University of Nevada, Reno
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UNR Joint Economics Working Paper Series
Working Paper No. 10-008

Economic Reform and Alternatives for North Korea

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November, 2010

Abstract

This chapter assesses the potential for reform in North Korea, and considers the lessons learned from economic reform and transition in China, the Soviet Union, and Central Europe. We focus in particular on the importance of reforms in the financial regime, and argue that in the absence of a major change in North Korea's environment, such as a crisis caused by reduced economic and/or political support from China, or increased access by the North Korean population to events in the rest of the world, the current situation is likely to continue for many years. North Korea will thus continue to alternate between declining, stagnant or mediocre economic growth. It will also continue to be a source of geo-political instability in the world in general and Asia in particular.

JEL Classification: P20, P52

Keywords: Economic Reform; North Korea; Price Liberalization

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Prepared for

Survival Strategy of North Korea
Suk Hi Kim, Terry Roehrig and Bernhard Seliger (editors)

by

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Economic Reform and Alternatives for North Korea

Introduction

North Korea, a.k.a. the Democratic People's Republic of Korea, has existed as a socialist state for over 60 years, only a decade less than the tenure of the Soviet Union. Like the Soviet Union, North Korea has gone from rapid growth to economic stagnation. The Soviet Union and other socialist economies in the face of collapse and/or stagnation adopted market reforms to various degrees and established sustainable growth. This is especially true of China. In contrast, North Korea's economic, financial and political institutions have changed little while other former socialist economies have adopted more open and competitive market structures and frequently more open political institutions. North Korea's economy has been essentially stagnant for the past three decades.

The correlation between economic growth and market reforms during the past is well established, though some continue to debate the causal relationship. Shleifer reviewed various economic and social indicators for the world and concluded that in what he calls the "Age of Friedman" over the last quarter of the 20th century, "…the world economy expanded greatly, the quality of life improved sharply for billions of people, and dire poverty was substantially scaled back."[1] The institutional redesign of the former socialist economies toward more market-oriented structures demonstrated the economic benefits of market reforms. In sharp contrast, almost three decades of economic stagnation in North Korea have led many observers to wonder how much longer the North Korean regime can survive.

Each decade since 1980 has produced predictions of North Korea's imminent collapse, beginning with the rapid economic decline after both the Soviet Union and China dramatically reduced financial support. However, North Korea continued to survive as a closed, socialist and authoritarian regime. In the 1990s North Korea experienced major famine and economic distress, and again many were predicting collapse. North Korea, however, continued to survive.

The most recent prediction of collapse came in the late 2000s, as North Korea appeared to be on the verge of a second famine and the success of market reforms in the former socialist economies, especially China, was overwhelming. Again, North Korea as a closed, socialist and authoritarian regime continues to survive.

The history of the second half of the 20th century demonstrated that state-managed economies like North Korea's are not sustainable in the long run, but the long run can be very long. There remain skeptics about the benefits of market reform; however, the theoretical and historical evidence clearly shows state-managed economies are not sustainable in the long run. Reforming the socialist system is necessary to achieve sustained growth but extremely difficult, because it almost always requires some political institutional redesign that reduces authoritarian control.

Reform, however, may create economic distress and undermine political authority. China is one of the few examples of a nation that maintained an authoritarian central control while permitting significant market reforms. Even in China's case however, it is not clear whether market reforms will generate political distress in the near future if a growing and prosperous middle class demands greater political freedom. The short-term risk of reform in terms of both economic and political distress during the transition period may appear far too great for a hereditary communist leadership like North Korea.

Authoritarian leadership regimes are not prone to commit suicide. With the benefit of assistance from China, heavy doses of propaganda on an isolated public that portrays the Korean people as a pure people in a sea of corrupt countries, nuclear blackmail aimed at Japan and the West, exports of nuclear and missile technology, counterfeiting operations, and international aid, the North Korean leadership has been able to avoid reforms that might weaken its control over the country.

"Hegel remarks somewhere," Karl Marx wrote, "that all great world-historic facts and personages appear, so to speak, twice. He forgot to add: the first time as tragedy, the second time as farce."[2] The unpredictability and potential danger to the world of North Korea makes it hard to find the humor in "farce", but the state of North Korea's economy does often border on the absurd. North Korea's reforms to date have been tentative and inadequate, and unless significant and risky reforms are implemented, North Korea will one day face an even more dramatic economic distress than Russia experienced under Yeltsin.

