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Comments Welcome

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What Can North Korea Learn from China's Market Reforms?

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1. Introduction

The Democratic People's Republic of Korea (whose name, by the way, involves a double redundancy) has an advantage over all the other planned economies apart from Cuba. Being a late starter in reform, it can learn from others' mistakes and successes. Kim Jong Il, once called the "Dear Leader," but now having attained the apparently loftier status of "Great Leader Comrade," has complained that, "Many countries which had long fought shoulder to shoulder with us in the push for socialism and Communism are now collaborating with the imperialists and averting their eyes from us" (Schell, 1996, p.64). Contrary as it is to its long-standing policy of self-reliance, however, North Korea has much to gain from opening its eyes to how its former comrades are prospering by "collaborating with the imperialists." In this paper I try to extract some lessons for North Korea from China's experience in reforming its microeconomy.

The North Korean government itself appears to believe it can learn from China. It introduced some timid reforms in the mid-1980s, giving state-owned firms some internal incentives and permitting highly restricted production of consumer goods by nonstate firms, which appear to be watered down versions of some of China's reforms. Reportedly (Kang and Lee, 1992) these changes followed a visit to China by Kim Il Sung and Kim Jong Il.

Measured by growth rates, China is the outstanding success among all the transition economies: growth has averaged about 10 percent a year for more than a decade and a half. China achieved this remarkable growth in part because its pre-reform conditions were conducive to reform. Its large, labor-intensive, inefficient agricultural sector offered quick returns to straightforward reforms. With its relatively young population the problems of supporting the nonworking aged are less than in countries like Hungary. China's economy was relatively decentralized, by the standards of the planned economies, which meant that the provinces were able to follow policies that were somewhat independent of the center, and, unlike in Russia, there were no huge nationwide monopolies to impede reform. But China's growth was not merely the consequence of advantageous initial conditions. Success came because China chose reform policies that, by a combination of luck, improvisation, and good management, were well designed. These policies involved gradual reform rather than shock therapy. Though gradual, China's reforms have been deep, creating a competitive market economy.

2. Limits to China's Lessons for North Korea

Despite the success of its economic reforms, China is not a model for North Korea or any other reforming country to copy. Even putting aside China's deplorable record in human rights and political freedoms, we can question some of its policies in the purely economic sphere. Several aspects of the economic reforms were misconceived. The reforms were marked by significant policy errors and backtracking. While China's gradualist approach to economic reform has been vindicated by its results, even a supporter of gradualism can argue that they were too gradual, and that China should have moved more quickly from partial to complete price liberalization and more aggressively on privatizing its state-owned enterprises. Much can be learned from China; but there is no case for simply mimicking its reform policies.

The scope for lessons for North Korea from China is limited, moreover, if North Korea's economic reforms are accompanied by reunification with South Korea. If it is simultaneous with reunification, the transition in North Korea will be fundamentally different from that in China, or in any other transition country other than east Germany. Unification-based transition means that market institutions--such as commercial laws and the means to enforce them, financial intermediaries, etc.--can be imported instead of having to be built from scratch. Building the institutions needed to support markets is one of the most difficult and slowest tasks of transition (McMillan, 1996). To the extent that North Korea gets these institutions for free, its transition will have a shorter distance to travel than China's, and so the reformers' task will be easier.

One particular kind of market that is crucial for making large-scale industrial firms operate efficiently is the managerial labor market. Evidence from China and other transition economies (summarized in McMillan, 1996) indicates that attempts to improve state-owned or privatized enterprises often fail unless new, competent managers are installed as part of the restructuring. Where do good managers come from? Managers must receive training, and there must be mechanisms to locate and identify able managers (Spence, 1974). While China achieved success in finding commercially-oriented managers and replacing the old-style managers of the state-owned enterprises (Groves et al., 1995), the search was limited to home-grown managers. Joint ventures with foreign firms have resulted in improvements in the management of state-owned enterprises (Nee and Su, 1996; Qian and Stiglitx, 1996), though only a minority of state firms have entered joint ventures.

