

Phased Integration and Policy Tasks of Social Security in Unified Korea

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Foreword

For the last 65 years, the Republic of Korea under liberal democratic system and the Democratic People's Republic of Korea under communism, have been in a long-lasting division, which resulted in differences in politics, economy, society and culture deeper than those experienced in any other divided nation on the earth. North-South relations after division have repeated the conflict and reconciliation, expectation and disappointment, etc. according to the changes in national and international circumstances, and have developed in a 「stop and go」 model where improvement and deterioration in relationships are repeated in uncertainty. However, we need to prepare under the urgent consensus that unification is a matter of the present that can happen anytime, since it is clear that national development and the future of the people depend on unification of the nation and recovery of homogeneity as one people.

In preparation for policy measures for unification, discussions on social welfare issues, to this day, have been subordinate to political or economic issues. But there can be no different opinion on the necessity to prepare for the protection of basic living of the citizens in the north, an issue that we will eventually face as one of diverse social matters to be dealt with, along with economic and social crises in the initial period after unification. In particular, considering the possibility of unification taking place at an unexpected time, the size of financial resources and procurement method thereof and necessity to build

infrastructure are important policy tasks to be prepared for at this point in time along with political and economic issues. That is, forecasting specific policy tasks of each sector of social security that might emerge in the early phase of a south-led unification process and after the achievement of unification, as well as preparing a 'road map' for integration of the social security systems of North and South Korea from mid-to-long term perspective, are required.

This report has two research goals: one is preparation for policy measures for coping with crises in the social welfare area for the protection of minimum living standards of the citizens in the north in the initial period after south-north unification; the other is seeking diverse policy alternatives on the integration and unification of the social welfare systems of the North and the South during the economic-social transitional process in the region of North Korea. With regard to such policy measures, existing research reports are not nonexistent, but they did not go beyond indicating problems focused on fragmentary basis of argument, and, in particular, were deemed to be unsatisfactory to meet the demand of academic circles and policy makers who seek understanding of integration of the social welfare systems of the North and the South with the aim of preparing for unification of North and South Korea.

At the third-generation succession of power of Kim's dynasty in North Korea in September 2010, some scholars in and outside the country interpreted the development as a sign of North Korea entering into the process of collapse. Under these circumstances, we have to make the best policy preparations in case of the

sudden arrival of unification that might come to us without forewarning, and at the same time we should certainly find ways in which the policy alternatives we prepare will not add to the burden of the citizens of both the North and South. This research examines short-term welfare support policies for the protection of basic needs of the citizens in North Korea and policy orientation concerning major tasks for integration of social welfare systems of North and South Korea from a mid-to-long term perspective

We face the task of reunification of the Korean Peninsula, which has historical significance for the nation, and this can be realized only through the implementation of a liberal democracy, market economy, and a welfare society that unified Korea needs to pursue.

As for the gap in economic power between the North and the South, based on per capita GNI, South Korea's national income is about 17.9 times more than that of the north as of 2009. This means that the North Korean economy today remains in 'leveled-down absolute poverty' with per capita GNI falling short of 1/20 of that of South Korea. Accordingly, to achieve unification of the two Koreas, led by the South, efficiency in economic and social systems should be maximized and thorough preparations should be made that will also contribute to laying the foundation for the long-term development of unified Korea.

From the viewpoint of economic and social integration, the transition from a socialist economic system to a market economy system is in general based on the premises of change in proprietorship, price liberalization, privatization of government-operated businesses, liberalization of trade and capital transaction, and free mobility

of production elements. This means that we would inescapably have to protect the minimum living standards of the citizens in the North Korea amid economic conflicts and economic recession in the north, which are commonly expected to emerge in transition economies in addition to price rise, sluggish economic growth, massive unemployment and economic recession. Considering the current condition of leveled-down absolute poverty of North Korean society, rebuilding a social security system before and after unification would add a big burden to the finance of the government of Unified Korea.

As North Korea has maintained the extremely centralized political·economical·social system, contrary to the south, the depth of difference between the North and the South is bigger than that of any other divide nations in history. While South Korea has developed with emphasis on multi-party democracy in political aspect, market economy, decentralization in decision-making and the value of economic factors in economic aspect, and individualism, liberalism and pluralism in social aspect, North Korea has stuck to a single-party rule and totalitarianism in political perspective, a centrally planned economy in the economic aspect, and groupism of multiple-mobilization and the society centered around a controlling organization in the social aspect.

In addition, the fundamental difference in economic system between the North and the South lies in the characteristics in proprietorship: while South Korea has a private property system that recognizes property rights, North Korea does not recognize private property under the principle of collective ownership. The basic foundation of the North Korean economy starts from a

socialist ownership of means of production, and all ownership in North Korea is recognized based on social ownership with the exception of individual ownership solely for the purpose of individual consumption.

While South Korea, under the principle of a market economy, has valued creative activities and aimed for an open economy where most of production and consumption activities are privately managed, North Korea, in denial of the principles of the market economy, has stuck to a ‘command socialist economy’ where production and distribution is led by a ‘central plan’ based on the most ideological·stiffened·closed system even among the socialist states.

In particular, on the production and distribution side, South Korea could achieve an economic system of ‘consumer sovereignty’ through market price mechanism, while North Korea, disregarding consumer preferences, has maintained an inefficient economic system where there is only the leader’s sovereignty, and production and distribution are led by the state and the political party.

Therefore, Koreans who live today have two national tasks. One is the <national advancement task>, upon which continuous development of the nation depends. The other is <task of national unification> that should be achieved, ensuring national security and social security in the process.

Since these two tasks do not conflict with each other, policies should be devised in such a way that accomplishment of these two goals are synergistically made. And when the synergy effect is maximized, the unified Korean peninsula will have a new

impetus for development.

From this viewpoint on our unification, accomplishment of the unification of North and South Korea does not mean a completion of a national task; rather, it means that the south-north community will stand at the starting line for a new takeoff for the national economy. Accordingly, we need to consider all possible types of unification that can take place in the future as well as examine short-to-long-term policy measures in advance. Considering the economic capacity and status in the international community of North and South Korea here and now, there is no other choice but for South Korea to lead the unification process. And in case unification is realized rapidly, the importance of policy preparations of social welfare system that will secure basic needs of food, clothing and shelter of the citizens in the north right after unification cannot be overemphasized.¹⁾

More than anything, if the public distribution system of the north, where life is based on organizational management and

1) In particular because, in North Korea, the state takes responsibility for all the costs for individual living(security of living) that are required to control its people, and private possession of products is banned and accordingly consumption that is out of the boundary set by the state is not possible. Blanchard (1996) found one of the reasons of reduced growth that takes place in the early stage of transition to the market economy system in 'disorganization of old structure'. This points out the necessity for us to make prior preparations for short-term unification costs that include 'crisis management cost' or 'cost for relieving economic·social shock' until the northern region develops economic self-support and economic recovery. As for the establishment of a unitary economy between the North and the South, laying the foundation for internal vitality for the economy in the north should be a policy priority; for instance, accumulation of material resources, investment in human capital, expansion of social overhead capital, etc. from a mid-to-long term perspective. And all these constitute the policy tasks that we are to prepare for unification.

control, collapsed, it is not too much to say that it means that the basic living of citizens in the north would become impossible as evident with the current food shortage in the north, and will add financial burden to the government of unified Korea.

What kind of unification would be helpful for national development? Without regard to the type of unification of the Korean peninsula, what are the basic principles that we have to be faithful to in the unification process? How should unification be achieved, and who should achieve it for whom? Answers to these questions are self-evident.

Although North and South Korea advocate the unification based on the four principles of peace·people·independence·democracy, the problem lies in their conflicting viewpoints on the system expressed as a concept, ‘democracy’.²⁾

However, in view of the flow of world history and the ideology called ‘realization of life as human beings’, the argument that liberal democracy should be the basic order of the unified Korean peninsula is justified.

Type of south-north unification might develop in one of the following scenarios:

First, it’s the scenario where a gradual and peaceful unification is realized under the agreement between the North and the South. In theory, the most desirable is a phased approach. More specifically, at first North Korea takes open-door and reform policies, which

2) ‘Democracy’ in South Korea means ‘liberal democracy’, a concept that recognizes relative values; on the other hand, North Korea regards it as ‘people’s democracy,’ a concept that insists on absolute value. Furthermore, both sides maintain the position that they would never back down as far as these principles are concerned.

is followed by the North Korean economy and society making a soft landing, followed by gradual increase in cooperation between the North and the South with the aim of recovering the homogeneity of the nation, and followed by the convergence of economic·social systems.

But as noted above, not only their opposite viewpoints on the concept of ‘democracy’ but the north’s plan for unification under communism in accordance with ‘class liberalism’ and the south’s ‘plan for embracing North Korean brothers in accordance with ‘pan-class national unity’’ are mutually exclusive. As long as they stick to opposite viewpoints, this type of unification cannot be realized in theory since there exists an impervious barrier between the two viewpoints and naturally, unification under agreement between the two sides is difficult in the present situation.

Second, in the case internal crisis in the north and the change in the state of affairs surrounding the Korean peninsula make the confrontation between the two systems meaningless, unification of the Korean peninsula can suddenly be realized. That is, if the north maintains its attitude of continuous refusal of opening and reform, adhering to their principle of autarky through ‘their way of socialism’, while strengthening a military-first policy with the aim of becoming ‘a prosperous and powerful nation’ by 2012, this will bring about its complete isolation in international society, which will accompany economic difficulties and faltering ruling system, namely the advent of a big bang or crashlanding of the north. If that happens, application of a South Korea-led unification plan might become possible, and accordingly we need to prepare for such a case. This situation

mentioned thus far will result from the following factors:³⁾

North Korea is suffering from complete isolation due to economic sanctions and pressure from the international community regarding nuclear development and an impoverished economy that is suffering from the difficulties of food shortage, famine, energy shortage and foreign exchange shortage. This condition results from the excessively centralized economy that is leading to a rapid collapse of the farming industry and industrial structure. If such a policy continues, the North Korean economy that is breathing hard even now will not find its way out and will fall apart.

There are no means whatsoever to maintain its existence as long as North Korean citizens keep crossing the border to other countries to escape starvation. In addition, North Korean citizens have begun to be aware of the fact that South Koreans are enjoying higher living standards than they, and in the process of the power succession from Kim Jong-il to Kim Jong-eun, weakening sovereign power caused by Kim Jong-il's health deterioration is also a possibility. Although many interpretations can be made

3) Refer to the contribution of Brian Myers to the edition of Mar. 27, 2010 of the *Wall Street Journal*. Brian Myers insisted that preparations should be made to meet the case of North Korea collapsing in a destructive manner within 10 years. He noted that experts on North Korea have analyzed that the current situation of Korea is the first stage of a collapse. He said, "Since the 1990s North Koreans have come to be aware that South Koreans are living better than they and the brethren in the south do not want to be ruled by Kim Jong-il". He continued, "The North Korean regime, not knowing why they are to be sacrificed to liberate the people who do not want to be liberated, rely on the most absurd propaganda and instigation" in despair. A paradoxical example is the slogan "let's open the door of a prosperous and powerful nation" in 2012, the birth year of former premier Kim Il-sung.

of the hereditary succession of dynasty made at the congress of delegates of workers party on Sept. 29, 2010, from a greater perspective, this means that the North Korean system is heading toward its terminal station regardless of its survival.