Cargill and Parker reviewed North Korea's development and tentative steps toward reform arguing that it was only a matter of time before the distortions of the economy accumulative to such a point that left no choice but to engage in market reforms.[3] Cargill, in the context of health problems of Kim Il Jong and the Kaesong Industrial Complex, suggested there existed some potential for reform.[4] Hindsight suggests instead that this potential for reform may have been vastly overstated. Tensions caused by the sinking of the ROKS Cheonan in March 2010, the less-than-optimistic

United Nations report on North Korean's nuclear and missile proliferation,[5] the November 2010 announcement of a new and highly sophisticated uranium enrichment facility, and a short time later in November 2010 the dramatic shelling of Yeonpyeong Island are events that make it hard to find any degree of optimism. Ultimately, reform will occur because it will become increasingly difficult to isolate the North Korean population from the reality of the rest of the world and/or the dead weight loss of inefficiencies in the economy will accumulate to a crisis stage and force reform of some degree. That day, however, may be far off.

The remainder of this chapter consists of four sections. First, it discusses the causes, the process and overall record of reform in the former socialist economies to better understand North Korean exceptialism. Second, it discusses the Chinese transition. The China case is important because any North Korean reform would likely follow the Chinese approach. China has been able to date to achieve major market reforms while maintaining an authoritarian set of political institutions. Third, it focuses on the importance of financial reform in any transition from state-directed to more market oriented economies and even in China this will become an Achilles' heel in the future if financial liberalization is not achieved. Failure to reform the financial system has led to much economic and financial turbulence throughout the world including the market-oriented industrialized economies. In the fourth section, the North Korean case is discussed in the context of socialist reform, the Chinese model and financial liberalization. A short concluding section ends the paper.

The Record of Socialist Reform

In the 20th century, less-developed countries that adopted centrally-managed socialist systems usually experienced rapid growth, at least initially, as state control over every aspect of the financial sector permitted forced savings and centralized coordination mobilized economic resources. Once the easy gains were achieved, however, growth almost always slowed as incentive problems led to a stagnation of labor productivity and the efficiency of resource allocation became more important. In particular, the lack of financial mechanisms to impose bankruptcy on inefficient firms, or the lack of a market price structure to even meaningfully measure efficiency, made it virtually impossible to reallocate resources away from poor past investments. The Soviet Union had been the model for centralized planning even though in many countries Marxist ideology has not play a major role. North Korea in particular is not and has never been actually a Marxist regime. The Soviet Union provides a classic example of the rise and fall of socialist central planning, however.

By the time the Union of Soviet Socialist Republics was established in 1921 after the Bolshevik Revolution of 1917, the Soviet Union had already experienced the disastrous implementation of War Communism designed to immediately establish Full Communism. War Communism attempted to effectively militarize agriculture and industry, and resulted in a famine costing an estimated five million lives in addition to those millions lost in the First World War and the Russian civil war. The first Soviet effort at reform after the failure of War Communism was Lenin's New Economic Policy in the 1920s. The new policy helped the economy recover but it also led to an ideological debate that ended with Stalin's implementation of agricultural collectivization, state monopoly over industry and trade, and the first of many Five-Year-Plans which established bureaucratic management over the national economy. Stalin also created a totalitarian state to maintain political power and enforce economic planning through a combination of terror and a siege mentality.

Stalin’s death in 1953 initiated new reforms to deal with the accumulating inefficiencies of Stalinist central planning. Khrushchev introduced policies to decentralize parts of the economy and encourage agricultural investment, and also permitted a mild political thaw as Stalin’s reign of terror was increasingly denounced. These reforms were only marginally effective. A decade later, Brezhnev and Kosygin introduced new incentive reforms while they also recentralized decision-making. Decentralization was not as effective as Khrushchev had expected because the incentive problems in state-owned enterprises meant that autonomy gave managers more freedom to be even more inefficient. The ideology of the Soviet Union against the market left only a return to centralization as a solution. When this failed the Soviet Union attempted more dramatic market reforms under Gorbachev.

The centrally-planned economy may be extremely inefficient, but it can be highly effective at marshalling resources in a less-developed economy. Putting the population to work, and forcing a high rate of savings through the state monopoly over trade and banking can initially lead to rapid growth rates. In the long run, however, diminishing returns, the overuse of natural resources, the disincentives of poorly-allocated and badly-managed labor, and the growing complexity of planning lead to ever-slower growth rates.

