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## The Winter of Their Discontent: Pyongyang Attacks the Market

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On November 30, 2009, North Korea announced a reform to replace all currency in circulation with new bills and coins. North Korean officials have made no bones about their motivations: The “reform” constitutes a direct attack on the emerging market economy and the independence from state control that it represents. In an interview following the conversion, an official of the North Korean central bank noted that the reform was aimed at curbing private trade and underlined that North Korea is “not moving toward a free market economy

but will further strengthen the principle and order of socialist economic management.”<sup>1</sup>

Without doubt the currency reform will reduce the well-being of the North Korean population at a time when the country is already struggling with economic stagnation, spiraling prices, and a return of chronic food shortages. The open questions are two: Will the government ultimately be forced to adjust its strategy or will it persist in enforcing the new antimarket course of action? The New Year’s joint editorial of prominent official news organs, an important statement of the government’s policy intentions, conveys a mixed message consisting largely of blather about revolutionary upswing; it does not even mention the currency reform—potentially signaling a lack of resolve in carrying it out. The second question is whether the discontent this new government action has sown will have implications for the country’s political stability. Preliminary signs suggest the regime is leaving nothing to chance and that heightened repression is a central feature of the new economic controls.

### THE ECONOMIC AND POLITICAL LOGIC OF CURRENCY REFORMS

Currency reforms are not a bad thing in principle and have been used by governments that have tamed inflation and wish to distance themselves from past policy mistakes. These reforms typically knock zeros off the old currency and issue new paper, often at approximate parity to major currencies such as the dollar or the euro. The reform acts as a precommitment mechanism. By making the country’s relative macroeconomic performance more transparent through the new exchange rate peg, citizens can more easily hold the government accountable. Such a move may help break lingering inflationary expectations and contribute to maintaining price stability, although

1. Kang I-ruk, “‘Currency Exchange Measure: Purpose Is to Protect Working People’s Interests, to Stabilize, Improve Their Living’—We Hear From Cho So’ng-hyo’n, Senior Staff Member of the Central Bank—‘Material Ground Laid for Fighting Off Inflation,’” *Chos’ŏn Sinbo Online*, December 4, 2009 [in Korean].

future inflation is ultimately a function of maintaining stable monetary and fiscal policy.<sup>2</sup> The overall price level should fall instantaneously by the magnitude of the redenomination, but relative prices should not be affected. Apart from these macro-economic considerations, proponents of currency reform have also claimed cost savings based on eased data entry, improved software compatibility, and the convenience of more manageable currency denominations.

### **The North Korean currency reform is an economically misguided initiative that will reduce the welfare of North Korean residents.**

Normally, a transparent conversion process is announced in advance and places no limits on conversion; citizens and businesses are allowed to convert all the old currency they have at the stipulated rate of exchange. The announcement would include a date at which the old currency ceases to be legal tender, accounting rules to govern the transition, and other practical measures to implement the changeover. In recent years countries such as Turkey, Romania, and Ghana have all successfully implemented such reforms. In Ghana, for example, the government began a campaign to inform the public of the impending change seven months in advance, and both the old and new currencies circulated in parallel for six months to allow adequate time for the changeover before the old currency ceased to be accepted as legal tender.

The North Korean case differs from this conventional approach in a number of crucial respects. The currency reform was sprung without warning; the public was given only days to convert their holdings. Most critically, it included confiscatory limits on the ability of citizens to convert their currency holdings. Not all old currency could be exchanged for new.

One motivation for the reform was to control inflation. The confiscation of “excess” cash means that the money supply actually contracts, in the case at hand by a potentially large amount. Unless the velocity of money increases to offset the monetary contraction, the level of economic activity also falls.<sup>3</sup> Indeed, if the monetary contraction is sufficiently large

the economy could temporarily experience deflation. As in the standard case, however, if the underlying drivers such as the state’s resort to the printing presses are not addressed, inflation will once again take hold; there is already evidence that this will prove a problem.

Confiscatory currency reforms are a form of asset redistribution, or more accurately, asset leveling. Such conversions either tax those with excess cash balances (if they can be deposited in bank accounts on unfavorable terms and subsequently withdrawn) or destroy “excess” cash wealth altogether. In the North Korean case, this last motive appears central: Currency reform was designed to target groups engaged in market activities that not only generate cash earnings but also require cash balances given the underdevelopment of the North Korean financial system, while at the same time providing compensatory allocations to favored groups closely connected to the state.<sup>4</sup> This distributional motivation—to punish enemies and reward supporters—is reminiscent of reforms undertaken in 2002 (Noland 2004).

The effects of these confiscatory measures are twofold. First, they will increase the risk premium on engaging in market-based economic activity, both increasing the prices of goods and services as well as decreasing their availability. It has been reported that even some high priority housing construction in the capital has ground to a halt amid the chaos.<sup>5</sup>

Second, the reform provides a disincentive to hold the domestic currency and, in the long run, will encourage further dollarization of the economy. The government preemptively banned the use of foreign currencies on December 28. Successful implementation of this prohibition will require an extraordinary degree of repression.

These disincentives to economic activity and to holding the domestic currency (assuming the ban on foreign currencies does not stick) will make it increasingly difficult for the

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percent? 50 percent? 90 percent?—given the limits on conversion. Whether it was consulted or whether the ultimate decision maker even knew enough to ask the question is unknown, but the shifts in the conversion limits discussed below suggest strongly that the government had not anticipated the economic and social reaction to the reform.