North Korea officialized the unprecedented third-generation hereditary succession of power—from the first Kim-to-Kim (from Kim Il-sung to Kim Jong-il) succession to the second Kim-to-Kim (from Kim Jong-il to Kim Jong-eun) succession at the delegates' congress of workers party held on Sept. 29, 2010. Unlike the first power succession from Kim Il-sung to Kim Jong-il, the second power succession from Kim Jong-il to Kim Jong-eun might cause veiled enmity between power groups inside the party or in the army as well as agitation among bureaucrats in the process of transfer of sovereign power.⁴⁾ Such developments, along with such political slogans as ‘a prosperous and powerful

4) It has been suggested that Park Nam-gi, the former director of the Workers Party's Planning and Finance Department, who were responsible for the whole economy of the north, was executed as a scapegoat over the fiasco of currency reform. In the past when massive deaths from starvation occurred, North Korea, in an attempt to soothe public sentiment, publicly shot to death Suh Kuan-hi, then party secretary in charge of agricultural affairs in september 1997. There are many such examples in the north that economic bureaucrats lose their lives to take a fall over policy failures. Kim Jung-woo, former chairman of International Trade Promotion Committee (minister level) who commanded Nasun (Najin-Sunbong) special economic district, insisted on the introduction of market economy and went missing since 1998. His successor, Kim Moon-sung, former deputy trade minister, is known to have been shot to death for corruption. It is told that in the case of vice premier Kim Dal-hyun, who was a representative economic bureaucrat at the time, visited Seoul in 1992 and mentioned opening the country when he returned to the north and was expelled to be a factory manager and committed suicide later in 2000. Chung Un-yup, who was in charge of economic cooperation between the North and the South in 2000s, was purged for corruption in 2008.

nation’ ‘military first policy’, would eventually enable the military, which is the representative attribute and essence of North Korean society, to seize power. Therefore, the whole process of hereditary succession of power itself cannot but constitute a dangerous period for the south. However, as witnessed by the ends of so many systems that were solely dependent on military strength, the end of the North Korean system will eventually come, and we should make provisions for such an event, expecting that it will come in the first half of the 21st century.⁵⁾

Third scenario is the unification under communism in accordance with class liberalism led by the north. However, since this case is impossible considering the gap in the size of population,

5) Few people expected that unification of Germany would happen within the 20th century right before the collapse of the Berlin Wall. Even the former Chancellor Helmut Kohl from the Christian Democratic Party disclosed in his memoir that he did not even guess in the first month of 1989 that the Berlin Wall would collapse in October of that year. Willy Brandt, who made efforts for political reconciliation with Eastern Europe including the Soviet Union, and Chancellors from the Social Democratic Party including Helmut Schmidt even called the word ‘unification’ futile. Leftist intellectuals denounced “discussion of unification” as “unrealistic political propaganda”. But this situation utterly changed as Gorbachev who advocated glasnost (openness) and perestroika (restructuring) became the leader in the Soviet Union, and the democratization trend that started in Poland spread into the whole East-European bloc, causing the flood of refugees swarm into neighboring Hungary, and Czech Republic, and mass demonstrations demanding democratization fill the streets of big cities of East Germany including Leipzig. Our current condition, where North Korea hurries the third-generation hereditary power succession, can be inversely regarded as a forewarning that a sudden change can happen anytime there. How desperate is the republic of Korea in preparing for such events? Any sudden change in the situation of North Korea constitutes the moment when the destiny of the nation is decided. The government and the people, together, on the earnest consensus that unification is a reality that we might confront any time, should find measures that will enable us to play the role of owner of our own destiny.

economic power, and status in the international community, this research will leave this scenario out of discussion.

However, we should keep in mind that any of the three above-mentioned unification types can happen without forewarning and accordingly, we should gather our wisdom and energy in preparation of measures to cope with unification on a national level.

The kind of arguments about unification that we should treat with caution are such that the collapse of the north will lead to disaster in the south, for instance, the assumption of appearance of massive refugees or astronomical amount of unification cost, etc. Anyhow, since we will encounter the issue of unification anytime the unrest there suddenly comes to the surface, we have no choice but to unify the nation at any cost. That is why we need to analyze the benefits and the cost of unification in advance, which is also dependent on our provision of policy measures.

There is no reason why a unified Korean government cannot properly manage 24 million citizens in the north, maximize a synergy effect out of 74 million, the combined population of the North and the South in mid-to-long term, and thus lay the groundwork for fresh development for Korean people. Actually, our capability is growing, even while we are not aware of it, to the level where we can accomplish unification.⁶⁾

6) East-West Germany started negotiation after the Berlin Wall collapsed on Nov. 9, 1989, signed the unification treaty next year on Aug 31, 1990, which consisted of 45 articles, and the agreement took effect five weeks later on Oct. 3. At the commemoration of the 20th anniversary of German unification on Oct. 3, 2010, Chancellor Merkel from East Germany said “we could rapidly reconstruct East Germany and become the Germany today that is respected in the world due to the concerted

In that case, what kind of economic·social change will unification bring to the citizens of North Korea? The answer to this question has grave importance in that it can be directly linked to policy tasks that the unified Korea will confront, and it can be found by understanding the meaning of the transition of the north into the market economy system. The elementary proposal here is that without the reform, opening and transition of the North Korean economy, maintenance of basic living and improvement in “quality of life” of the citizens of the north who are in “leveled-down” poverty cannot be secured. This research intends to examine the consequences of transition and the lessons from those economies that went through such transition periods, including the unified Germany, focusing on the collapse of the public distribution system and economic recession that will face us as the most difficult of ripple effects that the structural transformation of the north will bring about.

First, the security of citizens’ living in socialist countries like North Korea comes in the form of the housing·medical care·education that the state provides for free or at a low price, as well as subsidies on price, etc. of all kinds of consumer goods

effort of East and West Germans”. In an opinion poll, ZDF, German Public Broadcasting, conducted on the occasion of the 20th anniversary of unification of Germany, 84% of respondents answered that “unification was the right decision.” Those who answered that “unification was a bad decision” numbered only 14%. Despite the fact that for the last 20 years, 1.4 trillion euro (about 2200 trillion won) was poured into the reconstruction of former East Germany, and to raise the funds, German enterprises and people have borne the burden of ‘solidarity surcharge’ (Solidaritaetszuschlag) for almost 20 years, most of Germans accepted its necessity. <Refer to the editorial of the Chosun Daily on Sept. 29, 2010 written by Yang Sang-hun and the editorial of the same newspaper on Oct. 4, 2010.>

in addition to money income including wage and pension. Therefore, when price liberalization and industrial restructuring, which are the primary courses for the transition to market economy, starts in full-scale, the income distribution system also has to be restructured to correspond to the needs of the market economy. This is because price liberalization in transition economies accompanies sharp price increase in general due to the reduction or abolition of free provision of subsidies for the prices of daily necessities or financial aid on housing·medical care service·transportation·communication·medicine and medical supplies, while industrial restructuring causes massive unemployment and decrease in real income.

Collapse of ‘public distribution system’, which is based on organized control, almost means basic living of the citizens of North Korea will become impossible as we see from the current food shortage in the north. Under the system of North Korea, the state takes responsibility for all the costs of individual living (security of living) and private ownership of products are banned, and accordingly, it is systematically impossible for individuals to consume more than the set bounds.

Second, the general trend in economic growth of transition economies shows that output decreases in the initial period during transition and, after a certain period of time, it recovers again in a U-shaped pattern. In case North Korea, in its already deteriorated economic situation even before unification, has to undergo any further decrease in growth that will result from transition, the citizens there will be put under the worst living conditions. In his 1996 study, Blanchard cited ‘disorganization

of old structure' as one of the reasons why growth decreases in the initial stage of the transition process into the market economy. This suggests to us the necessity to make provisions for short-term unification costs, the kind to be used for crisis management or for relieving economic and social shock until after self-supplying organizations are established in the north and the economy is recovered therein.

Third. the blanket subsidies of former socialist countries offered to individual households deepened the problems of wasting national resources and imbalance of government budget. Accordingly, in the attempt at the transition of the North Korean system into the market economy, the unified Korean government will have to unavoidably reduce or slash the size of subsidy. This shows how important the role of the state, under the old socialist system, played in securing the basic living of individual households.⁷⁾

7) Poland, which started its full-scale reform to achieve the transition to market economy at the end of 1989, can be a good example to show the kind of difficulties that transition economies go through. With its reform, Poland saw a drop in real income, increase in unemployment and 14% increase in the poor, accounting for 31.5% of the total population, during one year of reform. In particular, the poor used to be mainly found among the people who were living on pension before reform, but this bracket expanded to people who earn wages, city employees, households with one parent, and households with many dependents. (Refer to Maret & Schwartz, 1993, pp.4~5) Also in the case of Russia, which has already tried the transition to market economy, the self-payment ratio of average household living cost stops at only 27% and the rest had to be supplemented by the state basic living security system. Living cost includes direct costs for general living and the cost spent on such public utilities as water supply, heating, electricity, gas, use of transportation facilities, etc., and the amount of money Russian government spent for such basic living security of its people is estimated, with the year 1994 as basis, to account for about 6% of GDP. From a separate perspective, the level of social security spending

Last, in view of the experiences that East Germans region, after German unification, or other transition economies in Eastern Europe including Russia went through the necessity to establish an effective social security policy for the northern region of Korea is expected to be strongly raised. Because if we accept the assumption that the ration of basic daily necessities ceases after unification and the number of the jobless increases during the transition process in which government-operated companies are privatized, the real income of citizens will fall, and output will decrease, commodity prices will soar, and accordingly, demand for social welfare will rapidly rise. And this situation will certainly constitute a new factor of financial pressure for the unified Korean government.

From the four aspects mentioned thus far, we can see that the disintegration of the north's ration system and increase in the number of the unemployed will certainly necessitate the establishment of a basic living security system and positive labor market policy. Therefore, measures to secure basic living in diverse aspects—for instance, employment support service after unification for those who work in the north, job training aimed for continuous job creation from a mid-to-long term perspective, securing adequate health·medical care services, granting a fixed level of cash or goods, etc.—would have to be led and managed by

of the Russian government when compared to GDP is about 11.5% of GDP annually; more specifically, pension (1995) 5.3%, housing subsidies (1994) 4.2%, protection of the infirm·pregnant women(1994) 1.0%, child allowance(1994) 0.7%, unemployment allowance(1995) 0.3%, etc. (Refer to p.47 of May 3rd-9th 1997 edition of The Economist).

the government.

The purpose of this research, regardless of the type of process we might go through to the accomplishment of unification, and particularly under the assumption that the country has to go through a drastic economic recession that is typical in transitional economies including price rise caused by disintegration of a ration system, slow economic growth and massive unemployment, is to discuss about how we should cope with such factors of social unrest, including the massive migration of North Korean citizens into the south, and try to define measures to manage such crises expected in the social welfare sector.

The scope of discussion of this research, given the lessons from the experiences of unified Germany and transition economies, includes; first, as a short-term policy measure, basic orientation in basic living support for North Korean citizens; second, policy tasks in the sector of health and medical care service to secure the right to health of the citizens in the north in the transitional period right after unification; third, policy tasks for overcoming the problem of the exodus of the citizens of the north; and last, as a mid-to-long term task, policy measures related to the integration of overall social welfare system between the North and the South.

This research ‘Policy Tasks for Social Welfare of Unified Korea’ is composed of six chapters. In the second chapter, economic and social systems of the North and the South are compared, and economic and social measures for the institutional transition of North Korea as major policy tasks for the integration of economy and society were described and analyzed. In chapters

3 through 4, results of analysis on the limitations of the north's dual security of the living of its citizens and its actual conditions made through the evaluation of the current income distribution structure, public distribution system and policy means for basic living security were suggested, and through the introduction of the lessons from transition economies, the size and policy tasks of basic living security for citizens in the north before and after unification were drawn. Particularly, in the third chapter, analysis was made on the policy tasks we will face in the initial period of unification, including the basic living protection for the citizens in the north from a short-term perspective, the problem of mass exodus and preparation of health-medical care service provision measures, and the measures to deal with the migrants from the north etc. Particularly, policy tasks for supporting the citizens in the north before and after the unification were drawn in this chapter. In the fourth chapter, as policy tasks for integration of the social welfare system from a mid-to-long term perspective, characteristics of the social security system of the north were examined and social welfare systems of the North and the South were compared, and to draw the lessons from the unification of Germany, general background of unified Germany, progress of the integration of the social welfare system, restraints on population migration, tasks required for health and medical treatment integration, and their implications on economic policy were examined. In the fifth chapter, based on the earlier mentioned analyses, basic orientation of policy tasks for supporting social welfare for the citizens in North Korea before and after unification was suggested, and measures etc. for phased integration of social

security system of unified Korea were defined. Particularly, in paragraph 4 of the 5th chapter, discussions in academic circles on unification cost and measures to secure financial resources made thus far were reviewed. The sixth chapter, the final chapter of this report, suggested basic viewpoints on securing basic living of North Korean citizens, areas for basic living protection, which is our policy task after unification, feasible policy means we would have to choose, and the tasks that need to be supplemented and studied in detail in the future. In the appendix, derivation of the formula related to the theoretical backgrounds of the discussions of this research was introduced, and the data of the North Korean population census for 1993 and 2008 was included in <Appended Table 1~12> after comprehensive reorganization thereof to help the readers of this report grasp and understand potential demand from the citizens in the north for health·medical treatment and social welfare sectors.

Chapter 1

Summary

Summary

Korea has the two important policy tasks of ‘national advancement’, upon which sustainable development of the nation and people are dependent, and ‘unification of the people’, of which the focus is on preparing for the unification of North and South Korea. Since these two task do not conflict with each other, policy measures should be devised in a way that these two goals are achieved in synergistic manner so that unified Korea will have new development possibilities.

From geopolitical and economical perspectives, achievement of the unification of North and South Korea does not mean the completion of the national task; rather, it means that the economic-social community of North and South Korea will stand at the starting line for a new takeoff for the national economy. Accordingly, we need to consider all the possible types of unification that can take place in the future and set up short- and long-term policy measures in advance.

