shipped in American ships; the first 50,000 metric ton tranche will only begin to arrive in late June.

As a consequence, the behavior of South Korea, China, and Japan—three neighbors capable of delivering supplies quickly—is increasingly critical as conditions in North Korea deteriorate. The single most effective change would be for China to reverse its recent policy of placing export controls on the grain trade, at least for North Korea. This would allow grain markets on the border to function more smoothly. Lifting these controls should extend to the operation of NGOs, including South Korean ones, which have served as a

FIGURE 2
NOMINAL
GRAIN PRICES

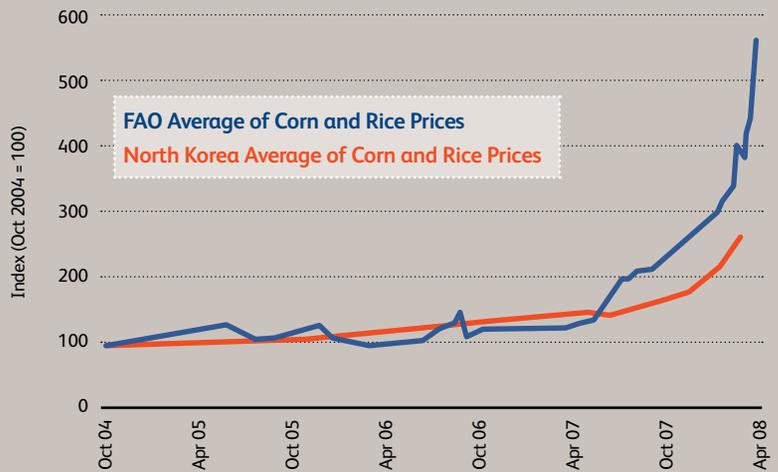


FIGURE 3
AVERAGE CORN-
RICE PRICE RATIO
APRIL 2007-
MAY 2008



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conduit, however small, for assistance into the country. China should also commit to the provision of food aid, preferably through the World Food Program.

In South Korea, the new government's policy stance is correct: humanitarian aid should be offered with no strings attached, but large-scale development assistance should be conditional on North Korean behavior. Sadly, South Korea's offer of assistance has been met by invective directed at President Lee Myung-bak. Were it willing to turn the other cheek, the South Korean government might be able to finesse North Korean intransigence by expanding its donations to the World Food Program. The government might also use the network of NGOs that has evolved over the last decade as a face-saving channel for official relief. However, in the absence of South Korea's usual fertilizer donation, the next harvest is likely to be down, implying a continued emergency into 2009.

Relations with Japan remain mired in the issue of North Korean abductions of Japanese citizens. Yet Japan sits on 1.5 million metric tons of rice, a byproduct of its trade concessions to producers such as the United States and

Thailand. The release of some of these stocks has already had an indirect effect by dampening regional price increases. However, the US could go further by asking Japan to use these stocks to offset US donations that simply will not arrive in time.

The US should also exercise quiet leadership with respect to the refugee question. The Chinese government's practice of forcibly returning North Korean refugees may reflect a natural protective response against the threat of a flood of migrants and even the breakdown of the North Korean regime; it was, after all, the notorious "hole in the fence" that helped precipitate the collapse of the Eastern European regimes. But the policy of returning refugees does not conform with China's obligations under the UN Convention relating to the Status of Refugees. Rather it simply serves to cut off another escape valve, however small, that has contributed to taking pressure off of a rapidly deteriorating situation.

Opening North Korea, through whatever channels possible, is the ultimate route toward a more prosperous future. If this crisis contributes to that process, it would constitute the only silver lining we can see in what is otherwise another sad chapter in the history of the North Korean people.

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