

Macroeconomic Policy in the Early Stages of Marketization in North Korea

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INTRODUCTION

Government policy in the initial stages of marketization can be divided into two categories: first, structural reform such as price liberalization, privatization and financial reform and second, a stabilization policy to cope with instability factors from the macroeconomic perspective. The former is about the introduction of new institutions that have not previously existed in a traditional socialist economy. The latter, on the other hand, is about dealing with imbalance and instability in the macro-economy, which is often seen in the process of marketization.

Any decision on which policy to pursue first depends on the local conditions of each nation and the researcher's personal perspective. Generally speaking, the radical argues for the simultaneous pursuit of stabilization and structural reform. But in reality, due to circumstantial restraints in those socialist countries that have transformed their regimes, a stabilization policy has been pursued first.¹⁾

1) In the early stages of transformation, there was a heated debate between the

This paper intends to examine the characteristics of macro-economic instability factors that can occur in the early stages of marketization and relative countermeasures. Inflation, unemployment, depression and other factors, which can disrupt the ability of the macro-economy to deal with the situation, will be examined, and the method for managing the macro-economy will be discussed.

Marketization in North Korea has not been realized yet. Thus, the discussion in this paper is somewhat of a simulation. And North Korea's economic performance depends heavily on the underlying policies for marketization, which limits the discussion in this paper.

The transformation experience of socialist countries demonstrates that the initial conditions in each country are just as important as marketization policy in determining their economic performance in the early stages. The World Bank assessed a decade of transition in the former Soviet Union and Eastern Europe in the 1990s, and pointed out that initial conditions could be more important than policy itself. In particular, in the early days of the transition (1990-1994) when the economies recorded negative growth, initial conditions played a greater role in bringing about different results in the countries' economic growth rates.²⁾ Therefore, in examining the initial conditions for marketization in North Korea, if we focus on the initial conditions, we could reach a conclusion that would not be that far from reality, despite the aforementioned limitations of this paper. At the same time,

gradual and the radical. But as time has passed, interest in this issue has declined. It was also recognized that stabilization should be pursued rapidly, and that restructuring would take more time to adjust to behavioral and institutional changes. For further information, refer to Marie Lavigne, *The Economics of Transition: From Socialist Economy To Market Economy* (New York: St. Martin's Press, 1999), pp. 118-120; Park Jae-hoon, "Transformation in Transitional Economies," in Korea Association for Comparative Economics (ed.), *Comparative Economic Systems* (Seoul: Parkyoung-sa, 1997), pp. 118-119.

2) It means that as transformation proceeds, policy impact increases. World Bank, *Transition--The First Ten years: Analysis and Lessons for Eastern Europe and the Former Soviet Union* (Washington, DC: The World Bank, 2002), p. 15.

the paper works on the assumption that marketization in North Korea will not be like a “Big Bang,” or a radical change, but rather a gradual process³⁾ and that domestic and international political factors will not play a role in marketization policy. This paper will compare the marketization experience of the former Soviet Union, Eastern Europe and China with North Korea, using the North’s initial conditions as a starting point, and setting up a simulation of macroeconomic conditions in the early stages of marketization in North Korea.

INFLATION IN THE EARLY STAGE OF MARKETIZATION

Inflation is the biggest possible threat to macroeconomic stability during the process of marketization. The Soviet Union and Eastern Europe experienced inflation during the transition period, and although it has stabilized somewhat with time, it is still at a high level. The Czech Republic and Slovakia, two success stories in their approach to inflation, have annual inflation rates of less than 10 percent, which is more than three times higher than Western Europe in 1997. As far as China, in its early reform and during the opening-door process, it did not suffer the serious inflation that was seen in the Soviet Union and Eastern Europe, but experienced slightly serious inflation in the mid-and late 1980s. Notably, the inflation in the mid-1990s was acute.⁴⁾

Generally, the major cause of inflation is oversupply of currency.