Particularly, it is essential to be prepared to cope with all kinds of economic and social problems we might face in the phase where national unification is about to take place and the phase after unification is realized, and the increase in social welfare demand that will occur in the process of narrowing the gaps between the North and the South in social sectors that constitute ‘the quality of life’. A desirable approach in taking specific measures for reducing both qualitative and quantitative gaps in social welfare system between the North and the South

in a unified Korea would be to promote unification in gradual phases in accordance with the structural changes that take place in the economic and social systems of both regions.

This is because accomplishment of a 'communal market economy·social system' of North and South Korea should be based on the premise that vitalization of job-creating functions and establishment of market economy in the north be settled, minimizing the financial burden of the government of unified Korea.

Discussion of this research report is focused on short-term emergency control policy to relieve economic and social shocks after unification and to protect the minimum living standards of citizens in the north, and on suggesting mid-to-long-term policy orientation of major measures to be taken for the integration of the social welfare systems of North and South Korea. Such discussion is based on the assumption of mass unemployment and the total collapse of rationing system that will inevitably occur under the transition of economic and social systems. In other words, economic and social unrest under the transitional period after unification was assumed as the premise in this discussion.

As short-term measures to cope with crises in social welfare sectors in the initial period after unification, this report first suggested policy measures to support the basic living of the citizens in North Korea and for health and medical care service sectors to secure their rights to health amid the expected disintegration of health and medical care sectors, as well as policy orientation in overcoming the problems entailing the exodus of

North Korean citizens to the south; second, as mid-to-long term policy measures, alternatives regarding the integration of social security policy between North and South Korea and accompanying matters such as financial procurement etc. were suggested. Major issues discussed here are as follows:

First of all, regarding the measures for protecting the minimum living of citizens in North Korea right after unification, priority should be the security of basic living, which includes such measures as livelihood protection for the unemployed, positive labor market policy, poverty relief policy, etc., from a short-term perspective rather than the improvement in 'quality of life' from a long term perspective. Because the work of composing a new social security system would be possible only after a job-creating capability is secured and the market economy is settled in the north to the level where individual enterprises and laborers can contribute to the social insurance fund to a certain degree. On the other hand, policy tasks required for basic living of citizens in the north in the phase where unification is realized but complete integration of economic-social system between North and South Korea that have not been accomplished are as follows:

First, at the point in time when unification seems attainable, emphasis should be put on 'basic living security' for the citizens in the north through such emergency aid measures as provision of food, basic medicine and medical supplies, and measures for refugees etc. Emergency aid measures for the citizens in the north right after unification should also be promoted in a comprehensive frame, eschewing selective support.

Second, in a full-scale unification promotion phase, basic living

protection measures for the unemployed and the poor should be prepared. However, such protection measures for the people in the north should not end in just ‘financial aid itself’. The ultimate emphasis should be put on ‘protection of labor force’ through the provision of jobs.

Third, in preparation for the initial stage after unification, it is necessary for both the central and local governments to make prior preparations for 1) the basic living protection and financial procurement for the citizens in the north, 2) the measures regarding the migrants from the north, and 3) establishment of legal grounds and regulations for the related policies.

Fourth, basic living protection policy for the people in the north in the initial period after unification should not end in ‘financial aid’ but be promoted with the ultimate goal of establishment of welfare in mind. Particularly, laying the foundation for welfare in the phase of protecting the basic living standards of North Koreans right after unification has an important meaning in that it would decrease in advance the cost-increasing elements that might occur under a full-scale social security system.

Fifth, in order to ensure basic living of North Koreans in the initial period after unification, establishment of minimum living standards, grasping the recipients and prior decision on subsidy distribution method should be made. In this case, minimum living standards should be decided considering the price level and average wages, etc. in North Korea from a long-term perspective. However, it would be inevitable, in the initial stage right after unification, to make decisions taking into consideration

policy implications including the size of financial aid that the unified Korean government can afford to provide. As for the recipients of subsidies and distribution methods thereof, subsidies should be delivered 'in fixed-amount' to low-income brackets who have no ability to work as preferential recipients and gradually expanding the scope of recipients, and at the same time keeping the fairness among them. In this context, with a view to define the scope of recipients from a long-term perspective, such microscopic information as income or household budget of citizens in the north should be computerized, and the data should be utilized to distinguish those who should be induced to employment and those who need monetary aid.

Last, for a smooth implementation of basic living protection measures, prompt reconstruction of regional administration system in the north is required. An administrative organization should be established that will grasp the recipients of subsidy, establish a proper subsidy delivery system and perform a supervisory role on the effect of diverse aid policies right after unification.

To prevent confusion brought about by the 'massive exodus of citizens of the north to the south expected right after unification, national-level services, including basic food supplies, education, medical treatment, housing, etc. should be secured on a temporary basis through financial aid from the unified Korean government.

With regard to massive migration of North Korean citizens into the south, of course, two-track policy that induces citizens in the north to voluntarily relinquish from migrating to the south by offering attractive elements in remaining in the north on one hand and at the same time considers employing such policy

instruments as discriminatory application of social security measures for the purpose of temporarily controlling migration in consideration of national security.

To be noted here is that both the separate management of social welfare finances on a temporary basis and the ultimate integration of social welfare systems between North and South Korea are based on the premise of prompt vitalization of the economy in the north. Speedy recovery of the self-supporting economy in the north through such active investments as the tentatively named ‘five-year economic-social development plan of unified Korea’ that covers the whole area of North and South Korea and transfer of material resources and human capital including experts and technical professionals to the north under the joint yearly plan can reduce the factors that induce the migration to South Korea and the cost for social welfare in North Korea that will be a burden on the government of South Korea, and also constitutes the precondition of complete integration of both sides.

Introduction of the unitary social insurance program can be considered at the point in time when job creation capability and market economy in the north have developed to the level where individual companies and insurants (employers and workers) can contribute to social insurance fund.

In the initial period after unification, reinforcement in the support of health and medical care service for the citizens in North Korea should be a priority. To this end, comprehensive research into the health and medical care service situation in the north including the facilities, equipment and demand of health

and medical care service in the north, etc. needs to be conducted and, based on the results, diverse international support and cooperation measures that cover medical protection of the citizens, provision of basic medicine and medical supplies, education and training of health·medical care service personnel, building up the infectious diseases prevention system, etc. should be promoted.

While maintaining the ability of the unified Korean government to financially aid the north, preparation should be made to establish the 「plan for integration of social security system」, of which the core will be the already existing social security system of South Korea on the other hand. However, as implementation of the unitary social insurance system or complete integration thereof is based on the premise of expansion of the basis of economic self-support in the north, 「separate management of social security system on a temporary basis」 is desirable until after existing government- operated enterprises in the north are privatized, and those privatized individual enterprises and workers can make contributions to the social insurance fund.

Considering the fairness to the citizens in the south, time spent in systemizing related information in the north, procurement of administrative personnel, short-term budgetary limit of unified Korea, North Koreans' lack of understanding of the principles of capitalistic economic activities, a careful approach to this matter under mid-to long-term goals is advised, and until the integrated social security system is applied under the same conditions to citizens in both North and South Korea, the finance of four social insurances needs to be managed separately in the early stage.

This is because the cost of basic living protection of the North Koreans right after unification would be appropriated from national budget rather than private investment, which means that the tax burden of the citizens in the south would inevitably increase. Accordingly, a sudden integration of the social security systems between North and South Korea would cause excessive budget deficit and constitute a new economic obstacle in the way of economic and social operation.

Nevertheless, despite inevitability of separate management in the early stage, long continuation thereof is not desirable since it will cause delay in socio-cultural integration as well as bring about adverse selection, the problematic situation where only workers with high risk ratio will gather in the north. Therefore, for the pursuit of social stabilization, the period of separate management of the social security system should be decided as a certain number of years within 10 years right after unification and made public.

In other words, instant and complete integration of all kinds of socio-economic systems is not a prerequisite that has to be unconditionally accepted. The most desirable situation for the integration of the social welfare system is after the integration of political-economic-social systems is completed and they have gone through the transitional process.

With regard to the procurement of financial resources, given the intertemporal solvency constraint (government spending-tax revenue= central bank leverage (increased issue of currency) +issuance of government bonds+foreign loans+others), reduction and appropriation of budget, tax increase, disposal of government

assets, issuance of government bonds and foreign loans, and leverage of central bank (increased issue of currency), etc. can be considered as direct procurement methods of unification cost.

In addition, with the privatization of government properties and government-operated companies in the north, use of international sources of public capital, for instance, use of special subsidy program for social stabilization of World Bank in the early stage after unification and acquisition of loans through the IMF and the ADB, etc., and measures for international cooperation, etc. should be positively examined.

Lastly, we have to be mindful of the fact that the kind of discussion that puts excessive emphasis on the negative aspects of economic burden of unification and make little of the advantages unification would bring about would only arouse conflicts and unrest among South Koreans.

Although unification of North and South Korea will impose a new economic burden on us for a considerable period of time, however, viewed from the angle of benefits, for instance, the peace dividend such as an Olson-type indirect benefit, gains from economies of scale from a long-term perspective, removal of ineffectiveness of division, and increase in the role as an axis of northeast economic zone and a bridge that connects thereto etc., unification of the country will open a new development possibility and offer an impetus to national economic progress.



Chapter 2

Policy Tasks for Socio-Economic Security in Transitional Period

Chapter 2

Policy Tasks for Socio-Economic Security in Transitional Period

With regard to basic living protection measures for the citizens in the north in the initial period of unified Korea, priority should be put on securing minimum living standards for the unemployed and the poor, for instance, poverty relief policy and positive labor market policy from a short-term perspective rather than the improvement of ‘quality of life’ from a long-term perspective.

Integration of the four major social insurance systems between the North and the South can be executed only when individual companies and workers in the northern region can share, to a certain degree, the burden of contributing to a social insurance fund. Besides, considering the fairness to the citizens in the south, time spent systemizing related information in the north, procurement of administrative personnel, short-term budgetary limit, the North Korean’s lack of understanding of the principles of capitalistic economic activities, etc., approach to this issue needs to be made in discretion.

From this viewpoint, basic orientation in the promotion of the policy regarding the protection of the basic living of citizens in the north after unification should be as follows:

First, at the point in time when unification is about to be realized, emphasis should be put on ‘basic living security’ of the citizens in the north through the establishment of an ‘

emergency relief plan, that includes the provision of food, medicine and medical supplies, quarantine activities and measures for refugees, etc.

Second, in the full-scale unification promotion phase, a 'basic living protection plan' for the unemployed and the poor, expected to increase due to the transformation of the economy of North Korea, should be established. However, in this unification promotion process, a basic living protection plan for citizens in the north should not stop at financial aid, but efforts should be focused from an ultimate perspective on "protection of labor force" in the north through the establishment of workfare by creating jobs, because there can be no argument in that creating jobs is an ultimate basic living protection measure, and particularly, laying the foundation of workfare in the north in the phase of basic living protection right after unification will have the effect of reducing in advance those factors that will cause the increase in the cost for the full-scale integration of the social security system of unified Korea.

Third, the 'Phased Integration Plan of Social Security System' centered on the social security system of the south should ultimately be prepared while maintaining in part the capability to provide financial aid to the north. Since complete integration of economic-social systems between the North and the South should be based on the premise of the extended basis for economic independence of the north, 'separate management of social security system on a temporary basis' until individual enterprises and workers in the north have the ability to contribute to the social insurance fund is inevitable.

In addition, to protect the basic living of citizens in the north right after unification, prior preparations including the establishment of minimum living standards, getting hold of the recipients, making the decision on subsidy distribution method and for its brisk implementation, reconstruction of administrative delivery system, etc., should be made.

However, since the unification process led by the south is expected to cause discontinuation or collapse of the existing economy, the social welfare system and social-cultural characteristics of the north, namely historical severance of North Korean structure as well as division and conflicts between the North and South might occur and persist as a serious social problem for a long period of time and accordingly, measures against such a situation should also be prepared.⁸⁾

One of important goals of socio-economic integration between the North and South should be to put the economy in the north on a growth track by preventing confusion during transformation and settling down the market economy system at the earliest possible time. That is also the best mid-to-long term policy goal that will

8) Since the unification process of Germany was led by West Germany, which seized the opportunity for unification, and economic-social integration was rapidly promoted without the period in which East Germany could go through 'transformation', political and economic conflicts between the citizens in the old East Germany and those in West Germany occurred due to growing unification cost. The lesson from the unification of Germany, specifically from the 'Ossi-Wessi conflict', is that it is good to have an intermediate stage in order to achieve a complete structural integration. Ossi-Wessi is a word implying the regional antagonism between the east region and west region of unified Germany: Wessi is a word indicating arrogant and selfish West Germans seen in the eyes of East Germans after unification, while Ossi is one indicating East Germans who looked lazy, lacking the spirit of independence, and moan in opposition to the western region in the eyes of West Germans.

relieve the burden of social welfare cost expected to occur for citizens in the north.

