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Transition Paths

The main underlying message of the statistical results reported in the previous chapter is that the survival of the Kim Jong-il regime is in no small part conditioned on its relations with the rest of the world. This chapter delves below the statistical modeling to what might emerge from the enormously different trajectories sketched out at the end of the previous chapter. One could associate "cooperative engagement" with a process of gradual economic and political integration between the North and the South. The other two scenarios ("international embargo" and "neoconservative's dream"), carrying with them vastly higher probabilities of regime change, could result in abrupt economic and political integration on the peninsula.

South Korea is key, both economically and politically. It is key economically because it is naturally the North's predominant economic partner due to shared nationality, proximity, and the economic complementarity of combining Southern technology, capital, and management with Northern resources and labor. It is also critical politically because while South Korea may act as a protector of the Kim Jong-il regime, undercutting coercive diplomacy, its very existence as a prosperous democratic state also creates a legitimacy challenge for the Kim Jong-il regime.

To return to the themes of chapter 1, let's begin with North Korea's internal politics. One can imagine a variety of scenarios under which North Korea might experience a gradual evolution toward a less totalitarian political regime, which would appear to be a prerequisite for deep integration with the South. As previously noted, Kim Jong-il himself has spoken of the "Thai model" in which he would reign but not rule. Charles Burton envisions a future in which "Kim [is] eased out slowly over time, and rather drastic revisions made to *Juche* over a number of reinterpretations" (Burton 2003, 3). This evolutionary change is possible, though perhaps unlikely.

But even if the political and ideological foundations for a less totalitarian internal polity and gradual rapprochement with the South are not intentionally constructed, it is not inconceivable that they could emerge from post-Kim internal political competition and intervention by South Korea.

Despite hagiography that elevates him to the level of a deity, Kim Jong-il is mortal. Suppose he were to die suddenly.[1] (Przeworski et al. [2000] observe that dictators are more likely than democrats to die in office, with an unusually high number of dictators dying in air incidents. Perhaps Kim Jong-il is right to take the train.) His death could well force a significant reorientation of North Korean politics that would not necessarily imply the disappearance of North Korea as a sovereign state.

If North Korea were simply a communist theocracy existing in isolation, there would be ample reason to have one's doubts about the sustainability of a *juche*-based totalitarian regime after Kim Jong-il's demise. Yet it is precisely the state's sovereignty over only half of the divided peninsula that makes the sustainability of the most obvious alternative—a post-*juche*, non-Kim regime—problematic. In contrast to other reforming communist societies in Asia, such as China and Vietnam, the divided nature of the Korean peninsula would seem to invite disadvantageous comparisons to the South and pose some very basic issues in terms of political legitimization. The Hungarian sociologist Elemér Hankiss uses the "parable of the prisoner" to describe the political-psychological coping responses of individuals in Eastern Europe under communism. While politically a prisoner is "anaesthetized with childish irresponsibility," the existence of Western Europe provided "invincible proof that life was worth living, that it was not devoid of value and meaning, that oppression, humiliating compromises, and an existence without dignity were only a transitory episode in their lives" (Hankiss 1994, 117).

Moreover the very extremity of political socialization under the current regime that would appear to lend it some additional resilience that would seem to work against establishing a sustainable alternative basis for regime legitimacy.[2] As Nicholas Eberstadt put it, "Deprived of its raison d'être, suffering from an economic crisis, and exposed to the

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1. Constitutional succession in North Korea is unclear (and probably irrelevant). Kim Il-sung is president in perpetuity. President of the SPA Presidium Kim Yong-nam is the titular head of state for diplomatic purposes. Kim Jong-il is the chair of the National Defense Committee (NDC) as well as general secretary of the KWP. If Kim Jong-il were to die, power would probably be contested among members of his extended family and contenders emerging from the NDC and perhaps the KWP Organization and Guidance Department.

2. Foster-Carter simply dismisses the possibility out of hand: "A workable legitimation or the continued existence of a non-Kim Il-sungist North Korean state in the 1990s cannot possibly be constructed" (Foster-Carter 1994, 32). See also Foster-Carter (1997c).

unavoidable gravitational pull of the Korean example from across the demilitarized zone, such a state would have little chance for survival. Eventually according to this line of reasoning, the state would be expected to implode—very possibly sooner than later . . . it is hard to imagine any permutation of the existing parts or adjustment of policies that would permit the survival of an independent communist state in the northern portion of the Korean Peninsula" (Eberstadt 1995, 140).[3]

Setting aside the possibilities that North Koreans, unlike Hankiss's Eastern Europeans, do not see their counterparts as "the light of hope in a world of defeat and despair," or have regressed into the "catatonic indifference" of a "vegetable," Eberstadt's formulation begs the question: what if instead of gravitational pull North Korea was subject to the centrifugal force of a South Korea fearing the cost of unification? Would a South Korean government committed to shoring up a post-Kim regime be capable of doing so?

Following the collapse of a regime, three groups typically come to the fore: revolutionaries, often making nationalist appeals; political moderates (Alexander Kerensky, Lothar de Maizière, Francisco Madero, and Abolhassan Bani-Sadr in Russia, East Germany, Mexico, and Iran, respectively); and counterrevolutionaries (Victoriano Huerta, Lavr Kornilov, and Gholam Reza Azhari in Mexico, Russia, and Iran, respectively), typically from the military, often with foreign support, for whom the main political problem is to establish legitimacy. Similarly, while the perception of a foreign threat is a usual prerequisite for the seizure of power by "top-down" revolutionary modernizers (a condition that arguably exists in North Korea), what makes the prospective North Korean case so strange is that it is the radical unifiers who would play the nationalist card, while it's the moderates, counterrevolutionaries, and top-down revolutionaries who might expect and receive foreign support—from the other half of the peninsula.

From a South Korean standpoint, the rationale for an engagement policy is quite simple. Pyongyang already holds Seoul hostage with its forward-deployed artillery. The marginal increase in effective threat associated with revitalization of the North Korean economy is minimal. Ergo, it is worth engaging with the North and hoping that through a policy of engagement either Pyongyang will evolve toward a less threatening regime or engagement will undermine the ideological basis of the Kim Jong-il regime and eventually cause its collapse. Either way the military threat to Seoul is eliminated. (Parenthetically, the same cost-benefit calculus does not hold for the United States, which has strategic interests beyond the

3. As Kim Kyung-won (1996) plangently observed, "[S]ubstituting the strategy of opening and reform for the failed *juche* ideology would take away North Korea's raison d'etre. North Korea exists as the antithesis of South Korea; if North Korea adopts an outward looking market economy, it will inevitably appear to be a poorer, more backward shabbier version of South Korea."

Korean peninsula, and this creates the real basis for divergence in US and South Korean preferences regarding engagement with the North.)

Suppose that the South was successful in promoting evolutionary change in North Korea—either Kim Jong-il pursues a reformist path in the North or Seoul successfully props up a reformist successor regime—what does this mean for economic integration? The key characteristics of this scenario are maintenance of two independent states and a sufficient degree of convergence of economic and political practices to make the outcome plausible. Under this scenario, it is assumed that the two independent states pursue a protracted, negotiated process of increasingly deep integration. This implies avoiding a collapse in the North while generating sufficient reform in the North's economic and political system to make some degree of integration with the South sustainable.