3) The so-called Big Bang method, i.e., comprehensive introduction of a market economy and radical ownership reform, is unlikely to be adopted by North Korea considering the domestic political conditions.

4) Refer to Lavigne, *op. cit.*, pp. 128-137 for inflation that occurred in the former Soviet Union and Eastern Europe during transformation. For China’s inflation during reform and opening-up process, Nakagane Katsuji, *China’s Economic Development*, tr. into Korean by Lee Il-young and Yang Moon-soo (Seoul: Nanam, 2001), pp. 204-225; Lin Yi Fu, Cai Fang, and Li Zhou, *China Miracle: Development Strategy and Economic Reform*, tr. into Korean by Han Dong-hun and Lee Jun-yop (Seoul: Baeksan Seodang, 2001), pp. 244-252.

Yet, during the process of marketization, and even without it, inflation can occur due to the following four factors.

Repressed Inflation

The historic legacy of a planned economy is repressed inflation. This is the type of inflation that is not reflected in official statistics, and which would have occurred earlier had the government not controlled prices. In the course of a planned economy, the market is repressed, and state-run company's production is inefficient, creating shortages in the supply of consumer goods. Even though there is a continuous monetary overhang because of the fixed price of goods, repressed inflation continues. Yet, as marketization progresses and price controls are eased, repressed inflation erupts, causing the repressed prices to soar. In other words, repressed inflation becomes open inflation with radical or gradual price liberalization.

Repressed inflation is closely related to the thriving black market called *Jangmadang* (literally, outdoor market) in North Korea. In the 1990s and into the first years of the new millennium, the state distribution system was paralyzed, resulting in the growth of North Korea's black market, which has replaced the official economic and commercial network.⁵⁾ Inflation was rampant in the North Korean black market in the 1990s (See table 1). Prices continued to increase in the early 1990s and peaked in 1998, only to stabilize again in late 1999. The black market prices were tens or even hundreds of times higher than those set by the government.

Then, in July, 2002, the July-1 program (the economic management improvement methods) was announced. This program can be seen as an effort to curb inflation in the black market as it increased official prices and wages drastically, abolished subsidies to companies, and provided stronger incentives for workers and farmers. The program was aimed at

5) It is known that North Korean residents are buying 60 percent of their food and 80 percent of other necessities in a *Jangmadang*.

Table 1. Trends of Black Market Price in North Korea

(Unit: North Korean Won)

	Item	State Price	Black Market Price in 1992	Black Market Price in 1998	Black Market Price in 1999	Black Market Price in 2001
Grains	Rice/Kg	0.08	20	77	64	50
	Corn/Kg	0.03		40	33	
	Flour/Kg	0.06		61	45	
Meat	Pork/Kg	9	60	181	160	138
	Egg/Unit	0.22	3	16	13	10
Vegetables/Fruits	White Cabbage/Head	0.05		9	20	
	One Apple	0.1		23	33	
Seasoning	Pepper/Kg	1.5		199	290	
	Salt/Kg	0.13		36	32	
Liquor	Beer/Bottle	0.5		78	68	35
Industrial Products	Laundry Soap/Bar	0.4		30-100		
	TV/Set	350		6,000-12,000		

Source: Ministry of Unification.

converting repressed inflation into open inflation, reducing the black market and addressing the problem of monetary overhang.⁶⁾

The problem was the price trends after the July-1 program announcement. Strong incentives might have increased supply somewhat. Still, in a country like North Korea where economic resources have been depleted, without the input of resources from the outside, there will inevitably be limitations of supply, therefore, inflation continues in the black market.⁷⁾

6) This measure allegedly increased overall prices in North Korea 25-fold.

7) For example, the *Joongang Ilbo* on December 5, 2002 quoted recent North Korean defectors as saying that food prices in the black market in Shinuiju and Musan had increased 2-3 times and that the price for sneakers and suiting cloth had also increased 1.5 times. The *Washington Post* of January 26, 2003 also quoted relief

Monopolistic Industrial Structure

The second reason for inflation in the process of marketization is closely related to the legacy of a planned economy with its monopolistic industrial structure.