Some socialist economies attempted significant economic reforms, ranging from Yugoslavia’s labor-managed economy and Hungary’s New Economic Mechanism to

Gorbachev's Perestroika. These reforms attempted to introduce a significant amount of both private production incentives and market-based prices, but their success was limited. In the case of Perestroika, for example, the government allowed small private entrepreneurship and replaced state planning targets with negotiated contracts between firms. The result, however, was a diversion of resources away from the state sector and a collapse in state production, a situation often made worse by poor macroeconomic management.

Significant reforms in most cases, however, came only after intense economic and financial distress or in some cases collapse of the regime. Some governments fell due to popular revolts, while others fell after political liberalization attempted to boost their legitimacy through free elections. The new governments found themselves with all the institutions of centrally managed economy, but without the ideological glue that had held it all together. Some like Poland and the Czech Republic chose rapid "big bang" transitions, with rapid price liberalization and gradual privatization assisted by their proximity to export markets in Western Europe. Others, like Hungary, chose a more gradual process that avoided the sharp recessions seen elsewhere but failed to create conditions for sustained growth, at least not until more dramatic reforms were implemented. However, the economic and political costs were high, and many governments that led these transitions did not remain long in power.

In Russia and other former soviet republics in central and Eastern Europe, many of the fundamental problems of the transition process were in the financial sector. First, the banking sector was slow to commercialize, its initial portfolio consisted of state-directed loans to state-owned enterprises, and it lacked the means to evaluate creditworthiness and monitor firm performance. As a result, the financial system relied on the implicit state guarantee to continue to make loans to state firms in order to keep them from shutting down, effectively pouring good money after bad. Second, with perhaps the sole exception of the Czech Republic, governments failed to cope with falling profits from state-owned enterprises facing increased competition and increased expenditures on subsidies and direct provision of public goods. Because private capital markets were virtually nonexistent due to years of repression, governments turned to central banks to finance their budget deficits, with the result that investment became less uncertain in an inflationary macroeconomic environment.

By the 1980s, the Soviet Union was experiencing not only negative rates of return on investment, but there were many sectors of the economy producing negative value-added. The economy was characterized by chronic shortages and poor-quality products, poor motivation and little innovation. Gorbachev's efforts to counteract these problems, and save the socialist economy in the 12th Five-Year Plan failed. His subsequent efforts to introduce more dramatic reforms effectively dismantled the old system but did not establish a workable alternative. In the 1980s, the Soviet Union was on the verge of collapse because of the accumulation of deadweight loss generated by fifty years of planning in the absence of an incentive structure that could rationalize the allocation of resources. Inflation was high in spite of being officially repressed, growth was negative in spite of continued high rates of investment, and while reforms were proposed and debated, they were rarely implemented. The fall of the Berlin Wall in 1989 and the collapse of the Soviet Union in 1991 signaled the end of Marxist socialism in Eastern Europe.

This history repeated itself in the socialist economies of Central and Eastern Europe. Though the Soviet Union had repressed most efforts at economic reform, except for those in Yugoslavia that tried to create a labor-managed economy, nonetheless different efforts had been made in East Germany, Poland, and Hungary. Once the Brezhnev Doctrine was withdrawn, dramatic reforms were implemented, though not in time to save the socialist economies. Economic decline accompanied political collapse, though some of these nations were better able to negotiate the restructuring territory better than others.

Jeong (2009) uses a principal-components approach to model the difficulty of reform and transition for the successor states to the Soviet Union and the formerly socialist economies of central and Eastern Europe.[6] The longer the economy was socialist, the higher the economy's initial income, the more inflation was repressed, the more dependent on trade with other socialist economies, the more closed the economy to other trade, and the greater the amount of industrial distortion, the more severe the economic decline once reform or transition begins.

The path of economic reform in these transition situations highlights several key policies.[7] Price liberalization is crucial to finding scarcity-based prices that clear markets and improve the incentive to produce, but it needs to be combined with macroeconomic stabilization. Because a socialist government, either current or former, usually lacks access to developed capital markets, declining revenues from state-owned firms and the increased need for a social safety net generates budget deficits that usually tempt the state to abuse monetary siegnorage. Privatization of state-owned firms is usually included, along with allowing foreign trade and investment on a level-playing-field basis.