July 2002 Reforms

Economic policy changes introduced in July 2002, involving among other things an attempt to increase the importance of material incentives, could be interpreted as the first hesitant steps in this direction.[4] The reforms could be interpreted as having four components: microeconomic policy changes, macroeconomic policy changes, special economic zones, and aid seeking. These initiatives followed moves begun in 1998 to encourage administrative decentralization (Oh 2003). A September 2003 cabinet reshuffle holds forth the promise of younger, and perhaps more technocratic, leadership.

With respect to the microeconomic reforms, in the industrial sector there is some indication that the government was attempting to adopt a dual-price strategy similar to what the Chinese have implemented in the industrial sphere.[5] In essence, the Chinese instructed their state-owned

4. Assessments of both the impact of the policy changes and the political motivations behind their introduction vary. See Lee (2002), Chung (2003), Frank (2003), Nam (2003), Newcombe (2003), and Oh (2003).

5. Oh (2003) disputes this notion, arguing that the aim of the policy changes was "to shift the country's economic control mechanism from one based on material balances in a traditional socialist mandatory planning system to one managed through a monetary mechanism. . . . The situation is quite different from that in China at the beginning of its reform process, where reform-minded leaders boldly argued that economic reform measures were imperatives, not policy options" (p. 72). Newcombe (2003) also emphasizes the shift from quantitative planning to a monetized economy and reports a statement by one official that could be interpreted as suggesting a more limited aim of the policy changes: "This objective (or reform) will only be achieved by removing the last 'vestiges' of the *Soviet system* from the North Korea economy" (p. 59, emphasis in original). Frank (2003) also quotes a similar denunciation of "Soviet-type" practices. These statements could be interpreted as manifestations of a North Korean attempt to justify ideologically a uniquely North Korean "third way" policy package.

enterprises to continue to fulfill the plan, but once planned production obligations were fulfilled, the enterprises were free to hire factors and produce products for sale on the open market (Lau, Qian, and Roland 2000). In other words, the plan was essentially frozen in time, and marginal growth occurred according to market dictates.

North Korean enterprises have been instructed that they are responsible for covering their own costs—that is, no more state subsidies. Managers have been authorized to make limited purchases of intermediate inputs and to make autonomous investments out of retained earnings. They are also permitted to engage in international trade. Yet it is unclear to what extent managers have been given the power to hire, fire, and promote workers, or to what extent the market will determine remuneration. There is some anecdotal evidence that faced with this dilemma, managers are creating offshoot firms to which to transfer workers, thus getting them off the payrolls for which the parent firm managers are responsible. Amid these changes, there has been no mention of the military's privileged position within the economy, and domestic propaganda continues to emphasize a "military-first" political path.

The state has administratively raised wage levels, with certain favored groups such as military personnel, party officials, scientists, and coal miners receiving supernormal increases. (For example, it has been reported that the wage increases for military personnel and miners have been on the order of 1,500 percent, those for agricultural workers may be on the order of 900 percent, but the increases for office workers and less essential employees are less.) This alteration of real wages across occupational groups could be interpreted as an attempt to enhance the role of material incentives in labor allocation.

The state continues to maintain an administered price structure, though by fiat the state prices are being brought in line with prices observed in the markets. This is problematic (as it has proven in other transitional economies): the state has told the enterprises that they must cover costs, yet it continues to administer prices, and in the absence of any formal bankruptcy or other "exit" mechanism, there is no prescribed method for enterprises that cannot cover costs to cease operations, nor in the absence of a social safety net, how workers from closed enterprises would survive (hence the dodge of setting up offshoots and telling them to sink or swim). What is likely to occur is the maintenance of operations by these enterprises supported by implicit subsidies, either through national or local government budgets or through recourse to a reconstituted banking system, which is being restructured. Indeed, the North Koreans have sent officials to China to study the Chinese banking system, which, although it may well have virtues, is also the primary mechanism through which money-losing state-owned firms are kept alive.

In the agricultural sector, the government has implemented a policy of increasing the procurement prices of grains to increase the volume of food entering the public distribution system (PDS) along with dramatically increasing the PDS prices to consumers, with the retail prices of grains rising from 40,000 to 60,000 percent in the space of six months (Noland 2003a, table 4). The increase in the procurement prices of grains was motivated in part to counter the supply response of the farmers who, in the face of derisory procurement prices, were diverting acreage away from grain to tobacco and using grain to produce liquor for sale. Comparisons to US wholesale prices (taken as a proxy for world prices) suggest that there is still considerable distortion in the relative price structure.

The maintenance of the PDS as a mechanism for distributing food is presumably an attempt to maintain the social contract that everyone will be guaranteed a minimum survival ration while narrowing the disequilibrium between the market and plan prices. Residents are still issued monthly ration cards; if they do not have sufficient funds to purchase the monthly allotment, it is automatically carried over to the next month. Wealthy households are not allowed to purchase quantities in excess of the monthly allotment through the PDS. The system is organized to prevent arbitrage in ration coupons between rich and poor households.[6]

Some have questioned the extent to which this is a real policy change and how much this is simply a ratification of system-fraying that had already occurred—there is considerable evidence that most food, for example, was already being distributed through markets, not the PDS. But this may indeed be precisely the motivation behind the increases in producer prices—with little supply entering the PDS, people increasingly obtained their food from nonstate sources, and by bringing more supply into state-controlled channels, the government can try to reduce the extent to which food is allocated purely on the basis of purchasing power. At the same time, the state may also be motivated by broader antimarket ideological considerations as discussed later. Yet another motivation may be to reduce the fiscal strain imposed by the implicit subsidy provided to urban consumers.

However, the North Koreans have not announced any mechanism for periodically adjusting prices, so in all likelihood, disequilibria, possibly severe, will develop over time. In fact, the World Food Program (WFP) reports that since the July 2002 price changes, grain prices in the farmers' markets have risen "significantly" while the PDS prices have remained largely unchanged (WFP 2003a). Anecdotal accounts suggest that as a consequence, despite the increase in procurement prices, the policy has not been successful in coaxing back domestic supply (as distinct from international aid) into the PDS. Indeed, some anecdotal reports indicate that the PDS is not operating in all areas of the country.

When China began its reforms in 1979, more than 70 percent of the

6. Oh (2003) claims that the rationing coupons have been abolished, and in theory, wealthy households can buy unlimited supplies through the PDS.

population was in the agricultural sector. (The same held true for Vietnam when it began reforming the following decade.) Debureaucratization of agriculture under these conditions permits rapid increases in productivity and the release of labor into the nascent nonstate-owned manufacturing sector. The key in this situation is that change is likely to produce few losers: farmers' incomes go up as the marginal and average value products in the agricultural sector increase, the incomes of those leaving the farms rise as they receive higher-wage jobs in the manufacturing sector, and urban workers in the state-owned heavy-industry sector benefit as their real wages rise as a result of lower food prices associated with expanded supply. The efficiency gains in agriculture essentially finance an economy-wide Pareto improvement (i.e., no one is made worse off). Chinese policy-makers understood this dynamic and used the dual-price system (allowing the market to surround the plan, to use a Maoist metaphor) and side payments to state-owned enterprises, their associated government ministries, and allied local politicians to suppress political opposition to the reforms. The existence of a large, labor-intensive agricultural sector is one of the few robust explanators of relative success in the transition from central planning to the market (Åslund, Boone, and Johnson 1996).

In contrast, North Korea has perhaps half that share employed in agriculture. As a consequence, the absolute magnitude of the supply response is likely to be smaller, and the population share directly benefiting from the increase in producer prices for agricultural goods is roughly half as big as in China and Vietnam. This means that reform in North Korea is less likely to be Pareto-improving than in China or Vietnam. Instead, reform in North Korea is more likely to create losers and with them the possibility of unrest.