Monopolies are quite prevalent in North Korea, with the following characteristics: (1) a relatively small economy, (2) a highly-centralized economic system, (3) large-scale central industry and small local industries, and (4) the *yonhap-kieopso* system.⁸⁾ Without efforts to create new companies through ownership reform, these characteristics are likely to persist. Yet, there will be limits to ownership reform in the early stage of marketization in North Korea, given the monopolistic industrial structure that is still in place. If price liberalization is pursued in the early phase of marketization, companies are highly likely to exercise their monopoly rights, which could, in turn, lead to increases. Moreover, if subsidies are abolished in the process of marketization, this could also increase prices. In fact, with the July 1 program, prices soared partly due to the elimination of corporate subsidies.

Fiscal Deficit

The third reason for inflation is the fiscal deficit, which is inevitable in the early marketization process. It takes a long time to dismantle behemoth government organizations, reestablish government functions, and form a new government structure. With less government involvement in pricing mechanisms, price subsidies

workers in North Korea as well as North Korean citizens and businessmen as saying that the rice prices across the black market had increased 50 percent over the past three months, while prices of other commodities had soared three-fold.

8) North Korea's *Yonhap-Kieopso* (business complex) are similar to the Combinat of East Germany; a form of company that combines many companies that have close relations in terms of production activity or management. See Yang Moon-soo, *North Korean Economic Structure: Economic Development and Depression Mechanism* (Seoul: Seoul National University Press, 2001), pp. 357-362.

can be reduced, leading to a decrease in government spending. On the other hand, price subsidy scrapping can reduce the income of companies and individuals, and eventually affect government revenue. The vulnerable in society cannot help but depend on the government, but at the same time, the government is saddled with the burden of supporting retrenched workers.

Also, there is an urgent need for large investment in social overhead capital (SOC) such as electricity, railways, ports and roads. The lack of SOC is commonplace throughout socialist countries but it is more severe in North Korea, which has added to the massive financial burden. Currently, Pyongyang is under such heavy financial pressure that the government decided to issue public bonds for the first time in five decades, which demonstrates the severe budget shortages in North Korea. With its weak financial system, the government will try to deal with this problem by issuing more currency, which will most likely merely accelerate inflation.

Devaluation of the Currency Due to Opening

The fourth reason for inflation is opening to the outside world. To boost export competitiveness, a country might depreciate its currency, resulting in increases in prices of imported goods and eventual inflation.

In the case of Pyongyang, it most probably will depreciate its currency in order to promote price competitiveness as it opens to the outside world. In particular, North Korea needs foreign currency to develop its economy. While it needs to secure the foreign currency necessary to increase exports, export price competitiveness is not something a country can acquire overnight. The easiest option available for North Korea appears to be depreciation. But even if the North depreciates its currency to stimulate imports, it will increase the prices of imported goods at the same time, thus fuelling inflation.

In addition, due to the huge gap between the official and black market exchange rates, depreciation in the marketization process is unavoidable. During the 1980s, the black market spread rapidly in

North Korea, and exchange rates in the black market increased sharply.⁹⁾ Consequently, the outflow of foreign currencies into the black market became a serious issue. As a countermeasure the government announced the aforementioned July-1 economic management program to increase the exchange rate from 2.2 won to the dollar to 153 won (depreciation). But the exchange rate on the black market has soured since the July-1 program.¹⁰⁾

Foreseeable Inflationary Pressure

Considering the four reasons for inflation during the process of marketization, excluding currency oversupply, North Korea is highly likely to suffer inflation that is even worse than in the former Soviet Union and Eastern Europe—not to mention China.¹¹⁾ On the other hand, however, we can presume the opposite effect, or no “additional” serious inflation in North Korea as was seen in the former Soviet Union and Eastern Europe, due to the change of repressed inflation to open inflation, and drastic currency depreciation, both implying that most of the impact has already been reflected on the economy.