4. As described in an interview with a North Korean central bank official, “If the measure were made known in advance, that would have provided a leeway of time for illegal money to be transformed into legal money.” Kang I-ruk, “Currency Exchange Measure: Purpose Is to Protect Working People’s Interests, to Stabilize, Improve Their Living”—We Hear From Cho So’ng-hyo’n, Senior Staff Member of the Central Bank—‘Material Ground Laid for Fighting Off Inflation,’” *Chos’ŏn Sinbo Online*, December 4, 2009 [in Korean].

5. Although normally a state activity, such construction is, in fact, dependent on state-owned firms now reluctant to part with supplies as well as private entrepreneurs who were financing and purchasing the units and are now without resources. Lee Myung-ho, “Currency Reform Halts More than 30 Percent of Pyongyang’s Housing Constructions [sic],” *Open News for North Korea* 26, December 27, 2009.

2. The logic of such conversions is, in part, psychological. A standard currency reform requires citizens to exchange notes with high—and in some cases very high—nominal values for notes with lower denominations. This conversion makes goods and services appear more affordable even if there is no change in the real price level.

3. In principle, the central bank should know the amount of currency in circulation and hence how much of the money supply would be destroyed—10

state to finance its activities and thus reinforce, not diminish, inflationary tendencies.

A final related motive—the flip side of discouraging private activity—is to revive the socialist sector. To the extent that the currency reform destroys private wealth and discourages market activity, it pushes workers back into the socialist sector. The one semi-official announcement of the reform is worth quoting at some length on this point: “Denying speculation that this [currency reform] action is a step in the direction of a free-market economy, responsible official Cho So’ng-hyo’n stressed that socialist principles and order will be far more solidly cemented in the managing of the economy. He also expressed his opinion that the market’s role will gradually dwindle as the state’s economic capacity is enhanced as more domestically produced commodities are distributed through state-run networks for commerce.”<sup>6</sup>

### THE CONTEXT: STATE VERSUS MARKET

The famine of the mid-1990s triggered a profound “marketization from below” of the North Korean economy (Haggard and Noland 2007). Households, work units, local-party organs, government offices, and even military units scrambled for food and in doing so initiated barter and trade and ventured into new, monetized economic activities. In a 2008 survey of 300 North Korean refugees living in South Korea, nearly three-quarters reported involvement in market-oriented activities (Haggard and Noland 2009a). A surprising 69 percent of all respondents said that they secured over 50 percent of their income from private business activities, and 46 percent said they secured all of their income from private activities.

At the peak of the famine and in its immediate aftermath the regime had little choice but to acquiesce in these developments and in 2002 it initiated a major economic reform. The details of this reform go beyond our purposes here, but it is worth noting that even this reform had elements that undermined incentives to private activity. The reform is also important because it corresponded with, and probably contributed to, inflationary pressures in the economy, which have been an ongoing concern.

One objective of the reform was to change administered *relative* prices and wages in an attempt to align them with underlying scarcities. For example, food prices were sharply increased in an effort to reduce the extent of government subsidies and to encourage production. Certain classes of favored workers also enjoyed larger wage increases than others.

But the North Korean reforms did not simply alter relative wages and prices; they also raised the overall price level by roughly 1,000 percent. A sympathetic interpretation of this change in the price level is that the North Korean authorities feared “monetary overhang.” Since the North Korean economy had shrunk so dramatically during the previous decade, citizens held large amounts of cash. This kind of involuntary savings often occurs in socialist systems in which workers receive wages in the absence of adequate consumer goods. Authorities may have feared that once the economy began to marketize, prices would rise as accumulated cash began chasing the goods that were on offer. Under this interpretation, the government engineered the increase in prices in a way that would reinforce the desired changes in real incomes for favored groups.

However, a less sympathetic interpretation is that the price increase was targeted at the class of traders and black marketeers that had sprung up since the famine. Since this group maintains large cash holdings in order to run their businesses, the huge jump in the overall price level would have the effect of destroying the value of their working capital; in this regard, the government-engineered change in the price level bears a certain resemblance to the 2009 currency reform.

Good economywide estimates of North Korean inflation do not exist, but one way of inferring inflation rates is through the black market exchange rate. Fragmentary data indicate that in the three years after August 2002, the black market exchange rate of the North Korean won depreciated against the US dollar at a relatively steady rate of 7 to 9 percent monthly, or at an annualized rate of 130 to 140 percent. Since inflation in the United States over this period has been trivial in comparison, this indicator suggests that North Korea experienced ongoing inflation well in excess of 100 percent a year in the three years following the July 2002 policy changes. It appears that by 2007 the rate of inflation reduced to low double- or even single-digit levels but then possibly reaccelerated as the economy came under multiple stresses in 2008–09.

Beginning in 2005, the government began to abandon the reforms and revert to more direct controls in an effort to revive the socialist sector, limit the sphere of private activity, and control inflation (Haggard and Noland 2009a, 2009b; Park 2009). An early indication of this new direction was the decision in August 2005 to reinstate the public distribution system (PDS) and to ban private trading in grain. As in the past, the ability of the government to implement this policy varied across the country, and eventually the government was forced to quietly shelve the policy. But such moves intensified again in the wake of floods in 2006 and particularly 2007. The government increased food production quotas, including

6. Kang I-ruk, “New Currency Issued in the DPRK: Currency Exchange Work in Progress—Policy to Benefit Hard-Working Workers’ Hailed by Majority of People,” *Chosŏn Sinbo Online*, December 4, 2009 [in Korean].

through exactions earmarked for the military. Authorities also cracked down on “embezzlement” and “corruption” on the part of cooperative managers and placed new restrictions on private plots and cooperative leasing of land to redirect effort back into cooperative work. Along with the weather and global price increases, this reversion to state controls no doubt played some role in the rapid inflation in food prices in 2008 and the most serious shortages since the famine of the mid-1990s.