While privatization of state-owned firms is usually included as a necessary step to improve production incentives, it has proven much less successful than many had hoped. Institutional redesign is difficult for any country, but especially difficult in a society that has failed to include any incentives to efficiently allocate resources. Instead, most new growth comes from new firms, and most of the state firms eventually go out of business. Parker explained this in Schumpeterian terms, as the lack of creative destruction through competitive selection leads to a rapid accumulation of both capital and inefficiency over time.[8] Cargill and Parker, focusing on the difference between state-directed and market-directed financial regimes, modeled this process to demonstrate that the gradual accumulation of inefficiencies makes the transition to a more competitive financial regime very costly.[9] The more time goes by in running an economy without competitive pressures, the greater the transition costs.

It is remarkable North Korea has avoided the institutional changes that other socialist economies have experienced after the rise and fall of state-directed planning. Like most state-directed economies the North Korean economy advanced in the beginning, but as inefficiencies accumulated economic growth declined or stagnated. Unlike most state-directed economics however, North Korea has resisted institutional redesign.

The Chinese Exception

Of the centrally-planned socialist economies, only China was really able to achieve significant reforms without economic decline. This success, however, emerged from crisis. China had suffered a disaster of monumental scale during the Great Leap

Forward in 1958-61 (an event that some have referred to as the Great Leap Backwards), as Mao turned Marx's historical materialism upside down. The Cultural Revolution that followed, once Mao regained the power that the Great Leap had cost him, led to great hardship and economic stagnation that lasted until his death in 1976.

After Deng Xiaoping pushed for a more pragmatic approach to reform, China's performance was helped by its particular reform path, by the fact that China was still largely a rural economy, and by the continued political legitimacy of its government. Unlike in Gorbachev's Soviet Union, China did not begin reform in the industrial sector but first focused on the agriculture sector, and China did not begin to dismantle the centrally-managed economy until it had already become largely irrelevant. In addition, there have been few changes in the structure of the authoritarian Chinese government.

After Deng's supporters gained the upper hand in 1978, China began with agricultural decollectivization, as production management was turned over to individual households and both rural and urban markets were created for the distribution of food. Agricultural productivity boomed, and living standards in both rural and urban areas improved. Rural surplus labor was unintentionally released for other pursuits, and rural enterprises were allowed entry into sectors once the sole domain of state-owned monopolies.

China followed a pragmatic political approach, and also began reform with an Open Door policy that not only created Special Economic Zones for foreign investment but also encouraged joint ventures, improved export incentives, and tolerated tourism. Chinese students began to study abroad in large numbers, and while some stayed abroad others returned with new ideas and expectations. In a decade, China went from a closed economy to one in which both exports and imports made up a significant portion of economic activity, and in its second decade of reform that trade and foreign investment became the primary driver of economic growth.

Once these first reforms had taken hold, China also reformed its financial and industrial sectors. Unfortunately, China found that its traditional state-owned enterprises were difficult to reform, and giving enterprise managers autonomy over access to loans from state-owned banks led to overinvestment and a serious non-performing loan problem. However, the use of a dual-track system allowed for the gradual emergence of a new economy without dismantling the old one. The dual-track system also increased arbitrage opportunities for firm managers, opportunities that could only be checked by a strong state. In spite of this increased corruption, China's state firms were thus able to "grow out of the plan."[10]

Chinese state-owned enterprises had nonetheless accumulated significant inefficiencies over the decades, and the gradual transition to a quasi-competitive market was inconsistent with these firms remaining as the cornerstone of the economy. Instead, the most rapid growth was seen in the nontraditional sector, such as in the township and village enterprises and the foreign-invested firms, in part because these firms were new and the more efficient ones grew fastest by attracting more capital.

So it was not until state firms were pushed into new management arrangements, a greater variety of ownership forms was allowed (including wholly-owned foreign firms and privately-owned Chinese firms), and the most inefficient firms began to be shut down that Chinese firms became somewhat more efficient in their use of capital. Instead, much of Chinese growth came from high savings rate and the shift of labor from low-productivity agriculture to light industry.

The Chinese Communist Party called this acceleration of reform the "Socialist Market Economy." After Deng's Xiaoping's death in 1997, Jiang Zemin announced a policy of "release the small, retain the large," in which smaller state firms were shut down or privatized, while larger and more profitable firms were restructured along the lines of South Korea's Chaebol conglomerates. Chinese state banks gradually become more commercially-oriented, as the state tried to separate its lending policy interventions from profit-based banking.