This is because a full-scale introduction of price liberalization and industrial restructuring, the basic procedures in the transition into market economy, the ‘so-called transformational recession’ represented by sharp increase in prices and unemployment will be unavoidable.

As witnessed by the experiences of transition economies in Eastern Europe, if existing government subsidies to consumption and investment sectors are slashed during the transition period into a market economy, it is forecast that output will decrease, inflation will set in, which will be translated into a decrease in real income, increase in unemployment and sharp rise in the demand for social welfare, deepening the budget deficit of the unified Korean government.

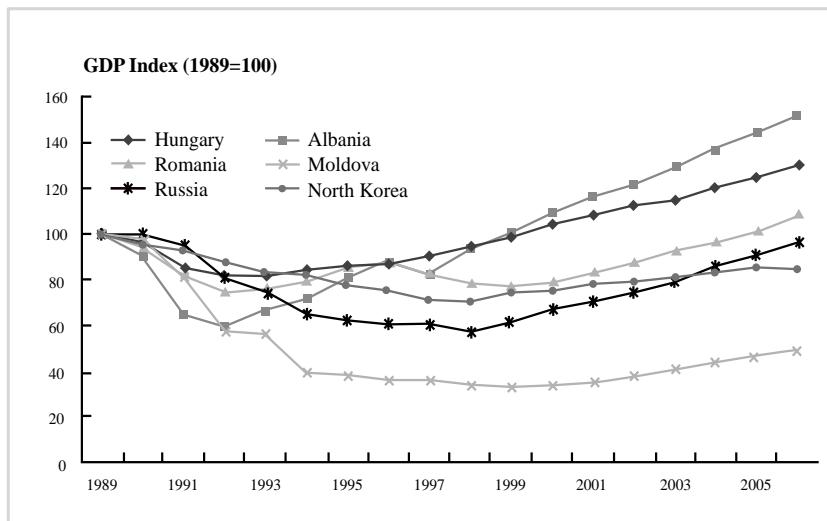
The lessons from the experiences of Eastern European countries to apply to the economic transformation of North Korea can be summarized into the following four economic·social policy tasks:

First, it is necessary as the first-priority task to build a framework of market economy in the north through the stabilization of macro-economy and price liberalization; second, new enterprises should be created through the establishment of law, institution and the structure of property rights and ownership, and efficient financial and labor markets that can smoothly supply enterprises with capital and labor force should be built; and last, building a social safety net for the protection of basic needs of the citizens in the north is urgent.

Changes in economic growth rate of transition economies in short and long run aspects: In the beginning stage of transition, Eastern Europe were faced with dismantling of the strong trade relationship with former COMECON system and have experienced heavily that collapsed division of labor in former Soviet Union system, political and administrative system simultaneously. Therefore, as seen in <figure 1>, Eastern Europe and the former Soviet Union have experienced the vicious circle: external shocks→ shortage of raw materials and capital goods→ recession of production→ decrease in income→ reduction of consumption→ the stagnation of production in short Run.

Though internal and external shock periods due to introduction of new system lasted for a considerable period, these nations restored with foreign economic relations by the combined policies of macroeconomic stabilization, price liberalization and trade liberalization and most transition economies in 1990s, with the effect of reforms is evident that the positive growth performance.

[Figure 1] Post-Communist economic growth performance (1989=100)



Source: Institut für Wirtschaftsforschung Halle (2010: 22)

1. Comparison of Socio-Economic Systems between North and South Korea

As a result of North Korea having maintained opposing social structure for almost half a century since division, the degree of difference between them is deeper than any other divided nation, and due to unique characteristics of internal politics of North Korea, the differences in economic system, value system, and lifestyle, etc. are deepening.

South Korea has made progress centered on the multi-party system and democracy in the political aspect; market economy, decentralized decision-making and emphasis on economic factors in the economic aspect; and individualism, liberalism and

pluralism in the social aspect; while North Korea has stuck to one-party rule and totalitarianism in the political aspect; centralized planning·concentrated economy in the economic aspect; and groupism, regulation and organization-first principle in the social aspect.

As seen in <Table 1>, South Korea could achieve an economic system based on ‘consumer sovereignty’ that is dependent on a market price mechanism, on the other hand, North Korea has maintained an inefficient economic system based on ‘leader’s sovereignty’ under which both production and distribution are led by the state and the party, disregarding consumer preferences.

South Korea has valued the creative activities of private economic units and maintained an open-type economic system, while North Korea, denying the overall aspect of the market economy, has held fast to a ‘command socialist economy’ under which production and distribution are led by ‘centralized planning’ based on the system that is the most ideological·rigid·closed, even among the socialist countries.

Besides, a fundamental difference in the economic system between North and South Korea originates from the different characteristics of ownership: while South Korea has the private property system that extensively recognizes property rights, North Korea does not recognize private property under the principle of group ownership of production means and products. The basic foundation of the economic system of the north is social ownership of production means, and ownership is recognized only in relation to socialist ownership with the only exception being that private ownership for individual consumption is recognized.⁹⁾

In terms of development of diverse industrial sectors, while South Korea could have aimed for a balanced development to a certain degree, North Korea, under the slogan of ‘military-first and prosperous and powerful nation’, have leaned toward a ‘heavy industry-first’ policy with the purpose of constructing a ‘military-industrial complex economy’.

Under these circumstances, the North Korean economic system is exposing inefficiencies of an economic system based on leader’s sovereignty that result from the reality that so-called ‘meritocrats’ from the party·military·political circles are dominating decision-making on production and distribution, and fails to maximize individual effort and creativity.

9) The Socialist Constitution of North Korea (Amended in April, 1992.) provided that “In the Democratic People’s Republic of Korea, only the state and cooperative organizations shall own production means”(article 20), and also provides that “private ownership is only for the purpose of individual consumption” (article 24)

<Table 1> Comparison of Economic System

	South Korea	North Korea
economic system	<ul style="list-style-type: none"> - Market economy - Decentralization of decision-making - Emphasis on economic factors 	<ul style="list-style-type: none"> - Centralized economy ·planned economy ·command economy - Centralized management - Emphasis on non-economic factors (lack of creativity)
Ownership	<ul style="list-style-type: none"> - Private property system - Extensive recognition of property rights 	<ul style="list-style-type: none"> - State ownership of properties - Group ownership of production means ·products
Production & distribution	<ul style="list-style-type: none"> - Freedom in production ·consumption activities - Private capital and social production - Consumer sovereignty (recognition of individual preferences) - Market price (market mechanism) 	<ul style="list-style-type: none"> - Restrictions on production ·consumption activities - Social capital and social production - Leader's sovereignty (no recognition of individual preferences) - Controlled prices (bureaucrats) - Heavy industry first (military-industrial complex economy) - Labor for self-sufficiency of community
External economy	<ul style="list-style-type: none"> - Open economy system (market opening) 	<ul style="list-style-type: none"> - Closed economy system (construction of independent national economy)
Problems	<ul style="list-style-type: none"> - Inequality in distribution of wealth and income - Economic unrest due to unemployment and inflation - Destruction of environment and human alienation - Market failure 	<ul style="list-style-type: none"> - Inefficiency in compulsory distribution of resources - Absence of automatic control device (price mechanism) that corrects errors in resources distribution - Disregard for consumer preferences - Lack of individual creativity and state's trust on people - soft budget constraint¹⁾

Note: 1) Unlike the market economy system, since the budget constraint of enterprises is not strict in the socialist economic system, occurrence of a deficit does not always lead to a bankruptcy. In general, it is recouped by government support through such means as subsidy, tax reduction ·redemption credit loan, controlled price, etc. In this context, a soft budget constraint indicates a general phenomenon where economic efficiencies cannot be expected for the lack of efforts on the part of enterprises to save themselves.

2. Main Tasks for Socio-Economic Integration

What should be taken heed to here is that the kind of society stabilization measures that only rely on exogenous short-term supply from the finance of a unified government for the basic living protection of the citizens in the north in the initial period after unification will not be a sufficient ‘prescription’ to enable the economy and society in the north to get out of stagnation after unification and secure the possibility to make sustainable development and thus enter into a dynamic society that is in balance with the south.

In order to achieve a substantial unification that accompanies the establishment of a unitary economy and integration of social welfare system, policy measures to lay the foundation for endogenous growth, including the accumulation of physical capital, investment in human capital, expansion of social overhead capital, etc., from a mid-to-long term perspective should also be executed at the same time.

In other words, introduction of market principles, which include the change in ownership through the reform and opening, price liberalization, privatization of government- operated companies, liberalization of trade and capital transaction, and free movement of production factors, should be made to raise economic efficiencies; and structural reformation should be made to get out of the ‘leveled-down society’ that resulted from a centralized social security system led by the state.

The first step toward the formation of a ‘communal market economy system’ between the North and the South should be

economic support led by the south, aiming at removing the factors of unrest in macroeconomic aspects that are expected to emerge during the economic transformation process of the north and laying a stable foundation for transformation. And all this should be promoted with the mid-to-long term development plan for the north in mind.

To be emphasized here is the need to minimize such economic conflicts as price increase, slow economic growth and mass unemployment that is expected to happen in the north during the transitional period. And considering that all the economic and social measures to overcome such matters cannot be implemented at a stroke, their gradual implementation is desirable. A summary of main policy tasks that are expected to be required during the transformational process in the north and those required before and after economic integration is as follows:

<Table 2> Main tasks for Transformation of North Korea and Socio-Economic Integration between North and South Korea

Major Tasks	Basic Orientation	Policy Means
Stabilization of macro - economy	<ul style="list-style-type: none"> - Building currency·credit provision system and efficient fund distribution - Tax reform corresponding to the transformation into market economy <p style="text-align: center;">↓</p> <p>(Single monetary system & financial policy)</p>	<ul style="list-style-type: none"> - Establishment of central bank system, promotion of saving and investment brokerage and manpower·technology support - Phased abolition of all kinds of subsidies to public enterprises and private sector & phased introduction of value-added tax

Major Tasks	Basic Orientation	Policy Means
Creation of market mechanism	<ul style="list-style-type: none"> - Promote efficiency in resources distribution and increase of production through the introduction of market pricing system - Gradual trade liberalization - Readjustment of foreign exchange rate to a realistic level and Securement of currency convertibility <p style="text-align: center;">↓</p> <p>(Price & wage liberalization)</p>	<ul style="list-style-type: none"> - Phased abolition of controlled price and wage differentiation - Construction of distribution network that enables free trade of products·raw materials - Integration of the current multiple exchange rate system of the north into monorate exchange system and adoption of managed currency system
Corporate reform & Restructuring	<ul style="list-style-type: none"> - Establishment of comprehensive private property system - Mid-to-long term industrial restructuring through nurturing private sector <p style="text-align: center;">↓</p> <p>(Balanced development of country & efficient industrial arrangement)</p>	<ul style="list-style-type: none"> - Establishment of privatization and property rights, and offer of material incentives through tax·financial support - Normalization or closure of old enterprises and support of foundation of new enterprises - Prevention of speculation, maximum procurement of state-owned land, and aiming for public development method of land
Social welfare ¹⁾	<ul style="list-style-type: none"> - Absorption of social security system mainly managed by government-operated enterprises and integrate it in stages based on standards of South Korea <p style="text-align: center;">↓</p> <p>(Unitary social security system)</p>	<ul style="list-style-type: none"> - Discriminatory application of social security system between the North and South on a temporary basis - Gradual reform of all kinds of social security system including countermeasure against unemployment and medical security system

note: 1) For detailed information on the comparison of the social security systems of the North and the South, refer to chapterVI of this report.



Chapter 3

Policy Tasks for Social Welfare in the Initial Period After Unification

Chapter 3

Policy Tasks for Social Welfare in the Initial Period after Unification

If we suddenly face the unification of North and South Korea while there remains a big gap in economic and social systems, the mass exodus of the citizens in the North to the South and an explosive increase in demand for social welfare are predicted. Permission for border-crossing between the North and the South while the market competitiveness of North Korean enterprises is low would cause the decrease in wage gap, leading to the phenomenon where wage level exceeding productivity is required in the north and causing mass unemployment as witnessed in the experience of unified Germany.

In the initial stage after unification, priorities for social stabilization measures should be given to the measures dealing with poverty, unemployment, basic living protection of remaining citizens in the north, protection of labor force in the north, and the measures concerning migrants from the north. It is desirable that this social stabilization policy for the northern region is promoted on the premise of complete integration of the social security systems of the North and the South from a mid-to-long term perspectives.