### The repression surrounding the currency conversion is part of a longer-standing trend toward the criminalization of market activity.

The recent effort to exercise control over the market has not been limited to the food economy but has included a wider assault on market activity; table 1 provides an overview of some of the more important control measures instituted in 2008 and 2009, including those targeting cross-border movement from the so-called National Border Area in the counties adjacent to China. The antimarket campaigns began with the imposition of escalating age restrictions on market traders in the fall of 2007, ultimately banning women under 40 from trading in general markets. From mid-January 2008 the government stepped up inspections on the general markets, or *jangmadang*, in an effort to control the range of goods offered, with the intention of reverting to the more limited farmers’ markets that were permitted to trade only in supplementary foodstuffs. In November 2008, North Korean authorities ordered all permanent markets to open only once every 10 days, reverting to the farmers’ market format. In addition to a variety of efforts to control the smaller markets, the government also focused increasing attention on the development of a major wholesale market in Pyongsung, which, because of its strategic location between Sinuiju and Pyongyang, had effectively become the distribution center for the entire country. In June 2009, this market was closed down.

It is important to underline that these efforts at control were not necessarily successful. Age restrictions were circumvented by bringing grandparents into the market, and some accommodation was ultimately made to allow for women experiencing hardship to trade. Regulated markets—and efforts to close them—gave rise to “alley markets” that shifted trading to new venues. The closing of the wholesale market at Pyongsung similarly shifted activity to new cities including Sookchun. Traders undoubtedly bribe inspectors as well.

Nonetheless, there can be little question that the period in the run-up to the currency conversion has been one of tightening controls on market activity.

These controls have extended to cross-border trade (table 1). The dramatic increase in trade with China has resulted in the creation of dense business networks that include major Chinese and North Korean enterprises, smaller Chinese and North Korean businesses, and North Koreans with relatives in China who are permitted to travel, albeit only with the greatest of difficulty. As a result, the border poses profound challenges to the North Korean leadership. When economic circumstances deteriorate, the incentives rise to move into China either permanently or in search of business opportunities and food. With this movement comes leakage in the government’s monopoly on information about the outside world. Cross-border trade has also come to include an array of communication and cultural products that directly undermine the government’s monopoly on information: from small televisions capable of receiving Chinese broadcasts in border areas to South Korean videos and DVDs and even mobile phones.

Larger trading entities in the land ports along the border, particularly in Sinuiju, have fallen under greater government scrutiny. In a noteworthy development in April 2008, the central government dispatched a team of 200 investigators to Sinuiju in the name of an Antisocialist Conscience Investigation to inspect the books of foreign trade organizations, necessarily affecting trade and market activity as a result. From November 2007, reports of ad hoc antisocialist investigations become more frequent in the border areas, targeting illegal internal movement, contraband, and cross-border trade and movement (table 1). 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 trafficking. But sentences have also been increased; single border crossings not related to South Korea or having political overtones that were previously overlooked now carry sentences of three years, with those found guilty of multiple crossings—even if not political—receiving sentences of up to 10 years.

### CURRENCY REFORM NORTH KOREA STYLE

Since 2005, the evidence of a turn away from reform has been ample. The currency reform marks only the most recent turn of the screw. It is not even the country’s first confiscatory currency reform; the shadow of potential expropriation hangs over all private activity in the economy.<sup>7</sup>

7. Early currency reforms at the time of independence replaced banknotes issued during the colonial period. In February 1959, the government undertook

**Table 1 Controls on market activity, foreign trade, and border crossing, 2008–09**

Date	Type of control
January 2008	Women under 40 banned from trading in markets, followed by efforts to redeploy them to workplaces.
April 2008	Wide-ranging Antisocialist Conscience Investigation of Sinuiju, the country's main land port with China, including the books of trading organizations. Restrictions placed on carrying merchandise on bicycles and carts in Sinuiju.
July 2008	Party, police, and market management office coordinate efforts to limit large sales in the Pyongsung market, an emerging wholesale center for the country in Pyongan province.
October 2008	Nationwide ban on sale of shoes in markets and new restrictions limiting trade in foodstuffs to individually cultivated fruits and vegetables.
November 2008	Major directive announcing the conversion of markets back to the more restrictive farmers' market format as of January 1, 2009. Markets to be open only on the 1st, 11th, and 21st of each month, and to be limited to retail sales of individually cultivated food; other foodstuffs and manufactures to be sold through the PDS and state-run stores. Major cities, including Pyongyang, Hamheung, Sookchun, Kaesung, and Chungjin, set up model farmers' markets.
January 2009	Full restructuring of farmers' markets postponed for six months. National Security Agency special investigative unit scrutinizes names, number of family members, and livelihoods of households in the National Border Area suspected of involvement in border crossing and trade. Public education campaigns and increased punishment for border crossing.
March 2009	New controls over lodging and movement without passes in National Border Area.
March 2009	Imposition of strict movement controls in connection with the Supreme People's Assembly elections; intensified controls following the elections.
May 2009	Announcement of "150-day campaign" accompanied by renewed implementation of market restrictions on women under 40 and restricted items, including products of joint ventures, industrial goods, and American and Korean products. Punishment of emergent back-alley markets and "sell and run" sales. Public education campaigns against market activities.
June 2009	Closure of Pyongsung market in Pyongan province.
July 2009	Increased control and surveillance over households in National Border Area with defectors.
August 2009	Public education campaign against excessive luggage associated with long-distance trade. Central Party Investigative Group scrutinizes officials in the National Border Area suspected of illegal activities.