Korean unification, by contrast, would give North Korean firms immediate access to the south's pool of managerial talent. In east Germany's unification-based privatization, most enterprises were purchased by west German firms, which then usually put their own personnel in charge, resulting in a massive transfer of managers from west to east Germany (Dyck, 1994). East Germany's transition has therefore faced fewer impediments than that of the other east European and former Soviet countries, where the lack of qualified managers has put a brake on the restructuring of state-owned or privatized enterprises. In those countries, according to Carlin et al. (1994), foreign takeovers of state enterprises have been the most effective route to changing the behavior of firms, because foreign ownership usually results in the incumbent managers being replaced or supplemented by foreigners. Because of the small number of foreign takeovers in those countries, however, relatively few firms have been improved by this route.

The same comparison applies to physical capital as well as human capital. East Germany's unification-based transition has seen a large amount of "foreign"--that is, west German--investment in its formerly state-owned firms, whereas the other east European and former Soviet countries have received relatively little investment inflow (Sinn and Weichenrieder, 1996). China, also, has benefited from foreign investment, but the amount of foreign investment has been too small relative to domestic investment to account for most of China's growth (Naughton, 1994). If North Korea follows unification-based economic reform, it will, like east Germany, receive an unusually large amount of investment from outside. With the influx of both investment and managers from the south that would result from unification-based transition, North Korea would be unusually well-placed to restructure its state-owned enterprises.

A further way in which a North Korean unification-based transition would differ from China's transition--though in this case making the Korean reformers' job harder rather than easier--is in the possibility of large-scale movements of people from north to south. Considerable labor mobility inside China was initiated by the reforms: perhaps 60 to 80 million people (100 million by some estimates) are moving around China in search of better jobs. The income differentials, among the different regions of China and between the cities and the countryside, that have spurred this vast migration are tiny, however, compared with the income differential between North and South Korea. North Korea's per capita income, according to a South Korean government estimate, is less than one-tenth of South Korea's: US$957 in the north compared with US$10,076 in the south in 1995.[1] This reflects the vast differences in capital per worker between north and south. It will take a long time and a huge amount of investment before the north's labor productivity and wage rates catch up with

[1] The per capita income estimates are reported in "North Korea: State of Decline," *Korea Money* September 1996, p.48. The standard-of-living difference is magnified by military spending: 27.4 percent of the north's GDP went to the military in 1993, compared with only 3.5 percent of the south's GDP: Korean Overseas Information Service (1995, pp.52-53).

the south's.[2] Migration from north to south on a massive scale, causing considerable social dislocation, can be expected to occur unless reunification is carefully managed.

One solution would be for the border between south and north to remain for several years during the transition. Such a Draconian solution, however, would seem to be inconsistent with the principles of a free society and with the Korean people's aspirations for social and cultural unity.

Another possibility is to adopt the German solution, under which, at the start of the transition, wages in the east were artificially raised closer to western levels. Historical differences between Korea and Germany limit the applicability of the German experience to Korea; but on the narrow economic question of how people respond to wage differentials, there is something to be learned from Germany. Between January and October 1990, the average industrial wage in east Germany rose 44 percent (Akerlof et al., 1991). Germany found this high-wage policy costly to implement. Because wages were driven well above labor productivity, firms could not profitably employ many of their workers; unemployment and recession followed. As Akerlof et al. (1991) point out, the high-wage policy can backfire, in that the unemployment it generates itself spurs people to migrate. Germany's problems persisted. In 1996, productivity in east Germany is still significantly below wages. Despite having received DM700 billion in transfers from the west in the six years since unification, the east in 1996 has only half as much capital per head of population as the west, so productivity continues to lag behind the west. Output in eastern Germany

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[2] According to an estimate by Marcus Noland of the Institute for International Economics (quoted in the *New York Times*, Sept. 19 1996, p.C18), it would take $500 billion to $750 billion of investment over 20 to 25 years to raise North Korea's per capita income to South Korea's 1996 level.

amounts to only about two-thirds of consumption.[3] In Korea, wage equalization would be still more costly to implement than it was in Germany, because the gap between the north's and the south's standards of living is wider than existed between the two Germanies. Setting wages artificially high creates more problems than it solves: it does not seem to be the appropriate policy response to the prospect of migration from North Korea. (A bizarre precedent exists for raising North Korean wages by decree. To celebrate Kim Jong Il's February 1992 birthday, according to Collins (1993, p.240), all workers received a 43.4 percent wage increase.)