One result of these changes has been a noticeable upsurge in small-scale retail activity, at least in Pyongyang. Whether it extends to an industrial revival more broadly is an open question, though the consensus among most outside observers is that, at this writing, marketization has not delivered as hoped. The fall 2003 harvests are predicted to be fairly large, but it is unclear how much of this is due to favorable weather, provision of fertilizer aid by South Korea, and incentive changes.

At the same time the government announced the marketization initiatives, it also announced tremendous administered increases in wages and prices. To get a grasp on the magnitude of these price changes, consider this: when China raised the grain prices at the start of its reforms in November 1979, the increase was on the order of 25 percent. In comparison, North Korea has raised the prices of corn and rice by more than 40,000 percent. In the absence of huge supply responses, the result will be an enormous jump in the price level and possibly even hyperinflation.[7]

7. See Frank (2003), Noland (2003a), and Oh (2003) for recitations of other, nonagricultural price increases.

Unfortunately, macroeconomic stability at the time that reforms are initiated is the second robust predictor of relative success in transition from the plan to the market (Åslund, Boone, and Johnson 1996). High rates of inflation do not portend well for North Korea.[8]

In the short run, an initial jump in the price level is usually accompanied by an increase in economic activity, as households and enterprises mistake increases in the overall price level for changes in relative prices. This is likely to be particularly acute in North Korea, where households and enterprises can be expected to be relatively naïve about market economics and where significant alterations in the structure of relative prices will be coincident with the rapid increase in the price level. So in the short run, there may be an increase in economic activity.

In the longer run, however, once households and enterprises begin to distinguish more clearly between changes in relative and absolute prices, it will become apparent that some parts of the population have experienced real increases in income and wealth while others have experienced real deteriorations. Access to foreign currency may act as insurance against inflation, and in fact, the black market value of the North Korean won has dropped steadily since the reforms were announced, with one recent report putting it at approximately 1,200 won to the dollar in April 2003.[9]

Indeed, the authorities' treatment of the external sector has been confusing. After announcing the dramatic price increases, the government maintained that it would not devalue the currency, though this would have caused a massive real appreciation that would have destroyed whatever international price competitiveness the North Korean economy has. After about two weeks the government in August 2002 announced a devaluation of the currency from 2.1 won to 150 won to the dollar, approaching the contemporaneous black market rate of around 200 won to the dollar. A second devaluation—this time to 900 won to the dollar, again approaching the black market rate—was announced in October 2003. Tariffs on consumer products such as textiles, soap, and shoes have doubled from 20 percent to 40 percent, possibly as an attempt to deal with the overvaluation of the real exchange rate and the surge of imports into the country (Oh 2003).

The government apparently continues to insist that foreign-invested enterprises pay wages in hard currencies (at wage rates that exceed those

8. North Korea looks better on the third robust explanator of success in the transition (Sachs 1995)—the viability of a presocialist commercial code. The commercial code of South Korea has its origins in the colonial-era Japanese commercial code that in turn was transplanted from Germany. North Korean scholars and officials at legal workshops have exhibited some familiarity with the concepts of the contemporary South Korean commercial code based on their understanding of their common presocialist legal system.

9. James Kynge and Andrew Ward, "Back to the table: Why Kim Jong-il's failing economy may be the key to halting his nuclear program," *Financial Times*, April 23, 2003.

of China and Vietnam). For a labor-abundant economy, this curious policy would seem to be the very definition of a contractionary devaluation, blunting the competitiveness-boosting impact of the devaluation by aborting the adjustment of relative labor costs while raising the domestic resource costs of imported intermediate inputs.

Make no mistake about it: With these changes, North Korea has moved from the realm of the elite to the realm of mass politics. Unlike the diplomatic initiatives of the past several years, these developments will affect the entire population, not just a few elites. Those with access to foreign exchange such as senior party officials will be relatively insulated from the effects of inflation. Agricultural workers may benefit from "automatic" pay increases as the prices of grains rise, but salaried workers without access to foreign exchange will fall behind. In other words, the process of marketization and inflation will contribute to the exacerbation of existing social differences in North Korea. The implications for "losers" could be quite severe. According to a WFP survey, most urban households are food insecure, spending more than 80 percent of their incomes on food. And while there is a consensus that marketization is a necessary component of economic revitalization, the inflationary part of the package would appear to be both unnecessary and destructive. (If one wanted to increase the relative wages of coal miners by 40 percent, one could simply give them a 40 percent raise—one does not need to increase the overall price level by a factor of 10 and the nominal wages of coal miners by a factor of 14 to effect the same real wage increase.)

So why do it? There are at least three possible explanations. The first, alluded to earlier, is the most benign: By creating inflation, the government hopes to provide a short-run kick-start to the economy, the long-run implications be damned. (From the standpoint of North Korean policy makers, Keynes' aphorism, "in the long run we are all dead" may apply with a rather short time horizon.) Given the extremely low levels of capacity utilization in the North Korean economy, this argument has a certain surface plausibility. Yet the problems of the North Korean economy run far deeper than underutilized resources. In large part the economy is geared to produce goods (televisions and radios without tuners, to cite one example, or Scud missiles, to cite another) for which there is only limited demand. Unless there is a significant reorientation in the composition of output, it is unlikely that inflation alone will generate a sizable supply response. Even agriculture is problematic in this regard: North Korean agriculture is highly dependent on industrial inputs (chemical fertilizers and agricultural chemicals, for example), and agriculture could be disrupted if the farmers find themselves getting squeezed on the input side.

A second possibility is that the inflation policy is intentional and a product of Kim Jong-il's reputed antipathy toward private economic activity beyond state control. One effect of inflation is to reduce the value of existing won holdings. (For example, if the price level increases by a factor of 10, the real value of existing won holdings is literally decimated.) Historically, state-administered inflations and their cousins, currency reforms, have been used by socialist governments to wipe out currency "overhangs" (excess monetary stock claims on goods in circulation), more specifically to target black marketers and others engaged in economic activity outside state strictures, who hold large stocks of the domestic currency. (In a currency reform, residents are literally required to turn in their existing holdings—subject to a ceiling, of course—for newly issued notes.) In July 2002 it was announced that the blue won ("foreigner's won") foreign exchange certificates would be replaced by the normal brown ("people's") won, though it is unclear if these are convertible into foreign currency. The other shoe dropped in December 2002 when the authorities announced that the circulation of US dollars was prohibited and that all residents, foreign and domestic alike, would have to turn in their dollars to be exchanged for euros, which the central bank did not have. In the case of North Korea, the episode that is now unfolding will be the fourth such one in the country's five-decade history.

In yet another wheeze to extract resources from the population, in March 2003 the government announced the issuance of "People's Life Bonds," which despite their name would seem to more closely resemble lottery tickets than bonds as conventionally understood. These instruments have a 10-year maturity, with principal repaid in annual installments beginning in year five (there does not appear to be any provision for interest payments, and no money for such payments has been budgeted). For the first two years of the program, there would be semiannual drawings (annually thereafter) with winners to receive their principal plus prizes. No information has been provided on the expected odds or prize values other than that the drawings are to be based on an "open and objective" principle. The government's announcement states, without irony, that "the bonds are backed by the full faith and credit of the North Korean government." Committees have been established in every province, city, county, institute, factory, village, and town to promote the scheme—citizens purchasing these "bonds" will be performing a "patriotic deed."[10] Both the characteristics of the instrument and the mass campaign to sell it suggest that politics, not personal finance, will be its main selling point.[11]

10. The discussion in Chung (2003) suggests that purchases of the bonds may be compulsory. According to another account, while purchases are not mandatory, the authorities use purchases as "a barometer of the buyers' loyalty and support for the party and the state" (*ITAR-TASS,* May 23, 2003. "Bonds are being issued for sale mainly to wealthy," translation by KOTRA, May 27, 2003, KOTRA–North Korea team, Lee Chang-hak. Taken from KOTRA Web site, June 6, 2003.).