Source: Research Institute for North Korean Society, *North Korea Today* No. 300, October 2009.

There are several obvious barriers to understanding how the present reform transpired. The reporting to which we have access traces back to a relatively limited number of sources. Official sources have largely remained silent on the reform; although embassies in Pyongyang were briefed verbally, the regime initially felt no need to provide an explanation of its actions to outsiders. A small number of South Korean sources (Goodfriends' *North Korea Today*; the newspaper *Daily NK*; the Network for North Korean Democracy and Human Rights' *NK In & Out*; and *Open News for North Korea*) maintain networks within North Korea, and Chinese-language

a second currency reform to curb inflation caused by the 1950–53 Korean War and to provide the government with investment resources for postwar rehabilitation. Like the current currency reform, the exchange rate was set to 100:1 but with no limit on the amount exchanged. A third conversion took place in April 1979. In July 1992, a fourth conversion set the exchange rate at 1:1 but required that funds exceeding the conversion limit of 300 won be deposited and could only be withdrawn over some period of time (5,000 won in three years, 10,000 in five years, the remainder in 10 years). In fact, deposits were only partially honored or not honored at all, with the consequence that the exchange did not only involve forced savings but was effectively confiscatory as well; reports suggest some depositors received nothing. See *NK In & Out* No. 22, December 2, 2009, at [www.nknet.org/eng](http://www.nknet.org/eng).

press offers some insights through the lens of border trade. However, early reports suggest substantial confusion on the part of North Koreans reporting on the reforms, and there is mounting evidence that the North Korean government has been forced to modify the terms of the reform as it has unfolded. In sum, the usual caveats of dealing with North Korea pertain.

For obvious reasons, a confiscatory currency reform requires significant planning, high levels of secrecy, and must be executed all at once.<sup>8</sup> New bills must be printed and distributed in advance. If individuals and households have prior information, they will convert currency into commodities or foreign exchange. Control of information is therefore required. Individuals, households, and private entities will also seek to

8. It has been reported that on November 27 authorities made surprise inspections of customs houses, state-owned enterprises, and other institutions, in some cases seizing inventory (Jung Kwon-ho, "Crackdown on Exporters ahead of Redenomination Revealed," *Daily NK*, December 11, 2009). It has been claimed that the black market value of the won dropped dramatically at the same time, though if correct, it is unclear whether this was a reaction to the state's action or due to word of the planned currency reform leaking in advance.

circumvent conversion limits once they are announced. For example, households holding excess cash will seek to distribute it to those not bound by the limits by offering them a share of the new currency received; naturally, the government has an interest in limiting such transactions.

**The hope of the government is that this loss of private economic activity will be offset by the return of labor into the state-owned enterprise sector.**

The dissemination of information on the conversion passed through party channels.<sup>9</sup> Provincial-level party officials were trained and then Party Committee secretaries and cadres in each city and county were convened on the morning of November 30, informed of the plan and given instructions about how to announce the new rules and address any objections; the justification for the reform was that it constituted a necessary measure on the way to the creation of a “strong and prosperous nation” by 2012, the hundredth anniversary of Kim Il Sung’s birth. The plan was announced later in the morning to the public by party cadres to People’s Committees, neighborhood office chiefs, and chairpersons of People’s Units for dissemination down to the *inminban* level, the smallest unit of community organization. Announcements were also made at work units and subsequently broadcast through the so-called third broadcasting, the colloquial name for municipal broadcasting networks that disseminate information and propaganda through speakers installed in homes, farms, and public buildings.<sup>10</sup>

The design of the conversion was to remove two zeros from the existing currency: A 1,000-won note would be replaced with a 10-won note. However, the government initially set a 100,000-won limit on what each household could convert.<sup>11</sup> How much money did this initial limit represent? Formal-

sector monthly wages for most North Koreans fall within a range of 4,000 to 10,000 won a month, suggesting that the limit for conversion was equivalent to 10 to 25 months of wages, a fairly substantial amount of cash to hold on hand. As we have seen above, however, most households are engaged in other market activities, with the result that actual incomes are higher than formal-sector wages would suggest. Moreover, given the absence of trustworthy financial intermediaries or institutions for providing credit, even households with modest engagement in trade maintain larger cash balances than might otherwise be the case. Consider, for example, a trader with a very small inventory of rice: a single, 50-kilo sack. At the retail prices prevailing at the time of the reform, about 1,700 won per kilo, the value of this small inventory would be 85,000 won or nearly the entire limit. Households also save to smooth consumption of basic necessities over the crop cycle given the failure of the PDS to provide adequate rations.

Another way of gauging the limit is to look at black market exchange rates. At the official exchange rate, the limit amounted to about \$740 (\$1=135 won). But at a preconversion black market won-dollar exchange rate of roughly 3,500, this limit was approximately \$30. In short, by virtually any metric the conversion limit appears quite low and probably hit a fairly wide swath of the population.