A third solution to the migration problem, which Sinn and Sinn (1992) say should have been adopted in east Germany instead of raising wage levels, would be to encourage North Korean citizens to remain in the north by offering them not higher wages but ownership rights. North Koreans could perhaps be given shares in state-owned firms, or be given title to the houses in which they live. It is easy to imagine that the prospect of owning a house or an apartment would be a persuasive inducement for the typical North Korean to stay in his or her home town. Heavy migration to the cities from the South Korean countryside has caused a chronic shortage of housing in South Korea,[4] so migrants from the north would find it difficult to get accommodation. Offering ownership rights to places of residence might, for this reason, work well in holding the population in the north. Giving capital to North Koreans avoids the distortions involved in raising northern wages above productivity, and so is a better way of discouraging excessive migration.

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[3] These data on Germany come from official German sources, quoted in Peter Norman, "Across the German Divide," *Financial Times* August 1 1996, p.9.

[4] Korean Overseas Information Service (1995, p.78).

If North Korea were to introduce deep reforms, several years in advance of unification so that the reforms had time to become effective, the temptation for people to migrate south would be reduced and unification would be less costly.

The wage-differential problem is part of a broader sense in which a North Korean unification-based transition would be different from other countries' transitions. It was not unduly difficult for the Chinese government to control the pace of transition, so as to ensure the reforms were gradual. Under unification-based transition, in contrast, the default option is big-bang reform. Just as nature abhors a vacuum, markets abhor price differentials. To the extent that possibilities for arbitrage--buying cheap and selling dear--are formed by any price differences between north and south, profit-seekers will tend to eliminate the differences following unification. If a unified Korean government wished to pursue Chinese-style gradualist reforms, which would necessarily entail price differentials between north and south persisting for several years, it would have to find ways to resist the natural tendency of markets to equalize prices.

Three possible scenarios describe North Korean economic reform. It could occur without reunification; with controlled unification; or with rapid unification resulting from North Korea's collapse. The lessons from China apply in all three scenarios. These lessons are more limited in the rapid-unification scenario, however, because the Korean policy-makers would face the additional constraint, not faced by China, that the law of one price would rule between the north and the south.

3. China's Reform Path

This section offers a brief and necessarily superficial summary of China's microeconomic reforms. The key ingredients of China's reforms were:

- the break-up of agricultural communes into individual farms;
- massive entry by new nonstate industrial firms;
- new incentives for state-owned enterprises
- price reform via a dual-price system.[5]

Agricultural reform achieved quick success. In the communes, the link between individual effort and reward had been tenuous. The reforms enacted from 1979 through the early 1980s gave each peasant family a long-term lease of a plot of land. The household must deliver a certain quota to the government each year, and it may sell to the government or on free markets anything produced beyond the quota. A household's income therefore depends directly on that household's efforts, and this has resulted in big increases in the production of food. Agricultural output increased by 67% between 1978 and 1985. In part this was caused by an increase in inputs. But mainly it was due to the strengthened incentives: productivity increased by nearly 50%, compared with no increase in productivity over the previous two and a half decades under communism (McMillan, Whalley, and Zhu, 1989).

Entry of new firms has been perhaps the most striking feature of China's transition. Although in the first few years of reform they were little noticed, the nonstate industrial firms grew remarkably quickly (their output grew by 25 percent each year in 1985-1991, according to Whiting, 1994), and twelve years into the reforms were producing half of industrial output. This entrepreneurial

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[5] This section is drawn from McMillan (1995). The best detailed account of China's reform path is in Naughton (1995); see also Naughton (in this volume) for more on China's reforms.

activity occurred despite the impediments of little law of contract, weak property rights, and underdeveloped capital markets. Scope for highly profitable entry existed because of the many market niches left unfilled by the state firms under the old planning system, and because of the misaligned prices that planning had imposed.