Since the announcement of the July-1 program, however, price and exchange rates in the black market are soaring again, and repressed inflation is resurfacing. This year, the North Korean authorities have used emergency measures such as issuing public bonds to absorb the monetary overhang, which shows that repressed inflationary pressure in North Korea is so great that it constitutes a major initial condition of

9) For example, 80 won to a dollar in 1993 had increased to 120 won to a dollar in 1996. Oh Seung-ryul, *A Study of Optimum Direction for North Korean Economic Reform* (Seoul: Korea Institute for National Unification, 1996), p. 28.

10) *Dongwha Shinmun*, weekly newspaper of the Central Association of Residents in the North Korean Provinces (March 9, 2003) reported the exchange rate of the won to the dollar on the black market had tripled from 220 won (February 2002) to 670 (February 2003).

11) Oh Seung-ryul also points out the possibility of severe inflation in the early reform stage in North Korea. Oh Seung-ryul, *op. cit.*, pp. 124-125.

marketization. Considering the monopolistic industrial structure, fiscal deficit, and inflationary pressure, North Korea has even more reason to worry about severe inflation in its economy than did the former Soviet Union and Eastern Europe in their situations.

POSSIBLE DECLINE IN PRODUCTION AND EMPLOYMENT

The experience of the Soviet Union and Eastern Europe indicates that in the early stages of marketization, there is a decline in output and employment. Despite the difference in the speed of transformation, this occurred in all countries. The country with the shortest negative growth period was Poland (2 years), while the country with the longest one was Ukraine (10 years). The Commonwealth of Independent States (CIS), on average, experienced negative growth for 6.5 years, with gross domestic product (GDP) declining by 50.5 percent. Central Eastern Europe and the Baltic States' (CBS) average was 3.8 years with GDP shrinkage of 22.6 percent.¹²⁾ But China was a different story. Since 1978 when Beijing pursued full-scale reform and opening, it has posted record growth, showing an annual actual growth rate for 1978-1997 of a striking 9.8 percent.¹³⁾

The question invariably arises: When the marketization process begins in North Korea, what will happen? Let us take a brief look.

Janos Kornai¹⁴⁾ who observed the transformation in the former Soviet Union and Eastern Europe, proposed the so-called "transformational recession" which predicts that when a system is transformed, recession is virtually unavoidable. Of course, recession

12) World Bank, *op. cit.*, pp. 3-6.

13) Refer to Lin Yi Fu, Cai Fang, and Li Zhou, *op. cit.*, pp. 18-28 for Chinese economic growth from the perspective of international comparison.

14) Janos Kornai, "Transformational Recession: The Main Causes," *Journal of Comparative Economics*, Vol. 19, No. 1 (1994).

will end someday, and if the recession is properly overcome, then the rest of the process will go smoothly. But in the case of the Soviet Union and Eastern Europe, it took them more time than expected to overcome the transformational recession. Even though there are disputes over the reasons for the transformational recession, this paper intends to analyze it in terms of the following four reasons, as it examines the possibility of such a recession happening in North Korea:

Aggregate Demand Shock

The first reason is aggregate demand shock due to the stabilization policy. Tight fiscal and monetary policy to stem inflation dampens total demand, causing production decline in the macro-economy. Other contributing factors include decline in product demand due to real wage decreases of workers and a decline in product-factor demand due to businesses' cash shortage.

Given the experiences of the former Soviet Union and Eastern Europe, if an extremely tight fiscal and monetary policy is followed in North Korea's early marketization process, production decline due to aggregate demand decrease is inevitable. In a transitional period, production decline in the macro-economy is more due to supply than demand, which will be discussed later. Even so, the demand side should not be ignored.

Transitional Confusion and Non-adaptation

The second reason is transitional confusion and non-adaptation due to transformation. For example, as the system transforms, the industrial structure changes, leading to shifts in property relationships to which economic actors often fail to adapt. Old codes of behavior are discarded, but there is no new set of rules to replace it. As the systematic vacuum continues for a while, the combination of these factors causes production decline.