The new currency was not available at the time of the announcement; residents were required to make the conversion by December 6, after which the old currency would be rendered worthless.<sup>12</sup> In the interim, commercial transactions were officially limited on the assumption that goods would need to be repriced. The result was panicked efforts to dump rapidly depreciating old won in favor of tangible goods or foreign exchange. Reports during the week of the conversion describe the prices of grain and other foodstuffs skyrocketing and the currency plummeting on the black market. One report from the middle of the conversion period suggested an exchange rate of 400,000 won to the dollar on December 1 in Sinuiju.<sup>13</sup>

9. *North Korea Today* No. 310, December 2009.

10. Because of the difficulty of synchronizing the announcements perfectly and the need to control information on the exchange, all telephone lines appear to have been cut on the day of the conversion although it is possible that they simply crashed from a spike in traffic.

11. An extremely important issue suggested in a number of accounts has to do with exempt classes. College students were allowed to convert 30,000 won each, on the assumption that they required some savings to live. Military personnel and elite workers also appeared to have separate limits and a major issue—although impossible to gauge—is the implicit exemption enjoyed by corrupt party officials privy to private information about the conversion. “At [sic] November 30, 11 AM, Currency Change Announced,” *NK In & Out* No. 22, December 2, 2009 at [www.nknet.org/eng](http://www.nknet.org/eng).

12. On December 4, the new currency went into circulation. North Korean currency now features 5,000, 2,000, 1,000, 500, 200, 100, 50, 10, and 5 won bills, plus a 1 won coin, and 50, 10, 5, and 1 jeon coins. On the 5,000, 2,000, 1,000, 500, 200, and 100 won and 1 jeon and 5 jeon coins, “Juche 97, 2008” is printed as the issuing year, while the 50, 10, and 5 won bills and the 1 won and 50 and 10 jeon coins carry the imprint of “Juche 91, 2002,” suggesting that a currency reform has been contemplated for some time, somewhat undercutting the notion that it was undertaken in response to inflation experienced since the 2002 reforms.

13. An interesting question is why sellers would accept currency that within days would be declared worthless. One possibility is that they expected the policy to be rescinded or conversion ceilings to be raised, increasing the future value of the money. Another would be that they had ways of circumventing the conversion limits. A third is that they expected that the old currency would

There is increasing evidence that the authorities did not anticipate the depth of the reaction to the announcement nor a number of practical problems that were to ensue. As a result, a number of changes in the original policy followed in short—and confusing—succession, mainly increasing the conversion limits subject to certain conditions.<sup>14</sup>

Viewed over the long run, the printing of more money than that required by the conversion could have a small silver lining. Despite the tremendous disruption of the reform and the loss of output in the short run, its effect might not prove lasting. Those with entrepreneurial talents have seen a loss in wealth but will no doubt seek to rebuild their savings by reverting to form and reengaging in private activity. The printing of additional currency would, ironically, offset some of the contraction of the money supply and lubricate this return to the status quo ante. But this assumes that the government will allow this revival of the market to occur unimpeded, and as we have seen, the conversion has been both preceded and accompanied by the imposition of a variety of new controls.

The currency reform was only the first stage of a wider set of policy changes.<sup>15</sup> Following the finalization of the reform, meetings were scheduled in Pyongyang for economic

cadres and managers to address the question of repricing and wages. In principle, a currency conversion does not involve any change in relative prices and wages: All prices and wages should simply adjust by the amount of the redenomination. If rice was trading at 2,000 won per kilo prior to the reform, it should cost 20 won per kilo after the conversion. As in 2002, however, the authorities were attempting a change not only in the price level but also in the structure of relative prices. Ideally for the regime, this would occur by eradicating the market and forcing producers and consumers to transact entirely through state-controlled channels, where prices and wages can be set by fiat. On December 9, detailed price guidelines were disseminated. Given the high share of food in household expenditures, the prices of rice have been the focus of substantial coverage. The guidelines accommodated market prices by raising staple prices higher than they had been prior to the reform.<sup>16</sup> Rice, which was trading from 1,700 to 2,000 won prior to the reform, was repriced at 22 to 23 new won, no doubt reflecting an interest on the part of the government to induce greater supply. In reality, it proved impossible for the government to move all goods through official channels or to control prices, and official guidelines subsequently had to be adjusted in the wake of ongoing inflationary pressures and inadequate supply.<sup>17</sup>

Critically, wage policies were introduced that favored certain groups. The *Chosŏn Sinbo*, a Japanese Korean-language publication that reliably reflects official policy, reported on December 4 that “salaries for workers in factories and Party sub-organizations will be guaranteed at the same level as previously.”<sup>18</sup> If this were correct—that workers would receive the same salaries as in the past *but in the new currency*—it would be the equivalent of a hundred-fold increase in wages. However there is at least some evidence that the government is, in fact, pursuing such a policy, even if only in the short run or for favored sectors.<sup>19</sup> Many workers were effectively employed outside of their work unit. A motive of the reform was to move them back into state-owned enterprises, potentially placing burdens on the firms. There is at least some evidence that the reform was accompanied by a progressive shift in salaries,

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continue to function as a medium of exchange. At one point in post-Saddam Iraq, due to the high rate of inflation, the old “Saddam notes”—which were no longer being printed and hence were in fixed supply—actually traded at a premium to the new Iraqi dinar. On the black market exchange rate, see *North Korea Today* No. 309, December 2009.