11. Frank (2003) argues that the issuance of these instruments is a response to the large expansion in expenditures associated with the increased procurement price for grain, and indeed, North Korean government expenditures appeared to increase by double

According to Kim (1998), when the government has resorted to lottery-like instruments in the past to deal with monetary overhang problems, they have been unpopular.

The hypothesis has the strength of linking what appears to be a gratuitous economic policy to politics—Kim Jong-il, who ascended to power after the death of his father Kim Il-sung in 1994 and rules as general secretary of the KWP and chairman of the NDC, not only rewards favored constituencies by providing them with real income increases but by going the inflation/currency reform route also punishes his enemies. This line of reasoning is not purely speculative: It has been reported that one of the motivations behind unifying prices in the PDS and farmers' markets has been to reduce the need for consumers to visit farmers' markets and to "assist in the prevention of illegal sales activities which took place when the price in the farmers' market was much higher than the state price" ("DPR Korean Economic Reforms," *CanKor*, August 9, 2002; WFP 2003b). A number of unconfirmed reports indicate that the government has placed a price ceiling on staple goods in the farmers' markets as an anti-inflationary device.[12]

The problem with this explanation is that having gone through this experience several times in the past (including as recently as the mid-1990s [Michell 1998]), North Korean traders are not gullible: they quickly get out of won in favor of dollars, yen, and yuan. Indeed, even North Koreans working on cooperative farms reportedly prefer trinkets to the local currency as a store of value. As a consequence, these blows, aimed at traders, may fall more squarely on the North Korean masses, especially those in regions and occupations in which opportunities to obtain foreign currencies are limited.

As an economist I am trained to assume rationality, and it is only with reluctance that I propose arguments that presume ignorance. But my personal experience in China suggests one more possible explanation for the North Korean policy. Demand and supply are not quantities or

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digits in 2003. However, the rise in outlays associated with the increase in the procurement price for grain ought to be offset by a similar increase in revenues from the expanded PDS sales.

12. Some observers have seized on a March 2003 North Korean statement that henceforth "farmers' markets" would simply be referred to as "markets," interpreting this as an implicit broadening of the policy changes. Frank (2003) contains an intriguing exegesis on the statement in which he cites North Korean interpretations of the writings of Kim Il-sung to the effect that "farmers' markets" existed in feudal times and that "markets" will come about during the socialist transition to communism when "all consumer goods are sufficiently produced and supplied by the state and when cooperative ownership is turned into all-people ownership"—that is, the North Korean statement could be interpreted as indicating progress toward socialism, not away from it. In turn, this could be regarded either as an indication of disinterest in systemic change or as an attempt to ideologically square the circle, thus justifying contemporary policy changes in terms of acceptable ideological constructs.

points—they are schedules indicating quantities as a function of prices. Market-determined prices are thus a signal of scarcity value reflecting underlying demand and supply. My conversations with Chinese officials in the early to mid-1980s, during the first stage of the marketizing reforms, however, revealed that fundamental misunderstanding of the nature of markets was widespread, especially among older officials who had spent many years in a planned economy.

The North Koreans have indicated that they are trying to unify (or at least reduce the differences between) state prices and farmers' market prices. In a press report, one unnamed official laid out the logic of the price reform: the administered price of rice would be raised to the farmers' market price, but since no one could afford rice at the market price, everyone's nominal wages would be increased commensurately. What this official did not seem to grasp was that the amount of won in circulation was instantly increased by a factor of 10 due to the wage increase, and unless there was an immediate supply response, then the government had effectively caused a 900 percent jump in the price level. And, in fact, the North Koreans have been slow to adjust the state prices in the face of the inflation that predictably materialized in the market.

Again, political considerations increase the plausibility of this argument. North Korea's decline over the past decade has apparently been accompanied by a withering of the KWP and decline in the bureaucracy's capacity to formulate policy. By all reports, a small number of senior officials are devising the economic policy changes being undertaken in North Korea. Moreover, North Korea has a political system in which the political space of discussion and dissent is highly constricted, and the penalties for being on the wrong side of a political dispute can be quite severe. So while the logic of too many won chasing too few goods would seem elementary to those of us raised in market economies, under the circumstances that exist in North Korea, the possibility that economic decisions are being made by people who do not grasp the implications of their actions (or are afraid to voice their reservations and instead engage in preference falsification if they do) should not be dismissed too hastily.

The third component of the North Korean economic policy change is the formation of various sorts of special economic zones. The first such zone was established in the Rajin-Sonbong region in the extreme northeast of the country in 1991. It has proved to be a failure for a variety of reasons including its geographic isolation, poor infrastructure, onerous rules, and interference in enterprise management by party officials. The one major investment has been the establishment of a combination hotel/casino/bank. Given the obvious scope for illicit activity associated with such a horizontally integrated endeavor, the result has been less Hong Kong than Macau North.

The 1998 agreement between North Korea and Hyundai that established the Mt. Kumgang tourism venture also provided for the establishment of an industrial park to be managed and operated by Hyundai. While the tourism project was obviously the centerpiece of the agreement, from the standpoint of revitalizing the North Korean economy, the establishment of the industrial park, which would permit South Korean small and medium-sized enterprises (SMEs) to invest in the North with Hyundai's implicit protection, was actually more important. In the long run, South Korean SMEs will be a natural source of investment and transfer of appropriate technology to the North. However, in the absence of physical or legal infrastructure, they are unlikely to invest. The Hyundai-sponsored park would in effect address both issues. (The *chaebols,* because of their size and political connections, would not be so reliant on formal rules—they could always go to the South Korean government if they encountered trouble in the North.) The subsequent signing of four economic cooperation agreements between the North and South on issues such as taxation and foreign exchange transactions could be regarded as providing the legal infrastructure for economic activity by the politically noninfluential SMEs.

The North Korean government and the South Korean firm then negotiated for 18 months over the location of the zone, with the North Koreans wanting it in Sinuiju, a city of some symbolic political importance in the northwest of the country on the Chinese border, and Hyundai wanting to locate the park in the Haeju district, more easily accessible to South Korea. In the end, it was agreed that the park would be located in Kaesong—a decision that was hailed at the time as reflecting an increased emphasis on economic rationality in North Korea.

The industrial park at Kaesong has not yet fulfilled its promise, however: Hyundai's dissolution forced the South Korean parastatal Korea Land Corporation (KOLAND) to take over the project, and the North Koreans have inexplicably failed to open the necessary transportation links to South Korea on their side of the demilitarized zone (DMZ), though negotiations with the South on this issue continue.