The new nonstate firms have a novel organizational structure. Most are not private firms. To anyone schooled in Western--or, for that matter, Japanese--concepts of corporate control, these firms look strange. Located in rural areas, they are run by village governments (and so are called township and village enterprises). They have few of the usual instruments of corporate control: no stockholder controls, and no threat of takeover (although there is some bank oversight). On a priori grounds, these firms simply should not work. But they not only function, but function efficiently (Byrd and Lin, 1990). The village-owned firms have been the main source of China's dynamism under reform.

China's state-owned industry, while shrinking relative to the rest of the economy because of the rapid growth of the nonstate sector, has itself achieved respectable productivity gains. This has been the result of liberalization measures that fall far short of privatization. Initially highly inefficient, these firms have increased their output under the reforms by over 7 percent annually. Most of this output increase is due to improved productivity, which has risen at an annual rate of over 4 percent.[6]

The productivity increase was a response to a range of incentives offered to the state firms (Groves et. al., 1994, 1995; Jefferson and Rawski, 1994). The government allowed firms to retain some of their profits, according to a

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[6] State-firm productivity growth has been estimated, using various different data sets but obtaining similar productivity-growth estimates, by Chen et. al. (1988), Dollar (1990), Gordon and Li (1989), Groves et. al. (1994, 1996), and Li (1994). One study, by Woo et al. (1993), claims productivity growth to be small, but this is hard to reconcile with the large increases in the state firms' output that have occurred. For a review of this literature, see Jefferson and Rawski (1994).

contractually specified formula. In some cases a firm now has to deliver a fixed amount of profit, and can keep any extra profit, so the firm has full marginal incentives. The retained profits are used to fund worker bonuses, benefits such as housing and health care, and investment in new plant and equipment. Managers are now given monetary rewards explicitly based on their firm's performance. Sometimes they had to post a personal bond, to be forfeited if the firm failed to meet its profit target. Managers obtained autonomy: the right to decide what to produce, how much to produce, and how to produce it was shifted from the state to the enterprise. Managers were permitted to pay workers bonuses and to hire some workers on fixed-term contracts. China's state firms in the 1980s reinvested 40 percent of their retained profits, presumably reflecting the managers' perception that they would eventually be rewarded for rebuilding the firms.

New methods of appointing managers were introduced. One extreme method, implemented occasionally, was to put managerial jobs up for auction, with bids being promises of future profits to be delivered, these promises being backed up by a bond posted by the manager. There was considerable managerial turnover (in a sample of state-owned firms, 90 percent changed their top manager during 1980-89), and as a result better managers were appointed than the Communist Party officials who used to run these firms.

In addition to, and reinforcing, these incentives directly imposed by the state, the reforms faced the state-owned firms with greatly increased product-market competition, as discussed below, providing a further impetus to improving productivity.

Some state-owned firms are a perpetual drain on the state budget through the subsidies they receive (although, contrary to what is often asserted, the chronic loss-makers are a minority among state-owned firms; there is a larger number of state-owned firms that deliver more funds to the state, in remitted profits and taxes, than they receive in subsidies, as Morris and Liu, 1993, show). The state-owned firms are still a long way from being efficient capitalist firms. Because of their strengthened incentives and improved organization, however, they are much less inefficient than they used to be, and have contributed to China's overall growth under reform.

The Chinese government introduced price reform via a dual-price system. Before the reforms, state-owned enterprises were required to sell all their output to the state at state-fixed prices. Under the reforms, these firms were allowed to produce extra output, beyond the plan amounts, and to sell that extra output on free markets. The fraction of state-firm output sold on markets progressively rose so that, by 1989, on average 38% of a state-owned firm's outputs were directly sold on markets, and for some state firms market sales were 100% of output. Similarly, an increasingly large fraction of state firms' inputs were purchased on free markets, rather than being allocated by the state: in 1989, on average 56% of a state-owned firm's inputs were procured through market purchases, and for some state firms, 100% of inputs were market-procured. There are dual prices, with the market price usually being substantially above the official price.