The policy regarding the protection of minimum living standards of the citizens in the north in the initial period after unification, as noted in the previous paragraph, should be promoted, being

mindful of the establishment of workfare through job creation in the north in an effort to reduce the cost of integration of social security in advance from a mid-to-long term perspective.

Since integration of the social security systems of the North and the South from a mid-to-long term perspective can be made possible on the basis of the enhanced capability of citizens in the north to pay contributions to the social insurance fund, continuous efforts should be made to make institutional improvement for economic recovery and sustainable growth in the region. And efforts should be continued before unification to secure basic needs for living, expand the social welfare system and improve income distribution, etc. in South Korean society as well.

In the present stage where the gap in economic capability between the two sides is big, the economic and social integration process of unified Korea should be promoted in accordance with the following considerations considering the massive exodus of North Korean citizens into the South and a sharp increase in demand for social welfare that are expected to occur after unification:

First, in the initial period when unification is about to be realized, emphasis should be put on 'security of basic living right' through emergency relief measures, including the supply of food and basic medicines, quarantine projects and measures to protect refugees etc.

Second, for the full-scale transformation stage of North Korean economy, 'basic living protection measures' for the unemployed and the poor forecast to occur in the north should be prepared.

In this case, the emphasis should be put on 'protection of labor force' through offering jobs rather than providing 'financial aid' itself. Basic living protection measures for the jobless and the poor among those who would remain in the north should also be prepared. However, the basic direction of these should be the establishment of DIY or/workfare and 'protection of labor force' for industrial development within the north through the provision of job training and job creation from a mid-to-long term perspective, while at the same time preparing emergency livelihood protection measures and phased reduction of financial public assistance with time difference.

Third, preparations should ultimately be made for the 'Phased Integration Plan of the Social Security System', while maintaining the capability to offer financial aid to the north. However, although ultimate goal should be building a social safety net that includes the four social insurances of pension·health·employment·industrial accident on the same level as those of the south, public assistance, social welfare service, etc. with a view to protect the citizens in the north from the social dangers of unemployment, disease, old age, poverty, etc., since it is based on the premise of the expansion of the basis for economic independence of the north, it is desirable to make 'a separate management of social security system on a temporary basis' until individual enterprises and workers in the north have the ability to pay contributions to social insurance fund.

Fourth, the basic living protection measures on a social welfare level¹⁰⁾ for the people remaining in the north and those who migrated to the south at the time of unification is a very important

policy task that requires detailed preparations in that it responds to factors of social unrest expected to occur in the process of unification and helps make economic·social integration happen earlier.

Last, as with the integration of all the other fields, the integration process of the welfare system also requires considering welfare expenditures, namely, economic burden (example: In the case of unified Germany, total unification cost accounts for 4~5% of federal government GDP, of which social welfare expenditure accounts for about 50%). Therefore, both central and local governments should make prior preparations to establish legal grounds for the regulations on migrants, basic living protection and the level of financial resources.

1. Protection of Basic Living of citizens in North Korea

With regard to basic living protection for citizens in the north right after unification from a short-term perspective,

First, due to overall destruction of distribution system of daily necessities, providing support in the building supply system of daily necessities is necessary. In addition, according to joint research between FAO and WFP, as seen in <table 3> almost 8 to 9 million North Koreans suffered from food shortage between

10) Social security system, in a broad sense, includes all the fields of social and economic systems, including housing, education, environment, health, regional development, population, labor policy, etc. However, if the scope is narrowed, it can be limited to social insurance, public assistance and social welfare service. This research intends to suggest discussions based on the narrow sense of social security system.

September and October of 2008¹¹⁾). It is particularly essential to establish poverty relief policy since the range of the poor will expand with the decrease in real income, decrease in household income of the unemployed, and increase in prices due to the abolition of unrealistic state subsidies on basic daily necessities etc.

Second, since it is difficult to create jobs in a short period of time from the initial period after unification, positive government policy on the labor market including income security, retraining and job creation measures, etc. to cope with massive unemployment crisis during the transformation of economic·social systems of the north is required. For instance, in dealing with the unemployed, it is advisable to provide subsistence allowance for a limited period of time, while inducing them to engage in temporary labor or vocational reeducation at the same time.

Third, with the institutional transformation in the north, productivity and real income are expected to decrease, and this will constrain the source of revenue while the financial demands to secure the income of citizens will increase. Accordingly, measures to secure the source of revenue required to cope with the budget constraint caused by increase in financial demand should be devised, while protecting the labor force in the north simultaneously through the appropriate implementation of measures concerning the migrants to the south.

11) Refer to FAO/WFP, Executive Summary: Rapid Food Security Assessment: Democratic People's Republic of Korea, June/July 2008.

Fourth, from a short-term perspective, a lesson we should learn from the experience of unified Germany is that we should prepare measures to meet with explosive increase, in a short period of time, in demand for the construction of infrastructure including the construction of housing, education, roads, railways, ports, etc. and social overhead capital, for instance, improvement of time-worn medical facilities, etc. in the north.

2. Policy Measures in Preparation for Exodus

In the process of unification, measures to support the welfare of people remaining in the north should be prepared for. In addition, from a short-term perspective, since massive exodus¹²⁾ of citizens in the north is expected, basic living protection measures for those who move to the south also should be devised.

If the integration of labor markets of the North and the South is enforced in the initial period after unification, it will cause the massive migration of North Korean citizens to the South due to the lack of manpower for production in the South Korean labor market, wage gap between the North and the South, low opportunities for employment in the North, etc.

In adopting a policy with regard to this situation, we need

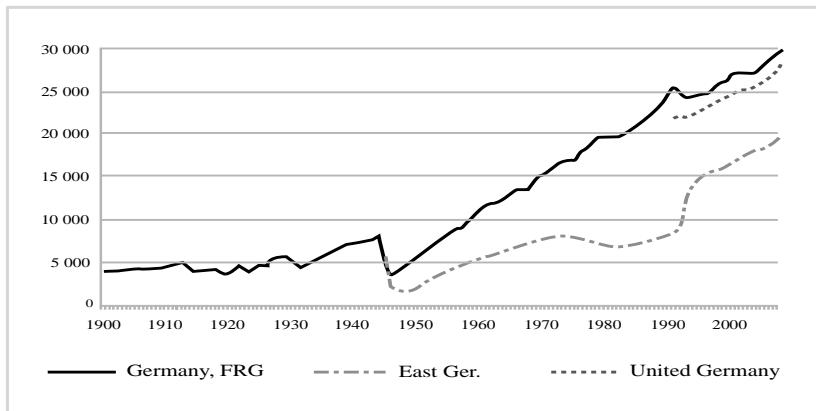
12) In an extreme analysis, Norland said even from a geographical perspective that if a person can move about 20 miles on foot per day, about 40% of citizens in the north will reach the truce line within five days without the help of any means of transport. However, even if a part of them migrates to the south, it will cause a major shock to the economy of unified Korea. Refer to Marcus Norland 1996 a and b.

to take note of the fact that from the experience of unified Germany, the main reason for migration was not the wage gap--main reasons for migration from the East to West Germany were as follows: first, worry over unemployment; second, worry over changes in environment; and third, wage gap. In other words, Germany's policy of trying to narrow the gap in income between East and West Germany by paying high wage exceeding actual productivity brought about massive unemployment, and this resulted in encouraging the migration of citizens in East Germany to the West German region.

Although some suggest the opinion that there is the necessity to physically inhibit the migration to solve the problem of a massive exodus, it would not be easy to control the population movement from the north to the south for a short period of time in the initial period after unification. In the case where unification is realized and some citizens in the north press ahead with moving to the south, it means that they account for one-third of the total voters of unified Korea, and accordingly, there will be a limitation for the ruling party and the government in enforcing a policy to inhibit the migration from a political perspective.

Under the circumstances, from a short-term perspective, prior preparations for securing the minimum living standards of migrants through the expansion of public assistance, and labor policy for supporting their settlement are required.

[Figure 2] Development of GDP per capita(€) in Germany



source: Institut fur Wirtschaftsforschung halle (2010:9)

In the initial period after unification, although preparations for basic living protection for the poor including those unemployed in the north are necessary, however, the basic aim for mid-to-long term preparations should be the ‘protection of labor force’ through the ‘establishment of ‘workfare’ by creating jobs rather than offering ‘financial aid’ itself. The policy measures recommended for this purpose are as follows:

First, as a <basic living protection policy>, accommodations to house migrants to the south in emergencies should be prepared not only in the northern part of Gyonggi province and Gangwon province but in every province under local government. Besides, cooperation systems not only between the central government and local governments but those with private organizations(NGO), including non-profit organizations and religious organizations, should also be established.

Second, with a view to help migrants to the south adapt to

the competitive society under the free market economy system that they have never contacted before, development of tentatively named ‘facilities to run training programs for adaptation to changes in the social system’ should be made.

Third, measures to secure financial resources and prepare legal grounds for such basic living protection should be made in advance.

As <labor policy means>, first, OJT (on-the-job training) programs that will lead them to productive adaptation to society thorough self-reliance and self-support shall be developed. For instance, in-house job training of enterprises should be encouraged and supported. As for decentralization of the population, job introduction to enterprises preferentially in small-to-medium-size cities need to be examined.

Because another factor to be considered in preparation for the migrants from the north is the reality that the social infrastructure of housing, medical treatment, education, traffic, public order, etc. in metropolitan areas in the south is in saturation, the question arises as to the accommodation capacity of those areas.

Second, the measures to connect job training to employment should be strengthened so that migrants from the north, based on the results of evaluation of preliminary education, including job training offered in accommodation facilities, can be introduced to an industry sector where manpower in the south is lacking.

Last, preparation of preventive measures against unjust behavior of employers in the south against low-income unskilled workers (blue collar workers) and those against industrial accidents is required.

What needs to be considered here is that with the increase in the number of migrants from the north who do not have the ability to pay taxes and need to receive government subsidies, the economic burden for the south to bear will grow bigger. That is, from a economic perspective, the policy regarding the migration of North Korean citizens to the south should be implemented within the extent that South Korean labor market can absorb them.

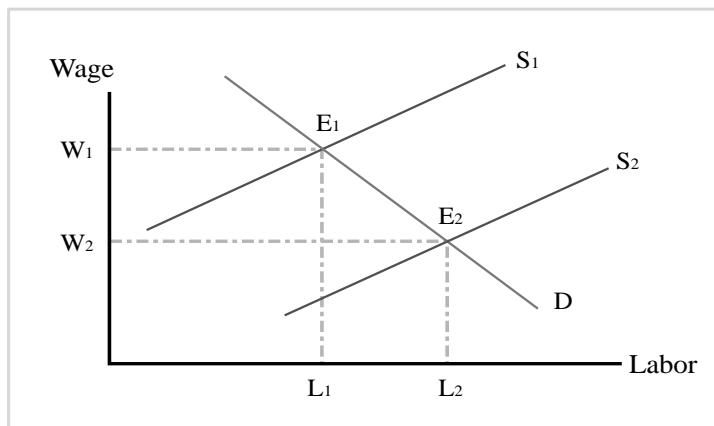
In other words, the point to be noted here is the necessity to consider the <absorptive capacity of South Korean labor market>. With the massive inflow of low-income·unskilled workers from the north, the problem of protecting the existing South Korean workers can arise. Continued migration to the south of North Korean citizens after unification means that a massive inflow of low-income·unskilled workers, which will cause the reduction of employment opportunities and income for those workers in the south who are in competition with them while increasing the income of capitalists--the effect of the ‘adverse distribution of wealth’. And since it can constitute another variable in the progress of the relationship between labor and management in the south, careful considerations should be given in devising measures to deal with such situation.

Nevertheless, not all the movements of population are harmful to South·North Korean economy: the population inflow to the south, where manpower for simple labor is lacking, can have a positive effect, to a certain level, of improving the overall economic power of the Korean peninsular. Therefore, relevant policy should be established in such a direction that ‘economic surplus of migration’

will be maximized. In other words, measures that will enable the migration of North Korean citizens to the south to increase the income of South Korean citizens should be devised.