In the case of North Korea, this kind of confusion and non-

adaptation is likely to be more serious because of the initial conditions of marketization in North Korea. For instance, the planned economy of North Korea has been a tightly centralized system¹⁵⁾ since the introduction of the “unified and detailed planning” policy in 1964-65. First, it is a planned economic system with a relatively good regulatory system regulations over information delivery and implementation. Secondly, the scope of the national economy subject to the planning is very broad. Its central planning and balance have a tight grip on the national economy, tighter than Eastern European countries.

In addition, it is noteworthy that the planned economy in North Korea has lasted longer than in Eastern Europe. Beginning with the foundation of North Korea (1948) and implementation of the “socialistic reconstruction of the relationship to the means of production” in 1958, North Korea has had a planned economy for more than 45 years, which is longer than Eastern Europe.¹⁶⁾ It is therefore hardly surprising that North Korea would find it more difficult to adapt to the new environment of marketization.¹⁷⁾

Non-elasticity of Supply

The third reason is non-elasticity of supply, the legacy of a planned economy along with delay in structural reform. In fact, North Korea suffered a severe economic crisis in the 1990s and into the new

15) Before reform and opening, the former Soviet Union had a tightly centralized system while China had a slackly centralized one. The noticeable difference in economic performance in these two countries during the system transformation is closely related to the degree of centralization. Refer to chapter 6 of Nakagane Katsuji, *op. cit.*

16) With the spread of the black market since 1990, North Korean residents had an opportunity to learn about the market economy, which acted as a positive factor in their adaptation to future marketization.

17) From another perspective, if the centralization of a system is strong, monopoly is highly likely to exist. Therefore, if decentralization (delegation to enterprises) is pursued to create a market, a monopolistic market is created. To ensure meaningful price liberalization a competitive environment is needed, which complicates the issue.

millennium, and most of its manufacturing infrastructure has collapsed. Indeed, it is in worse condition than the Soviet Union and Eastern Europe when they began transformation. In particular, equipment and facilities are antiquated. Due to the serious foreign currency crisis, they have decades-old facilities, many of which are still equipped with machinery used during the Japanese colonial era. During the so-called “arduous march” period in the late 1990s, maintenance and repair were neglected, further damaging the already decrepit equipment.

The technology of North Korea is also obsolete, with the gap between North Korea and other countries growing. The Korea Development Bank estimates that North Korea’s technology level in major industry is as much as 30 years behind South Korea’s.¹⁸⁾ As a result, North Korea’s efforts to cooperate with the South’s industries to restore its economy will have some limitations.

Import Expansion Due to the Open-Door Policy

The fourth reason is closely related to opening to the outside world. Opening can stimulate the inflow of foreign currency as well, but on the other hand, it could also open the floodgates to foreign goods. And chances are, North Korea could suffer a more serious trade imbalance, due to its geographical proximity to Japan, South Korea and China. High-priced North Korean goods would face competition from Western, Japanese, and South Korean products and medium- and low-priced goods would face competition from China, leaving little chance for North Korea to succeed. A surge in the import of foreign goods could injure North Korean enterprises, and it isn’t difficult to imagine a drastic shrinkage in domestic production.

As a countermeasure, if North Korean authorities adopt a flexible exchange rate, it could slightly ease the situation. Devaluation would lead to under-evaluation of production costs of domestic goods in the

18) Korea Development Bank, *North Korean Industries* (Seoul: KDB, 2000), p. 5.

international market and could ease competitive pressure from foreign countries in the local market. In this case, however, inflation would accelerate due to the increase in imported goods, proof that an exchange rate policy cannot defend a domestic market.

Transformational Recession in North Korea

It is rather difficult to predict whether output decline in North Korea's early marketization process will be more serious than in the Soviet Union and Eastern Europe. Even before the transition began, North Korea suffered consecutive years of negative growth and its economy shrank by 30 percent. In some sense, the impact from transformation has already been reflected. In any case, the economy is at its worst, so there is no place to go but up.