In September 2002, the North Korean government announced the establishment of a special administrative region (SAR) at Sinuiju. In certain respects the location of the new zone was not surprising: the North Koreans had been talking about doing something in the Sinuiju area since 1998. Yet in other respects the announcement was extraordinary. The North Koreans announced that the zone would exist completely outside North Korea's usual legal structures, that it would have its own flag and issue its own passports, and that land could be leased for 50 years. To top it off, the SAR would not be run by a North Korean but instead by a Chinese-born entrepreneur with Dutch citizenship named Yang Bin, who was promptly arrested by the Chinese authorities on tax evasion charges.[13]

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13. Press reports subsequently first touted Park Tae-joon, former South Korean general, head of the government-owned steel company POSCO, and prime minister, and later

More important is whether the SAR will generate any spillovers. In conventional terms this will depend on whether any lessons from the Sinuiju SAR experiment are generalized to the rest of the economy. Although the immediate prospects for the SAR appear dim, the SAR might have a more subtle positive impact if internally it is regarded as giving Kim Jong-il's unimpeachable imprimatur to the reform process. Bureaucrats and factory managers who have been reluctant to get ahead of the leadership may take this as a sign that change is safe. One possible ray of hope in these events was the removal of the less than 50 percent foreign ownership ceiling in joint ventures. Ultimately, the planned industrial park at Kaesong, oriented toward South Korea, may have a bigger impact on the economy than either the Rajin-Sonbong or Sinuiju zones.

The fourth component of the economic plan consisted of passing the hat. In September 2002, during the first-ever meeting between the heads of government of Japan and North Korea, Chairman Kim managed to extract from Prime Minister Junichiro Koizumi a commitment to provide a large financial transfer to North Korea as part of the diplomatic normalization process to settle postcolonial claims, despite the shaky state of Japanese public finances.[14] Each of the leaders then expressed regrets for their countries' respective historical sins and agreed to pursue diplomatic normalization. However, Kim's bald admission that North Korean agents had indeed kidnapped 12 Japanese citizens and that most of the abductees were dead set off a political firestorm in Japan. This revelation, together with the April 2003 admission that North Korea possesses nuclear weapons in contravention to multiple international agreements, has effectively killed the diplomatic rapprochement and with it the prospects of a large capital infusion from Japan, as well as already dim prospects of admission to international financial institutions such as the World Bank and Asian Development Bank.

Eric Hotung, a Hong Kong philanthropist, as Yang's successor. If it ever gets off the ground, it should promote economic integration between North Korea and China, though one should keep in mind that China is a big place and that the most economically dynamic parts are in the southern coastal areas far from North Korea. But the North Korean economy is so far down that even integration with a comparative backwater like Dandong could be a boost.

14. Japanese officials did not deny formulas reported in the press that would put the total value of a multiyear package in the form of grants, subsidized loans, and trade credits at approximately $10 billion. This magnitude is consistent with the size of Japan's 1965 postcolonial settlement with South Korea adjusted for population, inflation, exchange rate changes, and interest forgone (Noland 2000, Manyin 2000). Japan will certainly argue that its food aid and its $1 billion contribution to the Korean Peninsula Energy Development Organization (KEDO) should be counted against this charge. Some have speculated that Japan will even try to claim credit for the costs of recapitalizing bankrupt *Chochongryun*-controlled financial institutions in Japan. In any event, such sums, properly deployed, could go a long way in restoring North Korea's creditworthiness and financing economic modernization.

In connection with these developments, rumors circulated that the North Koreans intended to establish yet another special economic zone on the east coast, to be oriented toward Japan. Discounting the failed zone at Rajin-Sonbong, this would give the North Koreans three special economic enclaves, one oriented toward South Korea, one toward China, and one toward Japan, diversifying their portfolios so to speak. Again, given the centrality of politics to North Korean thinking, they may well envision playing the three against each other. In the long run, however, it is integration with South Korea that will be critical to the development of the North Korean economy.

Gradual Integration

Momentarily setting aside doubts about the long-run viability of these policy changes, suppose they work. What is the implication for economic integration with South Korea? In a formal sense, one can imagine a series of progressively deeper steps of integration that the states could undertake. Perhaps the first, and simplest, would be the formation of a free trade area, freeing trade between the two Koreas but permitting each to restrict trade with third parties according to their own interests. This would be equivalent to the North American Free Trade Agreement (NAFTA) in which trade is unencumbered among the United States, Canada, and Mexico, but each country maintains its own trade policies with respect to nonmembers. Even this first step would appear to be far beyond anything that can be seriously expected in the near term. The next step would be the formation of a customs union that would involve applying a common policy to trade with third parties. This would be akin to the European Economic Community (EEC).

Economic union would be a deeper form of integration, permitting the free movement of factors (labor and capital) as well as goods across borders, as exists in the European Union today. A monetary union would involve the adoption of a single currency, as is in process in some EU member states today.[15] A social union would involve the adoption of common labor and social welfare policies in the two states. The final stage would be political union and the surrender of independent claims on sovereignty.

Cooperation could be expected to yield economic benefits to North Korea in the form of enhanced trade and investment, assistance from South Korea and the multilateral development banks, and settlement of postcolonial claims against Japan. For $2 billion annually, one could fix the North Korean economy sufficiently that it would generate rising living standards. (Whether this would ultimately contribute to political stability

15. See Park and Müller (2001) for a proposal for gradual monetary integration of North and South Korea.

is another issue, though.) Around half of this would be for recurrent flow consumption expenditures, and around half would be for industrial and infrastructural investments that could be self-financed through export revenues, so that the necessary recurrent external financing needs would be around $1 billion annually. This would be a fairly bare-bones rehabilitation effort, though: James Williams, Peter Hayes, and David Von Hippel (1999), for example, estimate that a rural energy rehabilitation program would cost about $2 billion to $3 billion over five years. Their estimated price tag for a more comprehensive economywide program is $20 billion to $50 billion over 20 years. An Iraq-like attempt to nearly instantaneously increase living standards to some happy-ending steady-state path would require Iraq-like infusions of capital.

The most obvious source of funding for revitalization would be aid from South Korea. This, of course, is nothing new—South Korea regularly provides the North with food and fertilizer worth hundreds of millions of dollars and in June 2000 the South Korean government sent $500 million to ensure the consummation of the Pyongyang summit meeting between North Korean leader Kim Jong-il and South Korean President Kim Dae-jung.[16]

The United States is another source of aid. Between 1995 and 2002 North Korea received more than $1 billion in food and energy assistance from the United States, making it in the late 1990s the largest aid recipient in Asia. Even under the George W. Bush administration, assistance has been more than $100 million annually. Presumably these figures would jump if diplomatic tensions could be resolved. Another important source of finance would be the resolution of North Korea's postcolonial claims against Japan as envisioned in the statement of Japanese Prime Minister Koizumi following his September 2002 summit meeting with Kim Jong-il.

Membership in the international financial organizations would be yet another possible source of funding. Pyongyang has periodically expressed interest in joining the International Monetary Fund (IMF), the World Bank, and the Asian Development Bank (ADB), though membership talks have never made much progress, snagging on North Korea's unwillingness to permit the kind of access to economic data and information required for membership in these organizations and diplomatic opposition relating to unresolved political issues.[17] Moreover, in the absence of considerable

16. In September 2003, five government officials and one Hyundai Asan executive were convicted on corruption charges associated with the June 2000 payment. Another Hyundai executive's court decision was postponed pending the outcome of another corruption trial. Hyundai Asan Chairman Chung Mong-hun, under indictment for illegally channeling money to the North, committed suicide in August 2003. There have been unproven allegations of other illicit payments to North Korea to induce participation in other bilateral meetings.