14. Following the initial announcement of a 100,000 won conversion rate, a new decree was promulgated the next day that allowed for conversion of 150,000 won at the new rate and permitted conversion or deposit of excess funds up to 200,000 won at the rate of 1,000:1, or one-tenth of the standard rate. Authorities subsequently allowed for the deposit of up to 500,000 won but at terms (with respect to the exchange rate, ability to draw on the funds, or interest paid) that were unclear. Given the fact that the conversion was transparently aimed to confiscate excess cash balances, the incentives to take up the conversion or deposit of excess balances were undoubtedly limited; an individual would immediately identify himself as someone with “excess” paper wealth.

Limits on conversion were subsequently raised again by stipulating that in addition to 100,000 won, households could also exchange up to 50,000 won for each household member; an average household could thus exchange 250,000 or 300,000. Still later in the month, exchange limits drifted up to 300,000 then 500,000 old won per person, with deposits of up to 1 million won allowed if the sources of the funding could be explained. See, in particular, “Endless Confusion from Bad Policy” and “Sources Report Currency Reform Causing Discontent,” *Daily NK*, December 4; *North Korea Today* No. 307/308, December 2009; North Korea Reform Radio, “North Korea Currency Reform Analysis Report,” December 12, 2009; and “DPRK Authorities Easing Redenomination Caps, Offering ‘Relief Money’ in Agitated Bid To Reduce Citizens’ Dissatisfaction,” *Asahi Shimbun*, December 27, 2009 [in Japanese].

15. “Meeting on New Bills Scheduled,” *Daily NK*, December 7, 2009; Park In-ho, “New Industry and Real Estate Laws Enacted,” *Daily NK*, 16 December 2009; Kim Hyun, “N. Korea Establishes New Economic Laws Following Currency Change,” Yonhap News Agency, December 16, 2009.

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16. Prices following the reforms and announcement of the first guidelines can be followed in *North Korea Today* No. 315/315-1 Hot Topics; No. 316 Hot Topics; and No. 316, all dated December 2009.

17. “National Defense Commission’s Temporary Plan Indicated the Upper Limit for the Market Goods,” *Open News for North Korea* No. 25, December 12, 2009.

18. Kang I-ruk, “New Currency Issued in the DPRK: Currency Exchange Work in Progress—Policy to Benefit Hard-Working Workers’ Hailed by Majority of People,” *Chosŏn Sinbo Online*, December 4, 2009 [in Korean].

19. See, in particular, *North Korea Today* No. 319, December 2009, which is devoted entirely to reporting on wages from different informants.

with lower-income workers getting pay raises and higher-paid workers cuts.<sup>20</sup> Additional bonuses of 500 won per person were offered for each family member simply showing up at state-owned enterprises; this new policy constituted a one-time transfer of 50,000 won per person in the old currency, a substantial sum. Later in December, reports surfaced that this “relief money” was being distributed in the name of Kim Chong-un, Kim Jong-il’s third son and purported successor.

**A central theme running through many of the antimarket reforms in North Korea over the last decade has been a discomfort with the market and the potential challenge to political authority that it represents.**

The currency conversion was followed by the passage of a raft of new laws, including on real estate, commodity consumption, and imports.<sup>21</sup> Although the details of these laws have not been released, they appear to be aimed at increasing state revenue, reducing the scope of transactions outside of the state sector, and exercising greater control over enterprises and other government units.<sup>22</sup> For example, during the famine, work units were allowed to use real estate for the cultivation of food. Over time, however, authorities recognized that access to state land constituted a valuable asset and started to charge fees for its usage. The new law seeks to codify principles on the usage of private land and reassert the right of the state to relevant tax revenues, some of which were no doubt collected and kept by the work units themselves. The commodity consumption and import laws also appear designed to reassert control over interenterprise transactions, maintenance of inventories, and foreign trade—and foreign exchange earning—activities.

A final set of issues surround trade and exchange rate dynamics. As we have seen, many currency conversions are accompanied by a fixing of the exchange rate to increase the credibility of a stabilization program and to provide a nominal anchor to the economy. In this case, however, there has been no official statement regarding the wildly overvalued official

exchange rate, though one news report claimed that the official won-dollar rate was being devalued to 35, in line with its preconversion black market rate.<sup>23</sup> But confiscation changes how traders and even households think about their holdings of North Korean won and foreign currency. Residents are now more suspicious of holding won and thus put downward pressure on the exchange rate, adding additional inflationary pressures to the economy. One news report indicated that by the end of December, in the wake of the ban on foreign currencies, the postconversion black market won-yuan rate had reached 1,000 implying a won-dollar rate of more than 600,000 in preconversion terms!<sup>24</sup>

In contrast to the effect of the conversion on prices, initial reports from the Chinese side of the border were sanguine because most trade—and certainly most official trade—was denominated in foreign currency. But as the government delayed announcing its intentions with respect to the official exchange rate (and the tolerable black market rate), North Korean traders have had little choice but to withdraw purchase orders because of the difficulty of accessing US dollars and Chinese yuan—the two principal currencies in which North Korea’s trade is denominated.

Even if trade is denominated in dollars or yuan North Korea managers and entrepreneurs, at least implicitly, have in their minds a “shadow price” for foreign exchange. If the result of the currency reform is to drive up the shadow price of foreign exchange (in effect, a devaluation of the won)—and the institutional mechanisms of production are not too badly damaged—North Korean exports could increase, though not via the channel policymakers envisioned. Yet, whatever silver lining North Korea might realize on the export side is counterbalanced by the adverse effect depreciation will have on the prices of a variety of imported basic consumer goods, including food.