China was able to gradually transform itself into a rapidly-growing market-based global economy with the Chinese Communist Party still firmly in charge. It did so after the economic collapse of the Great Leap Forward, and after the stagnation resulting from the Cultural Revolution. It kept its authoritarian structure in place as market reforms were gradually introduced, and it followed a pragmatic approach that engaged the rest of the world and created alternatives before the old system was dismantled. China thus became the model for other socialist economies to follow, though few have done so successfully. Viet Nam's Doi Moi reforms perhaps came the closest to matching China's success. Any real reform that may commence in North Korea will most likely follow China's model.

Financial Liberalization in Socialist Economies

Financial liberalization in the non-socialist economies first manifested itself as market and governmental innovations in both domestic and international financial institutions. For example, the collapse of the Bretton Woods fixed exchange rate system in 1973 was a key turning point in the shift from state-directed to market-directed financial regimes. The transition most frequently emerged in the financial sector with interest rate liberalization, increased asset diversification powers for financial institutions, and development of money and capital markets. The transition then spread to the real sector and is now manifested by a broad liberalization of a broad range of public and private institutions.[11]

Many of the former Soviet Bloc economies and a number of Asian economies have witnessed significant structural change in terms of how far they have shifted from state-directed regimes. Japan and South Korea, for example, have gone from economies that regulated virtually all interest rates, engaged in varying degrees of credit allocation, restricted the inflow and outflow of capital and foreign direct investment, and possessed corporate sectors with no meaningful corporate governance or transparency, to economies that now permit market forces to play a significant role in both real and financial transactions.

China presents an even more dramatic example of change. The Chinese economy was far more rigidly controlled and exhibited for more economic and financial distress at the start of the transition than either Japan or South Korea. In addition, China lacks a democratically-elected government while Japan and South Korea have functioning democratic governments. While China continues to be ruled by a Communist government, one now certainly more Leninist than Marxist, China’s economic and financial institutions are undergoing major reform as market forces are permitted to play increasing roles.

The transformation in most economies has been associated with increased economic growth, increased standard of living, and increased world integration. At the same time the process has not been smooth and some economies have experienced financial and economic distress. The Asian Financial Crisis that began in 1997 led to currency flight, failures of financial institutions, and declining output in a number of Asian economies, including South Korea. China was little affected as it had only begun to liberalize its financial sector and continued to maintain an airlock system on its foreign currency market. Similarly, the Great Recession in the United States (2007-2009) has had financial repercussions worldwide, even in many countries where the financial sector did not engage in risky lending behavior.

The North Korean Reform Experience

Like the Soviet Stalinist economy from which it came, North Korea implemented a centrally-planned economy that forced savings from a poor population for industrial investment. Like the Soviet Union after the Russian civil war, and like China after its revolution, North Korea after the Korean War adopted a siege mentality that enabled it to justify its policies in order to protect itself from a hostile outside world. While actual Soviet policy allowed only minimal access to the outside world, official Soviet doctrine was international in scope. By contrast, North Korea preached cultural exceptionalism and a more insular form of self-reliance called Juche, which combined aspects of Maoism and Confucianism with an intense personality cult centered on Kim Il-Sung (and later Kim Jong-Il). In many ways, the North Korean cultural exceptionalism was drawn from that preached by Japan during its colonial period.

In the two decades after the Korean War, North Korea grew rapidly, keeping pace with South Korea even after the latter became more export-oriented under General Park Chung-Hee. Though its terrain was relatively mountainous, North Korea was the beneficiary of some remaining capital investment from the Japanese occupation, while South Korea was relatively more agricultural and relatively more devastated by the war. North Korea's planned economy also invested significantly in heavy industry, and also received significant outside assistance from China and the Soviet Union. Military spending rose to a third of national income by the late 1960s, and this diversion of economic resources helped to contribute to slowing economic growth in North Korea, even as South Korea boomed from an export-led growth strategy.

Few statistics have been officially reported since the 1960s, and much of what information is available is based on scattered official statistics of problematic quality, anecdotal evidence, and educated guesses. It is generally accepted North Korea grew faster than South Korea both before and after the Korean War, and some observers suggest it may have reached growth rates of as high as 12 percent per year. According to Cho, North Korean economic growth was positive through the mid-1970s.[12] By the 1970s, however, the North Korea's economy began to stagnate, and South Korea surpassed the North.