17. In the case of Japan, these concerns have revolved around the abductees issue. In the case of the United States, the US executive directors at the development banks would be

reorientation in North Korea's domestic economic policies, it would be unlikely that the multilateral development banks would make significant loans even if North Korea did become a member. Technical advice and assistance would really be more important than direct lending activities, which would ultimately only complement the activities of private investors. However, assuming that all these issues were resolved, working from the case of Vietnam (another Asian transitional economy where the government undertook rapid economic reforms) and scaling down the multilateral development banks' lending program for the smaller size of the North Korean population, one obtains lending on a scale of $150 million to $250 million annually.[18] Bank staff have also expressed the view privately that an independent, poor North Korea would probably be able to access more lending than a unified middle-income Korea.

A final source of public funding could be a revision/renegotiation/extension of the 1994 Agreed Framework between the United States and North Korea, under which a multinational consortia, largely funded by South Korea and Japan, agreed to build the North Koreans two nuclear reactors. Given the state of North Korea's infrastructure, the investment of billions of dollars in two nuclear reactors would be daft—the reactors could not be safely operated without rehabilitating North Korea's creaky electrical power grid, and in any event, the money could be better used on alternative investments. Scrapping the costly light water reactors and instead building more cost-effective electrical generating systems, refurbishing the existing electrical grid, and building the necessary infrastructure would allow North Korea to export electricity to South Korea and China and export other products globally, thereby earning foreign exchange (Von Hippel and Hayes 1998).

At the same time, to obtain these benefits, North Korea would have to forgo its current revenues from exportation of medium-range missiles and weapons of mass destruction, drug trafficking, and counterfeiting, which may run as high as $1 billion annually. Furthermore, North Korea would have to settle private claims arising from past international loan defaults, were it to reenter international capital markets.

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legally prohibited from voting in favor of extending loans to North Korea until it was removed from the list of countries engaging in state-sponsored terrorism. See Noland (2002a) for discussion.

18. It is possible that under some circumstances, North Korea could obtain international financial institution loans even if it were not a member. For example, the World Bank maintains a special program for peace and sustainable development in the Middle East through which it makes loans in the areas controlled by the Palestinian Authority. It also has adopted a policy that allows it to assist countries that are emerging from crises even though they are not members in good standing of the Bank. This policy was adopted after the Bank was precluded from lending to Cambodia because of a debt arrearage problem. The key attributes in these cases appear to be a cooperative recipient government and strong support from major Bank shareholders.

In sum, if there were sufficient reduction in external tensions and internal policy reform, North Korea would face a fairly supportive international environment. What might be the effect of North Korean economic reform on the North and the South?

Even in today's relatively tense diplomatic environment, North Korea's incessant claims that the United States is out to "stifle" it ring hollow, as the primary constraints on North Korean development are self-imposed.[19] North Korea is probably the world's most distorted economy. Fundamental reform would have two profound effects: First, there would be a significant increase in exposure to international trade and investment.[20] Second, changes in the composition of output could be tremendous, involving literally millions of workers changing employment (Noland 2000, chapter 7; Noland, Robinson, and Wang 2000a).[21] Both developments could be expected to have enormous political implications, and as a consequence the rapidity by which reform was introduced would be affected by the resemblance of the reform-implementing government to the regime currently in power and hence reflect existing power configurations. A transition under Kim Jong-il would presumably yield relatively hesitant piecemeal changes, while an authoritarian government that came to power after some period of political turbulence might owe less to incumbent interest groups and might have more leeway to break with the status quo. Given the extraordinary degree of militarization of North Korean society, a reduction in diplomatic tensions accompanied by a major demobilization of conventional forces would yield a large peace dividend.

From a North Korean perspective, qualitatively similar results would be obtained if it liberalized preferentially and formed a customs union with South Korea (Noland, Robinson, and Liu 1999; Noland, Robinson, and Wang 2000b). Trade with both South Korea and the rest of the world

19. To cite one example, North Korea chronically fails to fill its Multi-Fiber Arrangement quotas on textile and apparel exports, even in markets such as Japan and the European Union where it has never faced politically determined constraints. Indeed, it was precisely this situation that generated transshipping activity by producers from quota-constrained countries attempting to circumvent the quota constraints.

20. North Korea does encounter the problem that it does not have normal trade relations (also known as most favored nation status) in trade with the United States. As a consequence, it faces very high tariff barriers in some sectors such as apparel in which it might have comparative advantage. North Korea could establish Normal Trade Relations as part of a process of political normalization under this reform scenario.

21. Even in the case of large financial inflows from abroad, which would drive up the real exchange rate, the traded-goods sector of North Korea would expand relative to the base. The rate of return on capital would rise, as would real wages for all classes of labor, with the largest increases experienced by the highly skilled. Assuming that the highly skilled would emerge as the predominant owners of capital, these effects would imply an increase in income and wealth inequality in North Korea (though this would occur in the context of a dramatic reduction in poverty).

would increase, and, from the standpoint of the whole peninsula, the customs union would be strongly trade creating. In the customs union scenario, integration with the North would have a modest positive impact on South Korea. Trade with North Korea would mostly substitute for trade with other countries and, given the small size of North Korea relative to South Korea, trade creation and diversion would have a trivial impact on South Korea. The distributional implications would be minor, and according to the model, formation of a customs union would be Pareto-improving.

The risks for South Korea of this engagement strategy are not the ones that would create symmetric dependency as is sometimes alleged. The disparity in the relative economic impact would be reinforced by disparity in political and social impacts as well. The process of economic integration would create highly asymmetric dependency in favor of the South. The real threat to the South of economic integration lies elsewhere. The South Korean economy has real problems with nontransparent and corrupt government-business relations. In the North, there is no real difference between the state and the economy. Any large-scale economic integration between the North and the South will be by its very nature a highly politicized process and will in all likelihood retard progress in cleaning up business-government relations in the South. The corruption scandals involving the Blue House and the Korean Development Bank with respect to Hyundai Asan's activities in the North are exhibit A in this regard. This does not have to be: There are ways, through the tax code for example, to encourage South Korean economic integration with North Korea in a transparent and relatively efficient manner. Such an approach would have the added benefit of encouraging learning and adaptation to actual market-based economics in the North, while weaning it from politicized aid-seeking. But these approaches have not been tried by Seoul.

Furthermore, while the reform scenario appears relatively attainable, there is no guarantee that such an outcome will be obtained. Up to this point, the global community's approach to dealing with the North has been aid-centric in practice if not in name. A fundamental question is whether aid is likely to encourage or impede the transformation of the Kim family regime?

There is a large economic literature on the fungibility of aid, its impact on policy, and its impact on growth. The message of this literature is that aid tends to be fungible and simply supports government consumption according to the pre-existing preferences of the recipient governments. (Even in the specific case of humanitarian food aid provided in-kind to North Korea, one effect has been to crowd out food imports on commercial terms, acting as implicit balance-of-payments support [Noland 2003a].) There is also little evidence that aid buys policy reform by the recipient government, rather it may alleviate financial pressures to reform and instead weaken accountability and encourage temporizing behavior. For these reasons there is virtually no evidence to support the general proposition that aid promotes growth, and its efficacy even in countries with good policies is now in doubt (Easterly, Levine, and Roodman 2003).[22]

This reinforces the previously obtained econometric result that aid contributes to political stability independent of growth by increasing resources available for regime maintenance. In essence, aid is a pure rent to the incumbent who can dole it out with the sole object of maintaining his incumbency. Indeed, recent research suggests that aid may actually undermine the quality of governance by encouraging corruption in the public sector and diversion in the private sector of scarce human resources from productive activities into rent-seeking. Anecdotal evidence of growing social differentiation in North Korea, in part due to the misappropriation of aid for private purposes, is consistent with this view. Even in the case of in-kind humanitarian food assistance provided to North Korea, the provision of this aid conveys enormous rents, and there are widespread though admittedly unproven claims that aid shipments have been diverted into the market by rent-seeking apparatchiks.