From the viewpoint of economic incentives the key point about the dual-price system is that, at the margin, decisions are made in the face of market prices. The fact that the price received from the state is less than the price received from the market merely means that the firm is paying a lump-sum tax. For a firm's decisions on how much to produce, what inputs to use, and what kind of investment to undertake, the state-imposed output quota is irrelevant, as long as that quota is smaller than the total output. What matters for such decisions is the price that will be received for any extra output, which is the free-market price (Byrd, 1987; McMillan and Naughton, 1992). Thus the dual-price system, although a gradual form of price reform, had an instantaneous impact, in inducing firms' decision-making to be market-oriented.

Dual pricing forced state-owned firms to compete, both with other state-owned firms and with nonstate firms. In order to sell on free markets, state-owned firms had to please their customers; they were forced to produce to a higher quality than when they had the government as guaranteed buyer.

4. China's Lessons for North Korea

China offers several lessons for North Korea, though because of the differences between China and North Korea they must be carefully scrutinized for their relevance.

Abolish the agricultural collectives immediately.

The elimination of China's agricultural communes, enthusiastically endorsed by the peasants themselves, generated large productivity gains in agriculture, not only providing badly needed increases in food supply but also freeing up labor and capital to be transferred into industrial production. This appears to be a specifically east Asian phenomenon. In eastern Europe and the former Soviet Union, where the efficient scale of farms is larger and farming is more capital intensive, attempts to reform agricultural communes have faltered, because it has been difficult to change the incentives that farm managers face (Johnson and Minton-Beddoes, 1996).

North Korea's agriculture is in crisis. Although North Korea was unique among communist nations in avoiding famine at the time agricultural collectivization occurred (Eberstadt, 1995), poor harvests and declining productivity led to an undersupply of grains as early as the 1970s (Lee, 1996, p.326). By the 1990s famine was in prospect. The food shortages reportedly were exacerbated by corrupt North Korean officials who failed to distribute rations equally, and by the north's inadequate transportation. The United Nations reported in May 1996 that, after severe flooding of farmlands, "without emergency food imports the consequences are likely to be devastating for large segments of the population." A North Korean television broadcast in June 1996 began with the anchorwoman saying, "Today, I will introduce you to tasty and healthy ways to eat wild grass."[7]

Any prospect of North Korean reform of agriculture up until now has been blocked, according to Kim and Koh (1994), by the ideological barrier to private ownership. The Chinese example shows, however, that the state's unwillingness to permit private property need not prevent deep reform. In China, a decade and a half after reform began, agricultural land is still not privately owned. Although each peasant works an individual plot, land ownership remains collectivized. China shows that workable incentives for farmers do not require land ownership but can instead come from contracts.

If China's example applies to North Korea, as seems very likely, then giving farmers contractual incentives to produce will quickly generate large gains in agricultural output. On the Chinese model, this could be done by abolishing the communes, giving each individual farmer a long-term lease to a block of land, requiring the farmer in exchange to deliver a pre-agreed quantity of grain to the state each year, and allowing the farmer to dispose as he or she

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[7] Trevor Page, "Flood Waters Come and Go. Misery Endures." *New York Times* May 26 1996, p.E3; Nicolas D. Kristof, "U.S. and North Koreans Begin a Wary Dialog," *New York Times* July 6, 1996, p.3; Son Key-young, "N. Korea's Autumn Harvest to Drop 10 Percent This Year," *Korea Times* September 14 1996, p.2.

wishes of any output beyond this quota. This reform will be relatively straightforward to implement, to judge from the Chinese experience, and its welfare benefits will be huge, as it will ameliorate the food shortages.

Agricultural reform will have less important effects on the rest of the economy, however, in North Korea than it did in China. Before reform, agriculture in China employed a massive 75 percent of the workforce (Lardy, 1983, p.4). In North Korea the agricultural sector is a much smaller part of the economy. According to Eberstadt (1995, pp.14, 92), quoting unpublished North Korea Central Statistics Bureau data, only 25 percent of North Korea's workforce was in agriculture in 1987. Lee (in this volume), quoting data from South Korea's Bank of Korea, puts the number higher, at 43 percent in 1990-92. By either estimate, the spillover effects on the rest of the economy from boosting agricultural productivity--releasing labor to be re-employed in industry and generating savings to be invested in new economic activities--will be smaller than in China. The jump-start that China received from the rapid success of its agricultural reforms will also occur in North Korea, but it will be less strong.