Estimates from the OECD, the Bank of Korea, and elsewhere suggest that per-capita income growth stagnated from 1973 to 1991, and then plummeted afterwards. Cho attributes North Korea's decline in output to both the accumulation of inefficiencies of the command system and the withdrawal of assistance from the Soviet Bloc economies as they began to shift from state to market-directed regimes. While the North Koreans preached self-reliance to an almost religious extent, it was nonetheless more dependent on trade than observers might expect. In 1990, its trade ratio was 20 percent of GDP, and imports outweighed exports by a 3:2 ratio.[13]

With the collapse of Soviet support after 1991, the Bank of Korea estimates that GDP fell by a third by 1998. By 1998, imports had declined by over two-thirds, and though GDP also declined steeply, the trade ratio fell to 11 percent. Food shortages became chronic, particularly during the famine of 1995-98, and the country was unable to feed itself. North Korea had inadequate domestic sources of energy, particularly with the rapid decline in domestic coal production. Shortages of raw materials, particularly metal, steel, cement, and fertilizer, became widespread, hampering the full employment of industrial capacity. In spite of the famine, which North Koreans referred to as the "arduous march" and cost them roughly half a million lives, the population still grew by almost 10 percent during the 1990s. As a result, per-capita GDP was thus almost 40 percent lower in 1998 than in 1990.

In the mid-1990s there was a growing consensus that North Korea was on the verge of collapse. While this may have been an exaggeration, macroeconomic performance was poor in the 1990s, budget deficits were growing, and reports of famine in rural areas were widespread. In response, North Korea commenced a variety of economic reforms in July 2002.[14] The July 1 reforms included increased administrative prices and incomes, revisions in the distribution system, enhancing the merit system, decentralizing the planning process, expanding corporate sector autonomy, and establishing of trust banks. Some of these reforms, particularly the price reforms discussed below, may best be described as an official acknowledgement of an alreadyexisting reality.[15] There were also announcements that firms would be allowed more control over the disposition of their production, once quotas were met, and this opened up the possibility of a future dual-track system for production within and beyond the plan.

North Korean prices were administratively set by the state on the basis of "necessary social labor expenditure," not by relative scarcity in markets. Shortages were exacerbated during the famine of the 1995-98, and prices rose dramatically for commodities and farmers' markets outside of direct state control.[16] Though no official price indices were reported, repressed inflation was finally addressed in the reforms of 2002, when official increases in prices, wages, and the official exchange rate rose by 2,000-6,000 percent. Nonetheless, prices continue to be largely controlled by the state.

These efforts were not the first time North Korea had attempted reform. A joint venture law was enacted in 1984, the Rason Special Economic Zone was created in Rajin-Sonbong in 1991, and another was created in Sinuiju City in 2002. While Russian and Chinese firms have bid for access to these areas, they have nonetheless failed to live up to their promise. Outside of "politically motivated investments" that Rosenberger and Babson argued lacked "basic economic and commercial logic," foreign investors have not found these economic opportunities to be inviting.[17] Some of these have reported that North Korean officials make them pay discriminately higher wages and input prices, and as a recent example from the Kumsangsan Tourist Region demonstrates, they are quick to threaten nationalization of foreign assets when political disputes arise.

The economy of North Korea could be separated into three distinct sectors after the reforms, a formal sector which was in decline due to the failure of central planning and the state-owned enterprises, a predominantly agricultural private sector that was growing as rural markets were allowed and over-quota production from cooperatives was marketized, and a relatively independent military sector that continued to demand a large portion of national resources.[18]

After the reforms, North Korea did appear to return to growth. The Bank of Korea estimates that North Korean GDP grew by more than 20 percent over the past decade, more than enough to keep pace with a population that grew by less than 7 percent. However, per-capita output in 2009 remained 30 percent below the 1999 level,[19] and increasingly large portions of GDP were being diverted to industrial investment and military expenditures under North Korea's Songun "military first" policy.

Though the legitimacy of the political structure is dependent on the status quo, the possibility of North Korea returning to its early days of rapid growth is virtually nonexistent. Nonetheless, as Kornai points out, the classical socialist economy is viable in the medium run as a coherent, closed system.[20] Many of the reforms that North Korea has engaged in so far are largely in the category of what Kornai calls the "'perfection' of control." By leaving alone the monopoly of control at the top and the property relations of nationalized firms and collectivized agriculture, the state's efforts to improve incentives and efficiency through bureaucratic reorganization, decentralization, adjustment in official prices, and simplification of planning indicators are only able to provide temporary relief at best.