**SO WHY DO IT?**

A central theme running through many of the antimarket reforms in North Korea over the last decade has been a discomfort with the market and the potential challenge to political authority that it represents. Whether we think of cash holdings as an input to production in the private sector, the equivalent of working capital, or as a requirement for private consumption (the “cash in advance” constraint), the confiscation of “surplus” cash and the concomitant reduction

20. Lee Sung Jin, “First Salaries Since Redenomination Paid,” *Daily NK*, December 23, 2009.

21. “N. Korea Establishes New Economic Laws Following Currency Change,” Yonhap News Agency, December 16, 2009.

22. See Park In Ho, “New Industry and Real Estate Laws Enacted,” *Daily NK*, December 16, 2009; “North Korea Establishes Economic Laws Following Currency Reform,” *JoongAng Ilbo*, December 16, 2009 [in Korean].

23. *North Korea Newsletter* No. 84, published by Yonhap News Agency, December 10, 2009.

24. “N. Korea’s New Currency Plummets Against Chinese Yuan: Report,” Yonhap News Agency, January 3, 2010 [in Korean].



in the money supply should have the effect of reducing private output. This motivation—to shift the economy away from autonomous private activity and toward organs under direct control of the state—is key.

The hope of the government is that this loss of private economic activity will be offset by the return of labor into the state-owned enterprise sector; indeed, this was clearly a motive of the reform and was even announced as such. Yet the reason that workers left the state-owned sector in the first place was that productivity and incomes were low, constrained by lack of inputs, the breakdown of the planning process and a myriad of managerial inefficiencies. There is no reason to believe that simply moving bodies back into unproductive state-owned enterprises will increase output; to the contrary, workers will even be a burden to their work units unless they are engaged in unofficial market activities (Park 2009). Ironically, given the inflationary concerns of the state, in the longer-run we can expect the supply constraint associated with the decline in private activity to put *upward* pressure on prices.

More broadly, the effort to reconstitute the failing state sector is unlikely to work and will probably be counterproductive. Many firms were already engaged in activities outside of the plan, if only for sheer survival purposes. In the absence of state capacity to allocate resources, even the purchase of inputs was occurring through inter-company bargains that were largely outside the plan. As Hyeong Jung Park (2009, 5) puts it, “the prerequisite of the success of this measure is the normalization of the national material supply system and the state-run consumer goods trading network at a stroke, which is far-fetched.”

The issuance of new guidelines does not mean that prices will obey the government’s will. To the contrary, the changes in relative prices and the uncertainty surrounding the entire conversion process have fueled, rather than dampened, inflationary expectations. For example, rice prices that spiraled up during the conversion period have subsequently come down from their hyperinflationary levels, but still remain very much higher than they were prior to the conversion.<sup>25</sup> Again, unanticipated consequences are operating; given that holders of commodity inventories do not know what new prices might be, they have incentives to hoard.

It is often argued that North Korea should follow the Chinese model, or that it is even beginning to do so. But the North Korean approach to economic policy since 2005, and

particularly since 2007, is essentially the reverse of the Chinese approach. In China, the market was allowed to “surround” the plan. Once plan obligations were fulfilled, production and consumption transactions occurred on market terms at the margin. Over time growth increasingly occurred in response to market signals, even with public ownership of the means of production. The North Koreans appear to want to do the opposite. Authorities are seeking to reduce the scope of decentralized, market-oriented activity and are thus restricting the ability of the economy to respond to market signals and instead force development to occur according to state dictates.

## CRIME, RESISTANCE, AND PUNISHMENT

Confiscatory currency reforms of necessity rest ultimately on repression. Accounts coming from North Korea suggest that the authorities recognized that the conversion would not be popular, and made efforts to explain the purposes of the reform through party functionaries. Leaving nothing to chance, however, the government clearly beefed up security around the time of the announcement. According to *Daily NK*’s sources inside the country, the People’s Safety Agency (PSA) was ordered to control residents, and the National Security Agency, Defense Security Command of the People’s Army, and army bases were all placed on standby.<sup>26</sup>

The repression surrounding the currency conversion is part of a longer-standing trend toward the criminalization of market activity (Haggard and Noland 2009c). Changes to the North Korean criminal code approved in 2004 and 2007 include expansive definitions of economic crimes that, if taken literally, prohibit a wide range of standard commercial activities. This includes up to two years of “labor training” for individuals convicted of engaging in “illegal commercial activities, therefore gaining large profits.” The code also bars “illegally giving money or goods in exchange for labor.” Capital punishment is to be meted out for “extreme cases” of theft of state property and for drug dealing, and increased punishments are prescribed for “illegally operating a business, such as a restaurant, motel, or store.”

Refugee surveys suggest that the repressive apparatus of the state is disproportionately targeting those involved in market-oriented activities (Haggard and Noland 2009c). Participants in market activities were more than half again as likely to be detained as other citizens. Prisoners enduring a typical-length incarceration in a low-level “labor training center” often used to house economic criminals observed horrific abuses at astonishing rates: execution (observed by 60 percent), forced starvation

25. Two days after the closing of the conversion window, rice—which traded at 1,700 to 2,000 won per kilo before the reform in old money, 17 won in the new—was trading in a range of 50 to as high as 80 in new won, still a very significant increase. Even after the announcement of the first round of price guidelines, rice was still trading at multiples of the old prices and as high as 100 new won in some locations.

26. Lee Sung Jin, “Chaos Reigns after Currency ‘Trick,’” *Daily NK*, December 1, 2009.

(90 percent), and death by torture or beating (20 percent).