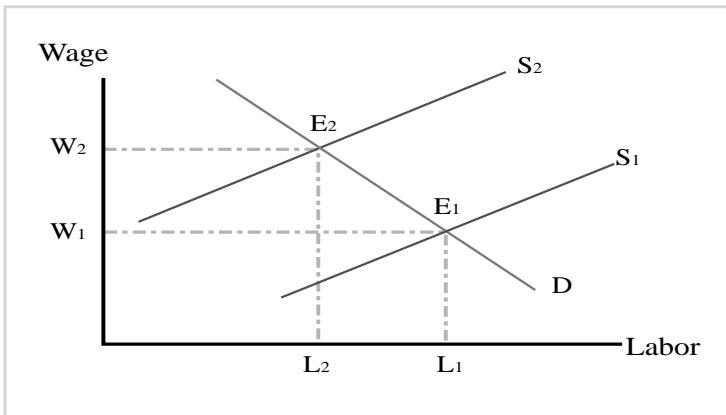
In case the massive exodus of North Koreans to the south happens, the changes in wage and quantity of labor of low-income-unskilled workers in North and South Korean markets are expected to develop as follows:

[Figure 3] Change in South Korean Labor Market



In this chart, W_1W_2 represents wage decrease of South Korean workers, and L_1L_2 represents increase in labor supply in the South Korean labor market.

[Figure 4] Change in North Korean Labor Market



In this chart, W_1W_2 represents wage increase of workers remaining in the north, and L_1L_2 represents decrease in labor force in the north.

If the exodus of North Koreans to the south causes overpopulation and the expansion of poor areas in the south as well as brings about ‘negative economic externality’, this can also emerge as a problem concerning accommodation capacity.

In the advent of such a situation, it is desirable in dealing with ‘negative economic externality’ to control the size of migration in such ways as the introduction of the system that imposes visible·invisible disadvantages or costs on migrants to the south without going as far as employing population control policy that mobilizes physical means.

In other words, if the visible·invisible costs for movement for North Koreans to the south exceeds the benefits that they will enjoy by remaining in the north, the factors for the migration

for the south can be reduced to some degree.

However, there is the possibility that the argument will rise that binding down the rights of North Koreans, even temporarily, to move residence by implementing a selective migration policy or imposing visible/invisible costs amounts to the discrimination between the citizens in the North and the South, or it might even go further to be accused as the violation of basic rights of citizens of a unified Korea.

Realistically speaking, considering such diverse factors for migration, it is impossible to solve the problem of migration with one method.

In this context, in order to constrain the exodus of North Korean citizens to the south, adoption of a two-track policy that induces the citizens in the North to give up voluntarily the intention to move to the South by offering economic incentives to remain in the North and at the same time considers a temporary employment of policy means that will reduce the movement when deemed unavoidable for the economic and social stabilization of both the North and the South is necessary.

Thus, the policy of supporting the migration of the citizens in the North to the South will have to go through the difficult process of drawing a national consensus from the diverse viewpoints of people from all walks of life.

3. Support for Health and Medical Care Service

To explain the current condition of health and medical care service in the north, serious food shortage and an inadequate

level of total medical expenditures per person, which are fundamental factors affecting the health of North Korean citizens, can be cited as examples. The following factors can act as main variables for the exodus from a short-term perspective along with the gap in economic power between the North and the South:

The first factor is the absence of ‘sustainable food security’ in the north. According to RFSA (rapid food security assessment) of 53 county(gun) areas in 8 provinces jointly conducted by FAO (Food and Agriculture Organization) and WFP (World Food Plan) in June, 2008, the regions and brackets of people suffering from serious food shortage are as follows:

By social bracket, they consist of children and adults accommodated in public facilities, and children accommodated in hospitals and clinics of all classes. Particularly, the shortage of food supply for pregnant women, breast-feeding women, children under the age of 5 and premature babies was found to be the most serious.

By region, in northeastern region, all the city areas in Yanggangdo- province and Hamgyongbukdo-province are found to be in the most serious condition, while to the south the areas that suffered from flood damage in recent years including Hwanghaenamdo-province and Hwanghaebukdo- province are found to be suffering the most. For example, as we can see in <Table 3>, it is estimated that almost 9 million North Korean population suffered from severe food shortage from Sept. 2008 to Oct. 2008.¹³⁾

Specifically, it was noted in the report that they are provided

two meals a day. Moreover, 3/4 of them are being provided with 50% of the normal amount for a meal and the quality of food being supplied is at the worst level. In addition, the report also noted that most of North Korean citizens supply their own food by collecting corn, vegetables and wildlife from nature, which means that their meal does not contain the lowest level of nutrition. According to the report, this difficulty gets more serious during those five months before the harvest of autumnal rice and corn.¹⁴⁾

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- 13) FAO/WFP, Executive Summary: Rapid Food Security Assessment: Democratic People's Republic of Korea, June/July 2008, p2, available at: www.fao.org/gIEWS/english/alert/dprk2008.pdf, accessed 30 May 2010.
 - 14) FAO/WFP, Special Report: FAO/WFP Crop and Food Security Assessment Mission to the Democratic People's Republic of Korea, 8 December 2008, p31.

<Table 3> Population Estimate of Regions suffering from Severe Food Shortage in North Korea (Sept. 2008)

(Unit: prs.)

	Investigated Region of Gun	Population Estimate of All Gun Regions
Pyungannamdo	1,719,000	1,910,000
Pyongyang	213,000	243,000
Hamkyungnamdo	1,212,000	1,391,000
Pyunganbukdo	1,064,000	1,165,000
Hwanghaenamdo	963,000	1,062,000
Hwanghaebukdo	891,000	960,000
Hamkyungbukdo	894,000	983,000
Gangwondo	440,000	500,000
Yanggangdo	276,000	314,000
Jagangdo	182,000	206,000
Total	7,854,000	8,741,000

Data: Figures for Gun-regioins covered by the research of the FAO/WFP. FAO/WFP, Executive Summary: Rapid Food Security Assessment: Democratic People's Republic of Korea, June/July 2008, People's Republic of Korea, June/July 2008.

The second factor is the inadequate level of total medical expenditure per person in the north. This is an inferior level even compared to those of Southeast Asian countries of which the per capita income is similar to that of North Korea, as seen in <Table 4>.

<Table 4> Per Capita Medical Expenditure (year 2006)¹⁵⁾

(Unit: US\$)

Nation & Region	Per Capita Medical Expenditure
Bhutan	49
Myanmar	5
Nepal	17
North Korea	0.5
Timor-Leste	52
SE Asia (average of SE Asia)	31
Global (global average)	716

Data: Amnesty International, "The Crumbling State of Health Care in North Korea", Index: ASA24/ 001/2010 p19, 2010

According to a recent report of WHO, per capita medical expenditure of North Korea is at a much lower level when compared to those of the nations of which per capita income are on similar levels (Myanmar) or lower (Bhutan, Nepal and Timor-Leste).¹⁶⁾

15) The latest statistics for North Korea are for 2006. See WHO, "World Health Statistics 2009", 2009, available at: <http://www.who.int/whosis/whostat/2009/en>, accessed 30 May 2010 (the 2010 edition does not contain statistics on health expenditures for North Korea).

16) US CIA, "Country Comparison: GDP -- per capita (purchasing power parity)", The World Factbook, 2007. Figures in the 2007 edition are based on the year 2006. The WHO Western Pacific Region includes Australia, Brunei Darussalam, Cambodia, China, Cook Islands, Fiji, Japan, Kiribati, Lao People's Democratic Republic, Malaysia, Marshall Islands, Micronesia (Federated States of), Mongolia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Republic of Korea, Samoa, Singapore, Solomon Islands, Tonga, Tuvalu, Vanuatu and Viet Nam... The South East Asian Nations in accordance with the classification of WHO are Bangladesh, Bhutan, India, Indonesia, Maldives, Myanmar, Nepal, North Korea, Sri Lanka, Thailand and Timor-Leste. etc..

The WHO report wrote that medical knowledge and technology of medical workforce in the north lag far behind the international level and noted that this situation is due to the lack of resources and the condition that the lack of medical development and experiences in medical treatment and procedures lead to inferior medical education. To solve this problem, WHO suggests the necessity to re-educate the medical workforce in the north on the level of international code to improve the level of health and medical care service in the region.¹⁷⁾

In addition, the results of research into the health and medical facilities and services for adults in the north show that economic downturn in 1990 and famine devastated them even further so that they were even at a worse level than in 1980s, and any betterments have not been made in the 2000s.¹⁸⁾

What should be noted in addition to backwardness in the resources related to health and medical care services including medical workforce, facilities and medical expenditure, etc., is the fact that consumers of medical care services are forced to make unofficial payment unlike the argument in the public medical

17) WHO, "WHO Country Cooperation Strategy 2004-2008: Democratic People's Republic of Korea" June 2003, available at: <http://www.dprk.searo.who.int/EN/Section16.htm>, accessed 30 May 2010, p12.

18) Medical expenditure in North Korea accounted for 3% of GDP, or 5% of stage budget in 2001, which is worse than, respectively, 7.6%,¹⁾ of GDP, and 8.4% of national finance in 1990. Caroline Gluck, "N Korea healthcare 'near collapse'", BBC News, 20 November 2001, available at <http://news.bbc.co.uk/1/hi/world/asia-pacific/166606.stm>, accessed 6 May 2010. and WHO, "WHO Country Cooperation Strategy 2004-2008: Democratic People's Republic of Korea", June 2003, available at: <http://www.dprk.searo.who.int/EN/Section16.htm>, accessed 30 May 2010, See. p11.

treatment law of North Korea¹⁹⁾

In the general report that the North Korean authority submitted to UN Human Rights Commission in 2009, it is specified that since February of 1960, North Korea has provided all its citizens with free medical care services and that all the citizens equally receive free medical care services under the constitution and the public medical treatment law²⁰⁾

However, it was found from an interview with citizens in the north that, unlike such claims, medical treatment has not been free since the 1990s and there exist diverse medical treatment delivery systems in reality.

Most of the North Korean citizens who were interviewed claimed that it has become custom to pay doctors or health care service providers in kind with, for instance, cigarettes, liquor, or food etc. and those goods paid in kind are encashed by them in the market.

Dr. Gro Harlem Brundtland, Director General of WHO noted in Nov. 2001 that the medical treatment supply system in the north almost collapsed and even the supply of basic medical

19) In article 9 of public health law of North Korea, it is prescribed that all citizens in the north be provided with all kinds of health and medical care services, including medicine and medical supplies, treatment, health checkup, examination, operation, hospital treatment, medical consultation, vaccination, transfusion, dental treatment, etc., for free.

Implementation of the ICESCR, second periodic reports submitted by States parties under articles 16 and 17 of the Covenant: Democratic People's Republic of Korea, UN doc. E/1990/6/Add.35, 15 May 2002, para68. The Crumbling State of Health Care in North Korea | 47 Index: ASA 24/001/2010 Amnesty International July 201.

20) National Report Submitted in Accordance with Paragraph 15 (A) of the Annex to Human Rights Council Resolution 5/1: Democratic People's Republic of Korea, UN doc. A/HRC/WG.6/6/PRK/1, 27 August 2009, para62.

materials· appliances, water supply, and power supply were paralyzed, and urged the interest and support of WHO member countries for the restoration of medical care service in the north. On the other hand, Margaret Chan, Director General of WHO, noted during her visit to North Korea April 2010 that although 90% of vaccination of children, including vaccination against malaria, is being carried out, however, continuous efforts should be made for the improvement of the medical care service in general, as well as for the continued supply of medicines and related materials·equipment, education of medical workforce, and technological improvement.²¹⁾

Taking into account the messages of WHO, etc. on the reality of health and medical treatment in the north, collapse of health and medical treatment system of the north in the initial period after unification might cause the prevalence of all kinds of epidemics and diseases. This will cause a sharp increase in the dead among socially vulnerable brackets including children, the old and the infirm, etc., and the impediment of normal growth of children resulted from lack of nutrition. As a result, the huge loss of human capital including the imbalance in population structure by age group can result. Therefore, policy-level support of the health and medical treatment sector will emerge as a task of first priority upon unification and should be treated as one.

21) UN, "UN agency chief urges strengthening of health care in DPR Korea", 30 April 2010. The latest statistics for North Korea are for 2006. See WHO, "World Health Statistics 2009", 2009, available at: <http://www.who.int/whosis/whostat/2009/en>, accessed 30 May 2010 (the 2010 edition does not contain statistics on health expenditures for North Korea). CIA, "Country Comparison: GDP -- per capita (purchasing power parity)", The World Factbook, 2007.

As noted by WHO in 2001 and 2010, health and medical treatment functions in the north were judged to be insufficient and almost paralyzed, and direct reasons thereof are analyzed as follows:

First, the short supply of agricultural products that continued in recent years led to overall food shortage, which caused lack of nutrition in socially vulnerable brackets;

Second, limitation in the aspect of medical supply, including the lack of medical equipment, lagging medical technology, etc.; and

Third, lack of follow-up management system due to lack of capability of North Korean authorities to establish medical delivery system and immune system required to secure the healing of North Korean citizens.