Since these reforms began, North Korea has had a regular series of conflicts with South Korea, Japan, and the United States. Qiao argues that these conflicts are intentional, and driven by domestic North Korean politics.[21] In the absence of conflict, capital inflows from the South threaten to undermine the regime's absolute control, and domestic pressures for reform begin to build. By creating international conflicts, the government can reassert its siege mentality and appeal to nationalism, temporarily halting capital inflows and silencing voices for increased reform. In response to the argument that North Korea ultimately desires a relationship with the United States, Myers retorts by asking how North Korea "could possibility justify its existence after giving up the confrontational anti-Americanism that constitutes its last remaining source of legitimacy" if it did so.[22]

The economic reforms of the last decade were perhaps a small step in the right direction, but failed to do what will be needed for sustained growth. But even the anemic growth of the last two decades is now threatened by growing tensions with South Korea, which has supplied a significant amount of food aid and trade at concessionary prices. South Korea may now cut off or dramatically reduce economic support including support of the Kaesong Industrial Complex, which has been financed entirely by South Korea and a source of dollars to North Korea. Reduced economic support, especially a reduced or abandoned Kaesong Industrial Complex which would be another serious blow to the North Korean economy. Projects like the Kaesong Industrial Complex illustrate the benefits that even small reforms by North Korea could generate and yet, North Korea continues to resist reform because of its desire to maintain the current power structure.

There are four possible outcomes. First, the North Korean economy could collapse from the accumulation of inefficiencies. Much like the albatross in Coleridge's *Rime of the Ancient Mariner*, the dead weight loss of inefficiencies could force the North Korean economic ship to a complete stop and force dramatically and unpredictable reform. Second, the legitimacy of the North Korean government could decline as government's control over information about the outside world weakens. The collapse of the Soviet Union had perhaps as much to do with access to information about the rest of the world as it did with of the accumulation of inefficiencies in the economy. While this access to information is inevitable, there is no way to predict how this would then unfold. Third, the quality of leadership at the top might wane as power is shifted to less-talented individuals, and with it public support of the leadership. Like the reduced ability to control information, there is no way to predict how this would unfold and bring about reform. Finally, China may be able to force reform, though to date China has been reluctant to use its economic, financial and political support to do so.

The best prospects for reform are likely a combination of one and four, but any prediction is hazardous. According to Noland, Walter Mondale once said that "anyone who claimed to be an expert on North Korea was either a liar or a fool."[23] Hence, these observations are offered with that thought in mind.

Conclusion

What makes economic reform in a socialist economy successful? China has demonstrated that a pragmatic approach is possible as economic outcomes in China appear to dominate ideological preferences in many ways. In spite of occasional political tensions, China has also been able to maintain reasonably good international commercial relations and has allowed its society to gradually become increasingly globalized. The maintenance of a sound currency backed by significant foreign exchange reserves has provided implicit insurance for foreign investors.[24]

China also benefitted from fortunate sequencing of reforms, a result of China's pragmatic and gradual approach. As Parker and Wendel pointed out, more often than not China followed reforms with more reforms, instead of retrenchment, as the reforms led to inevitable problems.[25] Finally, China strived to maintain political control during economic reform, and gradually created a viable alternative before dismantling the old system.

North Korea may retain firm political control, but it has failed to meet the other conditions for successful reform. According to Jeong, the reforms implemented over the past decade may still help to reduce the potential income decline should the regime ever collapse and the economy begins a transition, but those costs will still be enormous.[26]

At some point in the future, the inefficiencies of the system will accumulate and generate an even more serious crisis, but it appears that North Korea has not yet reached that point. In fact, there is some evidence economic conditions have improved in the last few years. While it is debatable whether the recent increase in output signals sustained recovery, there is a reasonable basis to conclude that reforms introduced in 2002 may be responsible for improvement in economic conditions.

While North Korea is not on the verge of collapse, it is only a matter of time until a more serious economic and financial crisis occurs, unless the regime makes a more significant commitment to reduce the degree of state direction over real and financial resources. The choice it has to face now is whether to allow these reforms or to delay them until the regime eventually collapses. The problem, or course, is that real reform will threaten the regime's control over the North Korean people.

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