Bundle reforms of state-owned firms in packages.

In the 1980s, North Korea attempted to improve industrial productivity by introducing internal incentives into its state-owned enterprises. An internal accounting system was used to allocate performance bonuses and penalties to workers. The enterprises were allowed to retain an increased portion of their profits, to be used for productive investment and worker welfare (Eberstadt, 1995; Kang and Lee, 1992; Kim and Koh, 1994; Lee, 1996).

No data seem to exist with which to evaluate the effects of these internal reforms. To judge from the experience of other planned economies such as

Hungary in the 1960s and 1970s, however, these reforms were probably too partial to be effective. It was crucial to the success of China's restructuring of its state-owned enterprises that a range of reforms was introduced: profit retention, decision-making autonomy for managers, worker bonuses, worker contracts, direct managerial pay incentives, performance-based promotion for managers, and installation of new and more able managers (Groves et al., 1994, 1995). The extent to which the Chinese government coordinated these changes should not be exaggerated. On the contrary, each individual state enterprise seemed to receive these reforms more or less at random times and in random order. But, typically over a period of five years or so during the 1980s, the enterprise accumulated a package of reforms, and there is evidence that the reforms reinforced each other: they were complementary (Hong and McMillan, 1996).

The ultimate way to induce a packaged restructuring of state-owned firms is to privatize them. China's example suggests, however, that privatization is not necessary for successful restructuring, at least in the short term. China's state firms have been much improved while still in state hands. This does not constitute an argument that state firms should not be privatized: it is clear that China's privatization has been too long delayed. But it does say that privatization is not the most urgent task of reform. Privatizing firms is difficult, subject to political and economic pitfalls. The method by which firms are privatized has implications for other aspects of the transition: for example, as noted, designing the privatization so as to give shares to people who stay in the north might be part of a solution to the problem of north-south migration. Privatization must be carefully managed if it is to be successful and to have desirable effects elsewhere in the economy. Given that the policy-makers' attention is a scarce resource, and that there is a limited supply of investment capital with important alternative uses (namely in setting up new firms: see below), privatization need not be the first step in the reform process.

More important than the packaging of purely internal reforms in the restructuring of the Chinese state-owned enterprises was the fact that their external environment was simultaneously reformed, in two respects. Their budget constraints were hardened: they could not longer rely on the state automatically to bail them out. And they started to face product-market competition. Given that these external reforms complement the firms' internal reforms (Gates, Milgrom, and Roberts, 1996), the internal reforms, if they had been implemented alone in China, would probably have generated little improvement in state-firm productivity.

Harden state firms' budgets.

If firms can count on the state to bail them out, then any attempt to impose internal incentives is undermined, as managers bear no costs if their firms make losses. Thus financial discipline complements internal reforms. Finance in China remains a monopoly of the state banks. Chinese state firms have continued throughout the reform period to have privileged access to state funds. A significant minority of state firms have gone on accumulating debt when they should have gone out of business (Naughton, 1994, p.323). Their budgets have not been hard. Evidently, however, budgets have not been so soft as to undermine the other reform measures: the internal reforms and the product-market competition. The shrinkage of government revenue during the reform period resulted in a decrease in the state's ability to subsidize state-owned firms. According to Xu (1994), through the 1980s those state firms that faced harder budget constraints made larger improvements in their productivity.

Privatizing a state-owned firm makes it likely its budget will be hardened, but does not guarantee it. Many of Russia's firms, for example, continued to receive subsidies from the state at the same rate after privatization as they had while still state-owned, for the Russian government could no more allow a privatized firm to fail than a state-owned firm.

North Korea's state-owned enterprises appear to have soft budget constraints (Kang and Lee, 1992). Finding ways to harden the state firms' budgets should be one of the first tasks of North Korean reformers.

Create competition.