North Korea currently receives considerable aid from South Korea, China, the United States, and other members of the international community, unconditioned on economic policy. (If there is any conditionality at all, it relates to foreign policy issues, particularly bilateral political relations between North and South Korea and the North Korean nuclear program [Noland 2000, table 5.3].) It is possible that the government of North Korea might use these capital inflows to promote economic reform. The initiation of economic policy changes in July 2002 demonstrates an intention to improve the efficiency of the economy, if not fundamentally alter its workings. Yet in terms of the structure of its economy, the relatively industrialized North Korea more closely resembles Romania, Belarus, and some other Eastern European countries than the relatively agrarian China or Vietnam at the time that they initiated their reforms (Noland 2000, table 3.7). The restructuring of industrial enterprises in North Korea is likely to create losers, at least in the short run, and as in the case of Eastern Europe, political opposition to reform. The counterargument is that the North Korean economy has sunk so far that incumbent firms, workers, and politicians will accept any reform as potentially welfare enhancing, and there is almost surely some truth to this observation. In this context, a reformist government might use aid inflows to

22. See, for example, Pack and Pack (1990, 1993) and associated citations on fungibility. On the apparent inability of aid to induce policy change, see Burnside and Dollar (1997) and Dollar and Svensson (2000); and on aid's potentially detrimental effects on governance, see Knack (2000) and Svensson (2000). Svensson (1999) finds that the long-run growth-promoting effect of aid is conditional on political rights. Needless to say, those are in short supply in North Korea.

pacify a potentially restive population during a painful transitional period of restructuring. So there is a case to be made that a reformist North Korean government could put aid inflows to good use.

However, such behavior, objectively speaking, would be highly unusual. Rather than using aid to ease painful transitions, most governments use aid to temporize and avoid implementing policy changes. When aid is used to support reform, it is often in the context of a new, sometimes democratic, government trying to make a break with the past, not a half-century-old regime under an incumbent leader. And it goes without saying that while the North Korean government did initiate policy changes in July 2002, they have been a mixed bag, possibly reflecting some serious misunderstandings of the workings of markets. While the government has introduced new slogans extolling efficiency improvements, it continues to proclaim "military-first" politics incessantly and has a history of hesitant and timid responses in the economic policy arena. This is simply to say that while engagement on market terms may indeed encourage learning and evolutionary change, in the specific case at hand, the odds are that the provision of aid will retard constructive change, not promote it. The result may be something closer to "muddling through" than the aggressive opening and reconciliation envisioned in "cooperative engagement."

For that matter, even the most adroitly implemented engagement policies cannot guarantee the hoped-for outcome of peaceful evolutionary change in the regime. The extraordinary politicization of life in North Korea implies that a change in political relations cannot be limited to a relatively discrete sphere—instead political change would have a comprehensive impact on virtually all aspects of social life. This condition would appear to portend difficulty in establishing a sustainable alternate polity. In short, the "cooperative engagement" scenario of the previous chapter may not be in the cards.

"Radical" Integration

Suppose that North Korea was not able to manage a gradual political transition successfully. Although North Korea today does not appear to embody the characteristics of a prerevolutionary society, nonrevolutionary transitions out of communism are problematic, and the divided-nation aspect of the Korean peninsula presumably would create difficult legitimization issues for any post-*juche* regime. The "collapsists" may not be alone in their unfulfilled dreams: the expectation that the two parts of the Korean peninsula will unify through a gradual, consensual, and protracted process of integration lasting generations, the official position of both Korean governments, would appear to be in large part based on wishful thinking.

The most likely outcome of an abrupt political transition in North Korea would be its eventual absorption into South Korea and its disappearance as an independent state. This is not the only possible outcome, to be sure. The most frightening possibilities would include a forcible unification attempt or a civil war in which one or more factions appealed for external assistance, potentially drawing South Korea, the United States, and China into military activities. Nevertheless, the peaceful collapse and absorption scenario is useful for illustrating some alternative conceptions of the economic precursors to unification as well as to its effects—even if continued muddling through under Kim Jong-il or some successor is a more likely outcome.

The relatively cheap gradual reform scenario depends on the stability of the North Korean state and the consequent ability to maintain enormously different levels of income across the two parts of the Korean peninsula. Specifically it depends on factor markets in the two parts of the peninsula not being allowed to integrate. A collapse would set in motion economic and political forces that would make the maintenance of such enormous disparities difficult, if not impossible, to sustain for any protracted period of time.

On the basic comparisons, the prospective Korean case does look worse than the case of Germany to which it is usually compared: In relation to South Korea, North Korea is larger and poorer than East Germany was in comparison with West Germany. The one criterion in which the Korean case comes out ahead is demographics: North Korea has a younger population than East Germany and young North Koreans are presumably more risk-taking and adaptable than middle-aged East Germans. Moreover, with a younger population, the existing educational and training institutions can play a central role in preparing the new democratic, market-oriented society.

Yet the relatively larger, poorer, and younger population of North Korea all points to migration as being a potentially more important issue in the Korean case than in the German case. The government would face rising expectations among the populace of the North and a desire to migrate south in search of better lives. It is possible, though unlikely, that the government could use the DMZ as a method of population influx control for an extended period of time while conditions in the North slowly improved. Rather, the political imperative would be to improve conditions in the North rapidly.

The conventional wisdom that the fundamental German policy error was in overvaluing the East German mark at the time of monetary union is wrong and obscures more important lessons of how to manage institutions during a transition. A more careful analysis suggests that it was wage policies—a product of German institutions and political incentives—not the exchange rate that priced East German labor out of the market. Moreover, misguided labor-market policies were compounded by mistakes regarding privatization and restitution policies, as well as competition (antitrust) policies, all of which combined to greatly reduce the demand for goods produced in East Germany.[23] However, even under a relatively optimistic scenario of moderate, controlled, cross-border migration, and rapid convergence in North Korea toward South Korean levels of productivity, bringing the level of income in North Korea to half that of the South would require a decade and hundreds of billions of dollars of investment—and, contingent on the amount of investment that could be financed from abroad, internal transfers similar in relative magnitude to the German case (Noland, Robinson, and Liu 1998; Noland, Robinson, and Wang 2000b; Funke and Strulik 2002). Of course the status quo already embodies transfers—South Korea is providing North Korea with hundreds of millions of dollars annually; the difference is that this assistance is provided unconditionally and presumably used for regime maintenance and not social welfare.

A key variable affecting virtually every issue of interest would be the magnitude of cross-border labor migration from the North to the South. Migration would act as a substitute for capital transfer. The more labor were allowed to migrate, the lower the amount of capital investment necessary to reconstruct the North Korean economy. If no investment were undertaken and North Koreans were able to freely move south, North Korea would be virtually depopulated before differences in income levels were sufficiently narrowed to choke off the incentive to migrate. Conversely, if incomes in North Korea were raised solely by infusions of capital investment, the amount needed to choke off the incentive to migrate could be as high as $1 trillion, out of reach of the South Korean taxpayer. Presumably, neither of these outcomes is acceptable to South Korea, so the real issue is the form of an intermediate solution that would involve a combination of cross-border movements in both labor and capital.

Several key factors will determine the macroeconomic impact on the South Korean economy of a collapse and absorption of North Korea along the lines of the German experience:

- What efficiency gains are possible in North Korea simply through marketization and the removal of self-imposed distortions—without any additional resources?
- How fast can North Korea absorb new technology?
- How much labor will be permitted to migrate from the North to the South?