Since North Korea's nuclear crisis, however, international aid to Pyongyang has plummeted. Consequently, most observers are predicting another year of negative growth. The argument that North Korea's economy has "nowhere else to go but up" therefore, doesn't seem to have any reliable basis. Factors such as disorganization, non-adaptation in the transition period, non-elasticity of supply capability and import surges from the opening should also be taken into account, which leads us to expect a more severe transformational recession than the more typical situation of the Soviet Union and Eastern Europe.

MACROECONOMIC POLICY DIRECTION

Conflict Between Price Stabilization and Employment Stability

During the marketization process, the two basic tasks in managing the macro-economy are to stem inflation and to prevent production and employment decline. Attaining these two goals simultaneously is not easy. Moreover, these two objectives are often accomplished in a trade-off, which forces authorities to make agonizing decisions. The

direction of macroeconomic management and the policy mix, therefore, becomes a core policy issue.

The choice is between two conflicting directions: either a tight or a loose fiscal and monetary policy, with the former being more conventional. Since, inflation, particularly hyperinflation during the marketization process, is most detrimental, curbing inflation is the biggest task facing the authorities. In addition, the basic policy direction is suggested to be a tight fiscal and financial policy.

Inflation creates a negative impact on the economy through tax distortion and arbitrary distribution of wealth. The bigger problem might be resource allocation distortion due to price system changes. As opening progresses, inflation becomes more destructive, further weakening price competitiveness of domestic products.

Looking at the experiences of advanced Western countries with firmly rooted market economies, once inflation occurs, it takes considerable time to get the economy back on track. Given this fact, at the initial marketization stage, when inflation occurs, it will take more time to restore macroeconomic stability. On the other hand, some argue for an expansionary policy. They criticize the conventional tight fiscal and monetary policy that seeks to stabilize the economy through demand control, contending that the demand-controlling fiscal and monetary policy resulted in a longer-than-expected period of economic recession, and tight fiscal policy prolonged high unemployment. The ultimate objectives of transformation, restoration of the economy and establishment of an economic growth foundation have remained elusive. Against this backdrop, public dissatisfaction and subsequent social unrest emerged, causing resistance toward transformation. Although inflation control is important, maintaining employment decline at a minimum level and restoring industrial competitiveness should be the focus of macroeconomic management.

A Limited Expansionary Policy

Consequently, which direction would be the best option for North

Korea in the initial stages of marketization? As mentioned earlier, since Pyongyang will probably suffer harsh inflation, a very important policy objective will be to control it. Nevertheless, a tight policy is not entirely suited to the North as it will cause worse production and employment declines than were experienced in the Soviet Union and Eastern Europe. In particular, North Korea posted nine consecutive years of negative growth, from 1990 to 1998, with the GDP shrinking by more than 30 percent. As of the end of 2001, the GDP decreased by 22 percent compared to that of the end of 1989.¹⁹⁾ A few more years of negative growth could throw the North Korean economy into a crisis. Excessively tight macroeconomic policy could also significantly damage the growth potential of the North Korean economy, possibly beyond the point of recovery.

Pyongyang will require considerable time to acquire industrial competitiveness, another roadblock to cooperation with South Korea. The basic structure of industrial cooperation between the North and South is combining Seoul's capital and technology with Pyongyang's labor, land, and natural resources. However, the manufacturing base in North Korea is on the verge of collapse and the technology gap between the North and the South spans several decades, which limits cooperation in the manufacturing sector.

Meanwhile, during marketization, in order to secure a growth engine, and to obtain the foreign currency needed for economic development, export promotion emerges as an urgent task. However, the goal of increasing exports cannot be achieved within a short period of time. Distorted price mechanisms, excessive overvaluation of exchange rates of the country's currency, lack of awareness of export goods competitiveness (particularly, quality), excessive interference by the central government and party organizations in trade negotiations, the energy crisis and a lack of raw materials led to a lack of product supply capability, and competition between domestic demand and

19) The Bank of Korea, "The Results of the Estimation of North Korean GDP in 2001," [www.bok.go.kr].

export demand. With marketization, the problem of prices and exchange rates could be eased a bit, but the other issues will require considerable time for resolution.