The single word that encapsulates the essence of China's reforms is "competition." The state firms during the 1980s began selling some of their outputs and acquiring some of their inputs on competitive markets. This changed managers' incentives. Market-based disciplines reinforce the internal discipline that comes from basing the manager's pay on the firm's profits. The product market links the manager's rewards to the firm's performance and gives incentives to boost productivity. To the extent that competitive markets complement direct incentives for managers, attempts to reform state firms' internal incentives without liberalizing their external market environment, as North Korea tried in the 1980s, are doomed to be ineffectual.

China contrived a competitive environment for its state-owned enterprises by two kinds of reforms. Price reform via the dual-price system meant that state firms started competing with each other, to the extent that they were selling their marginal outputs on free markets. Further, the entry of nonstate firms, the township-and-village enterprises as well as some private firms, introduced a new, lively set of competitors for the state firms. North Korea, likewise, can force its state enterprises to face competition by freeing its prices and by encouraging entry of new producers; also by opening itself to trade from South Korea or the rest of the world.

A quick reform that would induce competition among North Korean state-owned firms would be to let the military-owned production facilities, which currently produce all of the military's needs, compete with the ordinary state-owned enterprises, and vice versa.

The recommendation to create competition is the opposite of what some--in particular, authoritarian politicians--take to be the lessons from China. Cuban president Fidel Castro has "praised the achievements of Chinese and Vietnamese economic development, which he has contrasted unfavorably with the 'incredible disasters' which have befallen the countries of the former Soviet Union. . . The [Cuban] government's aim appears not to be to unleash the forces of the market but to try to control them."[8] This is a misreading of China, which obtained its spectacular growth precisely because it was willing to give up its control over the forces of the market. Chinese-style reform does not mean the state keeps a grip on the market. The overriding feature of China's reforms is that they unleashed competition. Competition entails taking the economy out of the bureaucrats' hands.

Foster entrepreneurship.

Entry into manufacturing can be strikingly fast. China abolished its restrictions on nonstate industry in 1979; by 1994 the new nonstate firms were producing, by official estimate, 60 percent of industrial output. The initial conditions set by planning induced rapid entry (McMillan and Naughton, 1992). First, most industrial output in the planned economies came from large firms. In market economies, small firms account for much of industrial activity. Numerous niches are best filled by small firms. Those niches being empty in the planned economy, there were unusually large rewards for entrepreneurs who arrived first. Second, to raise state firms' profits, the planners set high prices for most manufactured goods, and they kept some goods in short supply. After the state permitted entry, the first entrants reaped large profits from the high-priced and rationed goods.

[8] *Financial Times*, Sept 26 1995 p.1.

The new entrants are socially valuable. They produce consumer goods, provide employment, and, by reinvesting their profits, mobilize savings. Their indirect benefits could be still more important. By interacting with the remnants of the planned economy, the entrants have systemic effects. Competition is the main way the entrants cause improvements in the pre-existing state-owned enterprises, but not the only way. They also cooperate productively. In China, many of the new firms became suppliers for state firms, manufacturing components more cheaply than the large state firms could.

In China, as noted earlier, most of the new entrants were township-and-village enterprises. North Korea has, since the mid-1980s, had some similar firms: consumer-goods factories owned by villages and run by local governments. These firms have had some success: they have grown to account for 10 percent of consumer-goods production (Kim and Koh, 1994). Their impact has been limited, however because their activities have been tightly circumscribed. They have been starved for inputs, as they are supposed to use only scrap material and labor unutilized by the plan. Their products are required to be consumed locally. This regulation is intended to ensure that these factories do not interfere with the planning system. But the reason China's township-and-village enterprises had their beneficial effects on the Chinese economy was precisely that they did interact with the planned economy, both as competitors and as suppliers for the state-owned enterprises. An urgent part of North Korean reform will be to end the policy of insulating the consumer-goods factories from the rest of the economy. When the restrictions under which they operate are abolished, the consumer-goods factories undoubtedly will boom just as China's township-and-village enterprises did.