This repression benefits the regime in many ways. Among others, high levels of discretion with respect to detention and its associated abuses encourage bribery. The more arbitrary and painful the experience with the penal system, the easier it is for officials to extort money for avoiding it. These characteristics not only promote regime maintenance through intimidation but also facilitate predatory corruption. Given the growth in corruption in North Korea, it is almost a certainty that protected segments—in effect, mafias within the state—were able to shield their own profit-making activities from confiscation. (This phenomenon could become a prime source of contention if the government tries to enforce the ban on foreign currency holdings.) Thus one of the key social elements of the reform—to level incomes—is also not likely to be achieved; rather, the distributional consequences of reforms are likely to pit those who are protected through tight government, party, or military connections from those who are not.

A central question is whether the reform was so misguided as to spark unanticipated protests that would have broader political ramifications. Press coverage has been longer on hope in this regard than on specifics. At most we can probably expect everyday forms of low-level resistance and shirking rather than a frontal assault on state power.<sup>27</sup> Some of this resistance will take the form of recourse back into the market economy. But North Korea entirely lacks civil society institutions capable of channeling mass discontent into constructive political action. At present, the only institution capable of challenging the regime is the military, which Kim Jong-il courts assiduously; presumably the government will tread carefully when enforcing policies such as the ban on foreign currency that could adversely affect the interests of key constituencies.

## CONCLUSION

The North Korean currency reform is an economically misguided initiative that will reduce the welfare of North Korean residents. In the long run it is unlikely to even contribute significantly to the stated goal of rebuilding socialism. Such an effort is doomed to failure as long as the state lacks the resources and capacity to put goods on the shelves. Indeed, the second economy that the reform is trying to eradicate emerged in the first place as a response to state failure. Given the decision, one wonders if the regime has recourse to heretofore unrecognized sources of

funding or commodities that could allow the policy to succeed, or whether the policymakers who undertook the reform were simply unaware—or unconcerned—about its implications.

The government has not been oblivious to the discontent raised by the reform and has undertaken a number of ad hoc adjustments that could be seen either as tactical retreats or as efforts to build support for the policy. For example, “relief money” and wage adjustments suggest efforts to portray the reform as a progressive one aimed at assisting workers and controlling prices, even if these objectives cannot be realized over the long run. It is likely that the government will seek to release stocks of food, including through foreign purchases, in order to alleviate political pressures in the short run. Reports even suggest that the government has sought to survey the citizenry on the effects of the reforms, presumably to gauge possible “camel’s straws” or breaking points that would generate more active resistance.<sup>28</sup> The government’s substantial propaganda machinery has also clearly been brought into play, emphasizing the equalizing effects of the reforms.

However, there can be little question of the government’s determination to use controls and coercion as deemed necessary. The dissemination of the formal edicts outlining the reforms was accompanied by orders requesting the maximum punishment to those who violate the rules of the currency exchange. Four days after the exchange was announced, orders were apparently issued authorizing that those attempting unauthorized border crossing could be shot on sight. Nor were these merely hypothetical; several reports have surfaced of executions of those seeking to circumvent the conversion limits or burning old bills.<sup>29</sup> These more draconian actions are in addition to the surveillance and controls required to enforce new price guidelines and to stamp out market activities.

The sheer ruthlessness of the regime and its extraordinary capacity for repression were probably a precondition for this reform. However, there is little evidence that the regime has succeeded in stamping out the market entirely. The very fact that the government has had to revert to tighter controls and repression, in fact, demonstrates the determined survival instincts of its citizenry and the resilience of the market. One of the unintended consequences of the reform may be precisely to make the market a locus of political activity given the complete absence of other channels or civil society organizations for expressing grievances.

27. For example, “‘Women Power’ Gathers Against DPRK Currency Shock,” *Chosun Ilbo*, December 8, 2009, and other articles make reference to “protests” and even “riots” in response to the reforms, but these do not appear to be confirmed by subsequent reporting or were too small and localized to have wider effect. On “everyday forms of peasant resistance,” see Scott (1985).

28. *North Korea Today* No. 316 Hot Topics, December 2009.

29. See, for example, *North Korea Today* No. 316, December 2009; and “North Korea Raises Limit for Currency Exchange,” *Associated Press*, December 15, 2009.

## REFERENCES

- Haggard, Stephan, and Marcus Noland. 2007. *Famine in North Korea: Markets, Aid, and Reform*. New York: Columbia University Press.
- Haggard, Stephan, and Marcus Noland. 2009a. Reform from Below: Behavioral and Institutional Change in North Korea. Forthcoming in *Journal of Economic Behavior and Organization*.
- Haggard, Stephan, and Marcus Noland. 2009b. Famine in North Korea Redux? *Journal of Asian Economics* 20, no. 4: 384–95.
- Haggard, Stephan, and Marcus Noland. 2009c. *Repression and Punishment in North Korea: Survey Evidence of Prison Camp Experiences*. East-West Center Working Papers, Politics, Governance, and Security Series no. 20. Honolulu: East-West Center.
- Noland, Marcus. 2004. *Korea After Kim Jong-il*. Washington: Peterson Institute for International Economics.
- Park, Hyeong Jung. 2009. *Impact and Outlook of Currency Exchange in North Korea*. Korean Institute for National Unification, Online Series CO 09-49 (December 17).
- Scott, James C. 1985. *Weapons of the Weak: Everyday Forms of Peasant Resistance*. New Haven: Yale University Press.

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