Against this background, the need for devaluation of the North Korean currency can be proposed. One of the issues is how much the North Korean won should be devalued to gain international competitiveness. Considering the extremely poor export basis of North Korea, especially since devaluation causes an increase in the price of imported goods, it can only be implemented within a certain range.

Opening is essential for economic development in Pyongyang, and with the North's severely drained domestic resources, input from the outside is indispensable. However, in the infant stage of marketization, the inflow of foreign capital is questionable. Although North Korea has taken a positive attitude toward foreign investment compared to the past, the lack of electricity and poor SOC, obsolete facilities, and lack of raw materials have rendered North Korea a most unattractive destination for foreign capital. In addition, North Korea's domestic market is miniscule. And the so-called black hole of internal investors' capital—China—is located very close by, which constitutes another disadvantage for North Korea.

Therefore, even without a tight fiscal and monetary policy, the North Korean market could suffer a decline in production and employment in the early marketization. And if the macro-economy is managed with a tight fiscal and monetary policy, the possibility of negative economic growth could increase and the period of decline could be prolonged.

If production and employment declines for several years, it could generate resistance to reform, or delay its implementation. That scenario is much more likely in North Korea as the people still have a vivid memory of the hardships they suffered during the food shortage of the "arduous march" in the mid and late 1990s.

As mentioned earlier, the reason for inflation in the early marketization in North Korea is mostly on the supply side. Repressed inflation was caused by the drastic decline in the production of goods

and collapse of the official distribution network. In other words, in the official economy, the worsening goods shortage deteriorated the monetary overhang, which then became severe inflationary pressure.²⁰⁾

Announcing the July-1 program, the North Korean authorities tried to bring prices to the level of the black market hoping to balance supply and demand of goods and solve the monetary overhang problem. There has been, however, no substantial outcome, and in fact, black-market inflation was triggered again due to the supply side issue. The July-1 measures resulted in dramatic increases of money supply due to wage increase, but the goods supply was still limited, exacerbating the currency overhang. Unless North Korea deals with the supply side issue first, there will be no significant decline in inflation.²¹⁾ Nevertheless, an excessive expansionary policy can also be problematic, necessitating constant vigilance against inflation.

The general direction for macroeconomic policy should be slightly expansionary, however, in both financial and monetary policy. In all aspects, currency control is important, and this is particularly so for

20) An internal North Korean documents concerning the July-1 program (the content of this was reported by the *Chosun Ilbo*, October 16, 2002) said that "Now the country has no money, yet individuals hold more than twice the amount of the annual national budget." This stems from an absolute lack of commodities in official stores, and the thriving black market. Wages flow from the bank, to the factory, and to workers. Ideally, workers should spend the money so that it can flow back to the government through the national distribution network. But the money flow stops with the individual workers because there are no stores, only the black market. The money circulates among individuals, not going to the bank or to the government. Nevertheless, the government must pay the workers. To sum up, the government has to provide currency to the private sector but due to the lack of goods in distribution centers the currency hardly ever returns to the government. Rather, it accumulates in the private sector, which worsens monetary overhang.

21) The fundamental solution to easing inflationary pressure due to monetary overhang is to expand the supply of goods, stimulating the currency return to the government. Yoon Duk-ryong, Jung Hyung-gon, and Nam Young-sook, *A Scenario for North Korean Financial Reform Based on Examples of Transformation* (Seoul: Korea Institute for International Economic Policy, 2002), pp. 44-45.

North Korea, considering the monetary overhang it inherited from its planned economy. Furthermore, it is necessary to set a target for an inflation level that will not undermine sustainable growth and continuously control it. Various factors should be considered in setting the target, including how to achieve positive growth. What is important here is industrial policy, particularly industrial structure policy to secure a growth locomotive, through restructuring of the resource allocation system among industries.