Given the fundamental importance of new firms to successful transition, North Korean reform policies should be designed to minimize impediments to entry. Liberal licensing rules would reduce the ability of corrupt bureaucrats to extract bribes and delay new investments. Antitrust policies might prevent large state-owned or privatized firms from suppressing the new competition. A reasonably stable and predictable property-rights environment is needed if entrepreneurs are to be willing to invest (though China illustrates that such an environment need not be based on Western-style formal legal rules but might instead rest on a set of bureaucratic incentives which give rise to a steady but not too fast redefinition of the scope of property rights, as Naughton (1996) shows). The government can help set up bodies such as trade associations and credit bureaus to generate useful information for firms about the location and trustworthiness of potential trading partners. The government should promote and subsidize innovative sources of small-scale finance, perhaps along the lines of Pakistan's Grameen Bank. By these means, entrepreneurship could be encouraged.

North Korea's reformers should carefully investigate how privatizing state-owned enterprises will affect entrepreneurship before deciding on the timing and method of privatization. Depending on how it is carried out, privatization might slow the creation of new firms. Reformers may face a trade-off between privatization and entry. Fast privatization could crowd out the creation of new firms. First, the funds devoted to buying and restructuring state-owned enterprises, to the extent that the capital available for investment in North Korea is limited, reduce the mount available for building new firms. Second, fast privatization yields market uncertainty. Which products are going to be in demand? What is the competition going to be? Entrepreneurs who would otherwise invest in new firms might wait until privatization is completed and the uncertainty is resolved (Rob, 1991; Thimann and Thum, 1993). China avoided these discouragements to entry trivially, by not privatizing its state firms.

Conceivably the east European countries that undertook mass privatization, such as the Czech Republic and east Germany, might have deterred the creation of new firms.[9] Since China indicates that new firms are a major source of an economy's dynamism under reform, how privatization interacts with entry should be one of the main considerations during the design of North Korea's privatization program.

Accept nonstandard solutions.

Some of China's reform developments contradict familiar views on how markets work. The township-and-village enterprises have been the impetus for China's growth, despite their nonstandard organizational structure: they are not conventional private firms but are owned collectively by villagers and run by village governments. State-owned enterprises in China have, as a result of purely contractual changes, significantly improved themselves while remaining in state hands, contradicting the claim that it would be impossible to reshape them without the incentives that come from private ownership. Informal privatizations, involving new, ad hoc institutional arrangements set in place by state-firm managers and local-government officials, have resulted in improvements in firm performance (Nee and Su, 1996; Qian and Stiglitz, 1996). China has inadequate laws of contract and weak mechanisms for enforcing them, and yet there is a huge amount of successful deal-making, based on informal networks, disproving the notion that a legal system is needed before markets can

[9] Some evidence on such a crowding-out effect of fast privatization in eastern Europe and the former Soviet Union can be inferred from the data of Johnson (in this volume). No statistically significant relationship exists between rapid privatization and the size of the private sector, according to Johnson's Table 5. Since the privatized firms become part of the private sector, this suggests that more new entrants arose in those countries that did not undertake rapid privatization.

function. Innovative mechanisms such as these have helped to smooth China's transition.

North Korea's transition may well generate novel organizational forms and market institutions. Korean reformers should not reject new ways of doing business merely because they do not exist in Western practice or they do not conform to textbook or World Bank prescriptions. Nonstandard institutions can work well, at least temporarily in the peculiar circumstances of the transition economy.

Don't try to plan the entire transition.

China's reforms did not follow a coherent plan; instead, they consisted of small, step-by-step changes. China muddled through. Rather than destroying the old institutions and starting from scratch, China let its new economy grow around the old (Naughton, 1994). China's reformers had no clear idea of where they wanted China to go. While some of the changes began at the top, not all did; much of the reform process was bottom-up. Some reforms, in particular in agriculture, were initiated at ground level and only afterwards ratified by the central government. The reformers' role often was to permit change rather than to initiate it. The Chinese government led from behind.

The transition of the North Korean economy, like any other economy, will be far too complex a process for predicting and planning its path to be feasible. Experimentation is an inescapable part of transition. Reformers will make bad decisions if they fail to recognize the limits of their ability to foresee and to control the process. Abraham Lincoln formulated a good maxim for reformers. Speaking of another transition, the post-Civil War reconstruction which his assassination was to prevent him leading, Lincoln said, "The pilots on our

Western rivers steer from *point to point*, as they call it--setting the course of the boat no farther than they can see, and that is all I propose to myself in this great problem."

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