In view of the fact that the functional deterioration of health and medical care service can bring about huge loss in the human capital of 24 million North Korean citizens, the basic orientation of health and medical care service supply measures, to be implemented for improvement of health and medical treatment conditions in the north during the time of chaos right after unification, should be to provide support on a humanitarian level rather than to lay the basis for unification policy. Accordingly, aid from the international society, which includes the supply of medicine and medical supplies, support of treatment facilities-equipment, quarantine measures etc., will be acutely needed. To this end, the following measures should be taken:

First, the comprehensive investigation into health and medical conditions, including demand for health and medical

facilities·equipment, etc. in the north and health and medical treatment demand of North Korean citizens, etc., should be made. And based on the results of such an investigation, diverse international cooperation systems should be intensified for the medical protection of the citizens in the north, including support of basic medicines and medical facilities·equipment, education·training of health and medical workforce, building infectious diseases prevention system, etc.;

Second, reconstruction of health and medical infrastructure and support thereof along with the establishment of an emergency relief system for provision of medical care services to the citizens of the north through a cooperation system with the international society in the initial period after unification;

Third, emergency support to deal with malnutrition and impairment in immune system. Particularly urgent is the support for prevention of infectious diseases, including tuberculosis and protection of children and pregnant women. This is because pregnant women in the north are exposed to the dangers of anemia resulting from malnutrition and all kinds of infectious diseases, which might lead to stillbirth, miscarriage, delivery of low birth-weight infant, etc. In addition, the emergency support for the protection of pregnant women should also include the technological support to be provided to obstetricians, gynecologists and midwives to decrease infant death rate; and

Last, matters need to be considered with regard to the integration of medical system between the North and the South after unification as a policy task on health and medical treatment from a mid-to-long term perspective are to devise policy means

regarding license certification of health and medical care service workforce in the north, including doctors, pharmacists, nurses, etc., and preparation of appropriate educational curricula and education facilities to be used for re-education of them to reduce the gap in medical treatment technology between the North and the South.



Chapter 4

German Unification and Its Policy Implications for Korea

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1. The Process of German Unification

It is obvious that a unification of North and South Korea's two drastically different systems will never take place in the exact same way as it did in Germany. For instance, however, crucial lessons can be learned from the German experience of integration of social security systems between the East and the West as follows. The social security system of the former West Germany was one of the most developed and well organized of the Western hemisphere. An extension of the existing system to East Germany was sufficient to contain social problems. Given North Korea's current system and industrial structures, its projected economic decline during transformation-following unification following Germany's model-will be even more severe and the unemployment rate will be higher than East Germany's economy, especially considering the immature social security system in South Korea. Because of the existing system in the South may not be able to accommodate North korean people with simple extension as in Germany. Thus, careful preparation are required to avoid severe social disorder.

In order to gain a better understanding of the unification process, especially in the contexts of its application to the specific condition

in Korea, information on the social, economic and political situation before the German Economic, Monetary and Social Union(GEMSU), and the exact form of GEMSU and the Unification Treaty are equally important.²²⁾

Observing the process of German unification, an immediate question that comes to the minds of many Koreans is whether the same can happen on the Korean peninsula. It is generally believed that the key to German unification were the policies of Soviet president Mikhail Gorbachev and the democratic revolution of the East German people. Building mutual confidence through expanded official and unofficial contacts has also been a critical factor. Exchange visits among high-level government officials and people, joint activities by private social and cultural institutions in both areas, West German financial support for the construction of East German social infrastructure, and access of East German viewers to West German TV all helped maintain social and cultural homogeneity between the two Germanies.

Given that Koreans have not much inter-korean relations and we may have a long way to go in expanding contacts and confidence-building before unification.

Some see the possibility of a more sudden and dramatic fall of the North Korean regime by a people's revolt. This, however, does not seem likely. Unlike Eastern European countries, the North

22) The term of GEMSU were negotiated in April-May 1990, a State Treaty was signed in May and ratified by the legislatures in June, and GEMSU became effective on July 1, 1990. With Social Security and Economic Unification virtually accomplished, the drive for political union accelerated: the German Unity Treaty was ratified by the parliaments in September, and the GDR became part of the Federal Republic of Germany on October 3(see, IMF1990).

Korean experience of a market economy or a parliamentary democracy is almost nonexistent. Even with signs that North Korea is changing slowly in some areas, the regime will most likely attempt to exclude political democratization, continuing to propagate the “Juche”(self reliance) ideology as the base of its legitimacy and insulating the people from the outside world. The chance of a successful uprising will, among other things, depend on North Korea’s economic performance, the permeability of outside information, and the flexibility of regime in accommodating people’s aspiration.

This chapter attempts to identify major social security and economic issues arising when a centrally planned economy is absorbed into a market economy. It is clear from the German experience that even the West Germans, with close contact for 20 years, did not have a good understanding of the East German economy, and were poorly prepared for socio-economic and monetary union. Thus, a description of the historical situation on the Korean peninsula is given before discussing the similarities and dissimilarities between German and Korean situations and its implications for Korea.

<The Historical Situation on the Korean Peninsula>: The division of the Korean peninsula in 1945 created two distorted economies since the North inherited most of the natural resources and heavy industries, while the South was left with two-thirds of the workforce and most of the peninsula’s scant agricultural resources. Although the Korean War ravaged both economies, the refugee influx into South Korea placed additional pressures on the South’s existing limited resources. Large amounts of aid from the Soviet Union and China allowed the North to rebuild.

Since the 1960s, South Korea's economic growth has consistently outpaced that of the North. In only three decades, South Korea's gross national product(GNP)surged from US\$2 billion to almost US\$23 billion in 1991, while North Korea's GNP grew from US\$1.5 billion to US\$23 billion over the same period. A series of five-year economic development plans were largely responsible for radically transforming the South's economic structure from one dominated by subsistence agriculture to that of an export-oriented industrial economy. Meanwhile, a decision to rapidly expand its military and defense-related industries seriously weakened the growth potential of North Korea's economy since its other industrial sectors were deprived of manpower and vital investment resources.

North Korea is now facing its most serious economic setback since the division of Korea in 1945. The North Korean economy has gradually stagnated since the mid-1970s and has worsened significantly in recent years. It has registered a negative GNP growth for several consecutive years.

In addition to structural factors, temporary factors, such as disastrous harvest and the termination of economic aid from the former Soviet Union are the principal causes of its rapid decline. In the past, the former Soviet Union accounted for approximately 50 percent of North Korea's total trade volume. As North Korean trade with the former Soviet Union diminishes, North Korea faces severe shortages of energy and raw materials. Its industrial sector's production capacity utilization is currently estimated to be below 50 percent.

It seems that North Korea has few policy options available.

Economic and moral support can be expected from China for the time being, but China does not seem to have the intention or the capability to stabilize the North Korean economy for a long time. North Korea has also been trying to expand its economic relations with Western countries. It has put particular emphasis on economic cooperation through the promotion of joint ventures, by adopting a pertinent law in September 1984 and establishing special economic zone. However, up to now, joint ventures and special economic zone projects have not been successful.

Currently, North Korea is attempting to develop two different regions as Chinese-type Special Economic Zones. The development programme in the *Nampo* region is mainly aimed at inducing investment from South Korea, and *Rajin Sonbong* region project is intended to attract investors from Western countries. However, North Korea cannot expect any investment from South Korea until the nuclear issue is resolved. Moreover, no investor from other countries will engage in a North Korean programme without any guarantee of North Korea's political stability. North Korea also lacks at this time the necessary infrastructures in order to support these efforts.

Many Western observers believe that the collapse of the North Korean regime and its political system may happen in the immediate future. But the economic quagmire may not be a sufficient condition for a collapse of the political system. It may probably stay intact as long as *Kim Jungil* remains in power. Yet, any oppressive regime burdened with serious economic problems could sink at any time.

In the medium-term, political and economic destabilizing factors may arise. Politically, North Korea will have to shift power from *Kim Jung Il* to his son, considering Kim's health conditions. Economically, North Korea has to open up to foreign capital, which may imply the spread of information on Western living standards, and consequently could potentially foment social dissent. North Korea cannot maintain its current political system in the long run, but the question is when and in what form will such change come about.

Since the declaration of 7 July 1988 by the South Korean government, Inter-Korean commodity exchanges have expanded gradually. However, the trade volume is still insignificant compared to its potential. One way to safeguard inter-Korean economic relations from political interruption would be to establish a formal government level agreement between North and South Korea. In this way, "the Basic Agreement on Reconciliation, Nonaggression, and Exchanges and Cooperation"²³⁾ signed between the two Prime Ministers in February 1992 has laid the groundwork for the development of economic relations between North and South Korea. However, both sides must exert greater efforts to put the agreement into practice.

The pace and the extent of economic cooperation between North Korea and China is one of the most important factors to influence the future of inter-Korean exchanges(??)

The magnitude of the economic costs associated with national

23) The Agreement(in February 1992)was the first official agreement to be signed by the two Korea's prime Ministers of the respective governments.

unification will not only depend on the way unification is achieved, but also on the extent of South Korea's preparation for unification. It appears that in Germany, the fiscal transfers from the federal government to the former East Germany in 1991 amounted to about 5% of the former West Germany's GNP. If Korea's unification is to be realized in the same fashion, the ratio of costs borne by the South Korean government with respect to our economic size will be far greater than that of Germany considering Korea's population ratio, disparity in labor productivity, and other social and economic factors.

One of the most important lessons from the German experience is that national unification can proceed at an unexpectedly rapid speed and it can take any form. Thus, one cannot be too prepared for unification and its related complex contingencies. If unification were to suddenly take place, one of the main components of unification costs borne by the South Korean government would be massive investment for social infrastructure. Another potential unification costs will arise from the unemployment problems immediately after the integration of the two economies. Until the industry in the North Korean region is restructured and reorganized by private investment, government has to support the unemployed asses during the transition period. Additionally, harmonization of the social security and educational systems will also demand considerable expenditures from the South Korean government.

2. Some Lessons of German Unification

In economic transformation, in general, institution-building, liberalization, macro stabilization and privatization are of paramount importance.²⁴⁾ In Germany's case, this was handled with relative success. Yet, there are failures in the privatization process. The first mistake was adoption of the restitution principle. The second mistake was not to write-off bad debts. These factors slowed down the overall transformation process. In Korea's case, the same mistakes should not be repeated.

There are several similarities between the two countries. Both Germany and Korea became divided immediately after World War II against the will of their people. The economies of both countries had to be reconstructed from the ruins of war: Germany from World War II and Korea from Warld War II and the ensuing Korean War. During the cold war era, both countries had been caught in the middle of the confrontation between the East and West as the showcase of ideological competition between socialism and market economy. Eventually, in both countries, the market economic system came to be accepted as superior to socialism in its socio-economic performance.

Nevertheless, there are more differences which are important for a prediction of possible changes on the Korean peninsular. The major differences are found in their international political environments. The dramatic development of the unification process in Germany was an integral part of democratic revolution

24) For the detailed discussion of the issues, see O.Blanchard et al.(1991)

and sweeping reforms in East European countries which were ignited by the liberalization policies of the former Soviet Union, i.e., *Perestroika* and *Glasnost*. The strong movement toward European integration in Western Europe also provided considerable impetus for the unification of Germany.

The international environment has become quite favorable for the development of cordial relations between North and South Korea. However, in Northeast Asia, in spite of the collapse of the former Soviet Union, the Cold War conflict still prevails. And it also leaves room for the survival of socialism in North Korea. Unlike East European countries, the North Korean regime relied only slightly on the former Soviet Union for its legitimacy. Moreover, China, which still proclaims to pursue political socialism in spite of its market-oriented economic reform, continues to remain as the North Korean regime's main patron.

<Table 5> Exchanges between East and West Germany

	unit	1970	1980	1987
Trips ¹⁾	thousand	1,254	2,746	2,410
Emigration ²⁾	thousand	12.5	8.8	11.5
Postal and telecomm ³⁾	million	74	1,181	1,529
Trade ⁴⁾	million VE	4,441	10,873	14,014

Notes: 1) Number of trips from West to East Germany

2) Emigration from East to West Germany

3) Communication in both directions

4) Total of export and import; 1 VE= 1 DM

Source: Jachim Nawrocki, Relations Between the Two States in Germany, Press and Information Office of the Federal Government, 1990:Bonn.

When the pre-unification relations between East and West Germany and that of North and South Korea are compared, the

differences are substantial. While East and West Germany had been extensively engaged in human, cultural, and economic exchanges, the level of exchange and cooperation between North and South Korea is still a primary stage. Trade between North and South Korea has been opened from 1988, but the volume is minimal and still remains at the stage of stop and go process because of lack of confidence building measure(CBM). In terms of human exchanges, the number is almost negligible. Fortunately, the official relationship between North and South Korea has recently improved with the promulgation of the mentioned Agreement between both governments in February 1992. This Agreement is compare to, but more comprehensive than, the “basic Agreement” concluded between the former East and West Germany in 1973.