In terms of fiscal policy, a limited expansionary policy should be implemented. In the initial stage of marketization, increased demand for fiscal expenditures could cause a fiscal deficit. Consequently, setting a target for the fiscal deficit will be necessary. Important factors affecting fiscal conditions include foreign direct investment, international financial institutions' assistance, compensation from Japan, as well as South Korea's financial assistance. In particular, the size and the timing of assistance from the South Korean government will be a determining factor.

CONCLUSION

It is inevitable that North Korea will suffer even worse decline in production and employment, than were experienced by the more typical Soviet Union and Eastern Europe, not to mention China.²²⁾ The World Bank argues that the initial conditions of marketization have a great impact on this issue. The initial conditions fall under three major categories.²³⁾ The first is structure, which include industry's proportion of GDP, trade dependence on socialist countries, natural resources, and income level. Second are distortions such as repressed inflation,

22) As mentioned earlier, our focus was limited to initial conditions, producing these results. A different story might unfold, depending on the specific outline of North Korean marketization policy.

23) World Bank, *op. cit.*, p. 15.

black market exchange rates, trade conditions with CIS, reform history, and growth rates before the transformational period. Third are institutions such as market economy experience, geographical location, and whether or not the country's government is newly formed.

Due to the shortage of relevant statistics, exact comparisons are difficult, but it is clear that initial conditions in North Korea are worse than the former Soviet Union, Eastern Europe, or China.²⁴⁾ Notably, the World Bank points out that the distortions have the greatest impact on poor economic performance during the early stage of transformation.

First, with respect to monetary overhang, according to the Bank of Korea, it was 40 percent in 1989-90 in North Korea, which is higher than that of the Soviet Union, at 25.7 percent (the highest rate among countries that underwent transformation). In the 1990s, especially since the July-1 program, the monetary overhang became far more serious. Second, the gap between the black market and official exchange rate is 18 times greater than that of the Soviet Union, which previously had the biggest gap. In fact, shortly before the announcement of the July-1 program, the figure was even 100 times higher. Fortunately, the gap has decreased to 5-6 times since the July-1 measure. Third, Eastern European countries had some economic reform experiences before transformation began, but North Korea has no advantage in terms of reform history. As far as distortions such as repressed inflation, black market exchange rates, and reform history, North Korea's initial conditions will hardly be better than the Soviet Union and Eastern Europe.

Inflation in North Korea will be destructive, which will necessitate an inflation control policy as a key policy objective. Nevertheless, the current reality does not allow North Korea to consistently adopt a

24) Jung Yeo-chun also evaluates that the initial conditions of North Korea are worse than Eastern Europe. Jun Yeo-chun, *An Assessment on Economic System Transformation in Eastern Europe and its Implications for the North Korean Economy* (Seoul: Korea Institute for International Economic Policy, 2000), pp. 91-109.

tight fiscal and monetary policy. Moreover, excessively tight macroeconomic management could seriously undermine growth potential of the North Korean economy, driving it to the point of no return. Years of declining production and employment might generate resistance to reform or delay reform, and in addition, if the goods supply issue is not resolved first, efforts to ease inflation will face clear limitations. Actually, the International Monetary Fund and other international financial bodies recommended that the Soviet Union and Eastern Europe tighten fiscal and monetary policy in order to stabilize the macro-economy, but whether or not that policy should be adopted for North Korea needs further review.

Of course, an excessive expansionary policy can also be a problem. Inflation must be continuously controlled, and therefore, a mildly expansionary policy for macroeconomic management seems desirable. Setting a target for inflation and fiscal deficit level is also required, and in this case, the inflow of foreign capital and assistance from the South Korean government can be an important factor. The reform of the industrial structure is the most urgent for securing a growth engine. After all, the greatest task in early marketization will be how to design the policy mix that combines a stabilization policy and an industrial structure policy.