23. See Sinn and Sinn (1996), Watrin (1998), Wolf (1998), Noland (2000, chapter 8), and references therein for more extensive discussions of the German “lessons” for Korea.

- How much capital will be invested in the North? How much will come from the South and how much from other parties? Will this capital be invested on market or concessional terms?

Depending on how these factors are parameterized, one can come to a variety of conclusions about the impact of collapse on the South. Choosing a plausible and prudent set of parameters, the models suggest that over the course of a decade, the collapse and absorption scenario would yield the following results:

- A mild slowing of the South Korean growth rate, a rapid acceleration of the North Korean growth rate, and an increase in peninsular output relative to the no-collapse scenario (Noland, Robinson, and Wang 2000b; Funke and Strulik 2002).
- Within South Korea a shifting of income from labor to capital, and within labor, from relatively low-skilled to relatively high-skilled labor. If one assumes that capital is predominantly owned by high-skilled labor, then this suggests that the process will be accompanied by increased income and wealth inequality in South Korea (Noland, Robinson, and Liu 1998; Noland, Robinson, and Wang 2000b).
- Across the various sectors of the South Korean economy, there would be a tendency for sectors such as construction to expand, while the internationally traded goods sectors would be disadvantaged (Noland, Robinson, and Liu 1998; Noland, Robinson, and Wang 2000b).
- There would be a modest peace dividend in the South and a huge peace dividend in the North (Noland, Robinson, and Wang 2000b).

In sum, while collapse and absorption would negatively impact the South relative to a no-collapse scenario, the effect is relatively modest, and a South Korean government committed to cushioning the impact on the poorest parts of South Korean society could do so through the adoption of appropriate policies.

Put crudely, in the collapse and absorption scenario, the economics come down to the movement of Southern money north or the movement of Northerners south. The policies that are ultimately adopted will be a function of politics. A number of cleavages are possible: between the North and the South, and within South Korea between capital and labor (owners of capital viewing Northerners as a new source of cheap labor, and labor regarding the North as a potential source of labor-market competition). Cleavages within the South Korean labor force, between high-skilled and low-skilled workers, could also occur. Depending on the macroeconomic policies applied, the internationally traded and nontraded goods sectors could be affected in very different ways, opening up another cleavage.

In the event of collapse and absorption, a whole host of unification issues (conversion rate of North Korean won to South Korean won, assignment of property rights, etc.) have enormous implications for the economic welfare of current residents of North Korea. The extent to which they are afforded a voice in politics will be a critical aspect of the unification process. Effective participation by Northerners would appear to rule out some policies, such as proposals to maintain the DMZ and administer North Korea as a special administrative zone, which would prevent the equilibration of wages and rates of return on capital between the North and the South, or proposals for the South Korean government to retain rights to all assets in the North.[24] Conversely, policies that would deny to Northerners gains from the unification process would only be sustainable if their participation in democratic politics were circumscribed. Thus a key economic issue is the extent to which the North Koreans would be full participants in the political system of a unified Korea.

The question then arises: What, if anything, can South Korea, the United States, and others do to prepare for such a contingency? South Korea's need to prepare for the contingencies of unification with North Korea and its need to strengthen its financial system in the wake of its own financial crisis coincide. In the event of unification, there is absolutely no reason to finance the construction of infrastructure out of current tax receipts. Instead, the government will want to use both taxes and bonds to finance unification expenditures. Hence the development of a robust government bond market prior to unification should be a priority. A second consideration runs in the opposite direction: having surmounted the 1997–98 financial crisis, South Korea will want to return to a policy of fiscal rectitude and salt away some reserves for this potential rainy day. A strong government financial position would both allow it scope for immediate expenditures in the event as well as facilitate the issuance of "unification bonds." As a consequence, the South Korean government needs to develop benchmark bonds, even if they are unnecessary, strictly speaking. Some observers have ascribed current Korea Development Bank borrowing in international markets to this motivation.

At the moment of collapse in this scenario, there will be a critical need for close coordination among the militaries of the United States, South Korea, and China, since presumably they will be central to maintaining order, handling refugee flows, etc. This cannot be overemphasized, though further discussion is really beyond the scope of this policy analysis. Once the situation on the ground has stabilized, longer-run political and economic policies come to the fore. As indicated earlier, there is an extensive literature on the lessons for Korea from German unification, and the South Korean government has devoted considerable resources to studying this topic.

24. See Young, Lee, and Zang (1998) for a proposal along these lines.

At the time of unification, the South Korean government will have multiple (and potentially conflicting) policy objectives. On the one hand, maintenance of economic activity in the North on market-consistent terms will be the top priority. At the same time, the government should seek to effect a one-time-only wealth transfer to the current North Korean population since they will have to adjust to market institutions with virtually no household wealth. One can imagine a multipronged approach:

- Adopt dual-rate monetary conversion. Aim for slight undervaluation of the North Korean won to maintain competitiveness, thereby making North Korea an attractive location for investment. Convert personal saving at an overvalued rate (effecting a wealth transfer).
- Deed land to the tiller and the housing stock to its occupants, contingent on maintained use for some specified period of time.
- Maintain some kind of temporary, emergency, nonmarket social safety net in the North.[25]

Having given the land to the tiller, one must confront the issue of property rights claims by past owners or their descendants and the more general issue of assignment of property rights to commercial or industrial assets. Lessons learned from the experience of Germany and other former centrally planned economies (CPEs) are instructive in this regard:

- Avoid the policy of restitution for seized assets. Monetary compensation for seized assets might be considered, though even some South Korean analysts have argued that this would be a mistake.
- Privatize quickly and avoid the cash-on-the-barrelhead model. Abolish interenterprise debts.
- Emphasize investment, not consumption, transfers.
- Accept assistance from foreigners, including the Japanese.

With respect to privatization, the experience of East Germany and other CPEs suggests that it would be best to move quickly and avoid the cash-in-advance model, since it would severely restrict potential buyers. Attempts to restructure these enterprises before privatization should also be avoided. That is better left to the market. Interfirm debts, which are a legacy of irrational policies under the centrally planned regime, should be written off. Debt-equity swaps could be used to pay off external debt and at the same time create stakes in the viability of North Korean enterprises for South Korean or foreign firms.

25. These policy recommendations are discussed in greater detail in Noland (2000).

Given these considerations, there appears to be one institution in South Korea ideally suited for the task of making North Korea competitive: the *chaebol*. Unfortunately, one policy goal (to get the North Korean economy functioning as rapidly as possible) and another policy goal (to clean up business-government relations in South Korea) would conflict. It goes without saying which one will receive the greater weight. The *chaebol* are probably ideally suited for refurbishing the North Korean economy. However, saddling them with unproductive North Korean enterprises would have an economic price (in terms of reducing *chaebol* competitiveness internationally and possibly encouraging anticompetitive behavior domestically) as well as a political one (in the form of the quid pro quos that the *chaebol* could be expected to extract).

With respect to the other actors, many of the policies that one would want to see in place in the case of collapse (North Korean involvement with the international financial institutions, for example) are really not contingent on collapse. Since in the case of collapse one would want to see the multilateral development banks involved as quickly as possible, it would make sense to get them involved and develop some country-specific knowledge and expertise prior to the event.

A big money issue in any scenario will be how to settle postcolonial claims against Japan, which could involve financial transfers on the order of $10 billion. If this were not done before collapse, it would be essential that Japan and the government of Korea quickly reach an accord so that funds could begin flowing as soon as possible.