<Table 6> Exchanges between North and South Korea

Types	unit	2000	2005	2009	2010 1-6
Trip ¹⁾	number of Visitors	7,986	88,341	120,861	67,148
Trade ²⁾	Million US dollars	425	1,055	1,679	994

Notes: 1) Both Directions and Mt.Kumgang tour exempted

2) Figures corresponds to import and export volumes approved by South Korean government.

Source: Unification White Paper, National Unification Board, Republic of Korea., 2010, pp.279-282

In domestic politics, East Germany seemed rather liberal standards, it allowed much openness to information from the West. East German people were able to have access to Western TV signals and radio broadcasting. In addition, its travel policy was

particularly generous.²⁵⁾ In contrast, the North Korean regime is known to be one of the most repressive and its dictatorial repression has been continuously expanded up to present time. The North Korean people are completely blocked from any channel for foreign information, and freedom of travel, compare to the German case, or expression of discontent to the current regime are unimaginable.

The differences are substantial as regards the economic management system. East German's system was not as strict as the Soviet system. Its economic planning became relatively decentralized with the introduction of its "new Economic System" in 1963. Director Generals of individual Kombinate were allowed to make specific management decisions so that firms could function responsibly and profitably. Worker participation in Kombinate management, in the spirit of "democratic socialism", was limited.

North Korea's economic system has strictly adhered to the principle of a Soviet-type command economy. North Korea ranks as one of the world's most highly centralized, socialized and planned economies, even by former Communist standards. All economic decisions concerning the selection of production output, output targets, allocation of inputs including labor, prices, and

25) For instance, in a way to demonstrate its confidence about the achievements of socialism, the GDR government announced in 1984 that any citizens who wanted to cope with the possibilities of joblessness, inflation, homelessness, etc', in West Germany could apply for exit visas. In response to the announcement, the applications were surprisingly numerous until, after a few months, the government changed the policies. And denial of the exit visas permitting emigration caused country-wide tension and pressure.

distribution are strictly controlled and guided by a small central planning organization. Only a small portion of light industries specialized in the production of daily necessities, and this manufacturing is under the control of local municipalities.

There are also great differences between East Germany and North Korea in their property ownership structures and their respective historical development. In East Germany, the process of nationalization and collectivization was rather gradual. It involved large numbers of half-nationalization, half-private enterprises until the early 1970s. In the industrial sector, even after sweeping nationalization of corporations in the early 1970s, private industrial activities were still allowed in such areas as handicraft-production or self-employed businesses. These sectors accounted for about 3 percent of East Germany's net social product as late as the mid-1980s.

<Table 7> Changes in Corporation Ownership: East Germany

(unit: % of contribution to net social products)

Year	Socially owned	Half-private	Privately owned half-public
1950	56.8	-	43.2
1970	85.9	8.6	5.5
1985	96.5	0.6	2.9

Source: *Statistisches Taschenbuch der DDR*, 1985, 1986

<Table 8> Ownership of Real Estate: East Germany

Properties	Privately owned properties as percentage of total
Housing(1981)	48%
Farm Land(1990)	50-60%

source: Guter Fischbach, DDR-Almanach '90: Daten, informationen, Zahlen, Stuttgart; Bonn-Aktuell GmbH, 1990, hans-Werner Sinn, Macroeconomic Aspects of German unification, NBER Working paper No.3596, National Bureau of Economic Research, January 1991.

<Table 9> Changes in Types of Ownership: North Korea

	1946	1949	1956	1959
Farm Land ¹⁾				
collectives	0	0	63.5	92.0
State Farms	0	3.2	5.3	8.0
private	100.0	96.8	31.2	0
Enterprises ²⁾				
State-owned	72.4	85.5	89.9	89.7
cooperatives	0	5.2	8.1	10.3
private	27.6	9.3	2.0	0

Note: 1) as percentage of total area

2) as percentage of total numbers

Source: Joseph Sang-hoon Chung, The North Korean Economy, Hoover Institution press, 1974: Stanford, p.11 and p.61

Moreover, until the moment of German unification, almost half of housing was still privately owned. In the agricultural sector, more than 50 percent of total farm land in East Germany was reported to have been owned by individual farmers, even though these lands were incorporated into agricultural cooperatives and the individual owners were not able to exercise their property rights. All these indicate that private ownership

was maintained, in some form, under the socialist regime of East Germany.

By contrast, North Korea underwent rapid nationalization and collectivization. As early as 1958, North Korea had thoroughly completed collectivization of farm land and nationalization of industries mainly through forcible expropriation. Strict government control and planning and the complete extermination of private property rights in North Korea will make its economic transformation to a market economy all the more difficult than that of East Germany. The integration of the North and South Korean socio-economies is bound to involve greater social, economic and psychological cost. Naturally South Koreans are concerned with the economic costs associated with unification, as it will eventually become on their burden.

Like the division of Germany, that of the Korean peninsula was the result of World War II. Unlike the Germans, however, the Koreans experienced a large-scale bloody war against one other, deepening antagonisms and polarization. Situated in Central Europe, East Germany bordered on Western market economies and had a divided Berlin within its territory as an unavoidable point of contact. In contrast, North Korea is surrounded by sea, the military demarcation line, and borders on China and the former Soviet Union, thus enabling the region to keep the society in isolation with relative ease. While East Germany had fairly extensive trade relations with Eastern European countries, North Korea maintains a much more autarkic economy, instilling people with the “*Juche(self-reliance)*” ideology. Given the isolation of North Korea, once the people have their eyes opened to the outside

world, they are likely to feel strong disillusion and resistance to their regime. In such a situation, a gradual transition to a market economy is hardly to be expected. Under great uncertainty and possibly extreme internal turmoil, border-opening and massive emigration might be inevitable. Like it or not, South Korea will have to be prepared for this situation. Even though the East German authorities promised a gradual transition to a market economy, the promise lacked credibility among the people.

Economic union under a market economic system will have to be accompanied by currency conversion, privatization of North Korea public enterprises and large investment in the North. In currency conversion, it should be made clear to North Koreans that a favorable conversion rate, through boosting their short run purchasing power, may threaten the stability of their future income, as it would make it difficult for their enterprises to survive. In reality, the conversion rate will be determined not only by the relative productivity of the economies but also by the aspiration of the North Korean people of increasing their living standard and attaining social and political stability at that time. The more uncertain the prospect of unification and transition to a market economy are, and the higher the faith North Koreans have in the South's economic and welfare system, the greater the number of emigres. To stop it, the more favorable the conversion rate will have to be for the North Korean currency if this flow is to be stemmed.

As for the privatization of public enterprises and investment in the North, the German experience clearly shows that the existing bureaucracy controlled by communist elites should be dismantled

as soon as possible in order to keep it from obstructing the transition and reform process. An immediate and clear policy announcement concerning property ownership in the North also seems critical. The North Koreans should be given the ownership of their housing, while those undertaking productive investment in the North should also be allowed to purchase the required real estate. In order to prevent inefficient and disorderly land use, a zoning law should be placed in effect as quickly as possible. It may be difficult to ignore claims by former owners of confiscated land, and legislation concerning compensation for the loss will have to be prepared. However, if such legislation is enacted it should be drafted clearly to avoid the uncertainty which might inhibit productive investment in the North.

1) The cost of Unification

The German experience demonstrates that national unification involves enormous economic costs, and this is probably the most critical concern for South Korea. Major cost will include building the appropriate social infrastructure as well as welfare payments for social safety nets. In area of social infrastructure, construction of telecommunication facilities and transportation systems appear to be the most urgent tasks. In North Korea, private telecommunication facilities are almost nonexistent. The backbone of the North Korean transportation system, like East Germany, is the national railway network. To construct the necessary connecting road systems between North and South Korea, major investment will be required. The length of paved road in North Korea is only less than 4 percent of that in the South. Yhe

length of highway and harbor handling capacities in the North are estimated respectively to be 23 percent and 18 percent of those in South Korea.

Investment for new plant and equipment will basically be undertaken by private industries. The amount of investment to be induced in the North Korean region after unification will depend on the government's critical role in enhancing social infrastructure as well as of such economic incentives as financial and tax preferences. One of the critical tasks for restructuring North Korean industry is to dismantle industrial combines and to transform military industries to civilian purposes. Investment needs as well as unemployment benefits will depend on the strength of the North Korean industry. Since North Korean firms appear to have a comparative advantage only in mining and certain heavy manufacturing operations, the need for a comprehensive restructuring in agriculture and light manufacturing, together with new investment in the service sector, seems to be substantial. Before unification and the attendant unemployment payments and refraining allowances to North Koreans, South Korea first has the task of establishing its own welfare system, a task that will impose heavy burdens on the government budget.

The social security system of the former West Germany was one of the most developed and well organized of the Western hemisphere. An extension of the existing system to East Germany was sufficient to contain social problems. Given North Korea's current system and industrial structures, its projected economic decline during transformation-following unification following Germany's model-will be even more severe and the unemployment

rate will be higher than East Germany's economy, especially considering the immature social security system in South Korea. Because of the existing system in the South may not be able to accommodate North Korean people with simple extension as in Germany. Thus, careful preparation are required to avoid severe social disorder.

Demographic and economic features suggest that the relative costs of unification are likely to be much heavier for South Korean than was the case for West Germany. The East German population was 27 percent of that of West Germany, while the North Korean population corresponds to 50 percent of that of South Korea.

<Table 10> Income Disparity and Population Ratio

	North Korea South Korea	East Germany West Germany
per capita GDP	5-7%	25%
population	50%	27%

sources: National Unification Board, Republic of Korea; Leslie Lipschitz and Donogh McDonald(eds.), *German Unification: Economic Issues*, Washington D.C.: International Monetary Fund, 1990.

In order to better shoulder the costs, the South Korean economy must enlarge its savings capacity, which will only be feasible with sustained growth on the basis of enhanced industrial efficiency. How can the likely costs be minimized? What are the alternatives of the German type of unification? Can a gradual process of economic and social security integration between North and South Korea reduce the burden to the South Korean people

without reducing the development potential of a unified Korean economy? Is a gradual process of a systemic transformation of the North Korean economy and integration of social security systems at all feasible?

2) Shock Therapy vs Gradual Transition

Even in Germany, a gradual integration of the East German economy into West Germany was seriously considered at the initial stage. Because of their low productivity and inadequate capital stock, East German firms were not thought to be viable when the two Germanies were united. An economic union was also believed to be feasible only after the market mechanism was working to some extent in the East German economy. Nevertheless, German unification proceeded at full speed, mainly because political consideration overwhelmed economic caveats. The rapid deterioration of the East German economy in the midsts of much improved relations with West Germany was further impetus for the German Economic, Monetary and Social Union(GEMSU). With increasing numbers of people crossing the border to West Germany and a sharp economic slowdown, it was hoped that an early union would alleviate the economic situation.

Some Western economists had argued that shock therapy would be a more desirable approach than gradualism²⁶⁾, because it allows

26) See Heiner Flssbeck et al. (1991), p.4 : Almost all the national government have declared their intention to move towards a market economy on the Western pattern the “shock therapy vs. gradualism” debate continues. Dissimilarly the economists’ view, the standard political view still semms to be that a policy based on gradualism

an adjustment at higher speed. It is difficult to identify economic gains that rapid unification and elimination of the border would entail for South Korea. When free flows of commodity and production factors, including labor, are allowed, the economic gain could be only be the consequence of eased labor migration. Thus, the South may derive small benefits from rapid unification if it suffers from a significant labor shortage, especially for unskilled labor. However, the potential burdens of rapid unification will be severe for the South. It will consist of labor influx, higher unemployment and probable inflationary pressures, most of the costs will be borne by the South Korean taxpayers. A controlled speed of transformation and economic integration of North and South Korea will critically depend on the preservation of the border line between two regions. If for political reasons a restriction of the labor mobility and trade is not feasible, a shock transformation will be unavoidable. But if political conditions permit a different choice, an alternative approach other than the German type exists. The labor influx could then be restricted, and without currency union inflationary pressures should be lower. A slow decline in North Korea's economic activity would mean a slower widening of the gap between the North and the South. But the existence of border may delay the recovery of the North Korean economy and inter-regional income difference.

is more easily realised, that the staged transition from one system to the other places less of a burden on the population and will minimize the adjustment problems.

3) Some Other Issues

<Establishment of property Rights>: In transforming a socialist economy to a market economic system, one of the fundamental tasks is establishment of ownership on various kinds of properties. Several options for new ownership are available, including restitution of property rights to the original owners, sales of state-owned properties through public auctions, even distribution of property rights to the general public through a voucher system or the like, and distribution of property rights to the actual users.

In Germany, two main criteria were applied with respect to the ownership assignment method: respect for private property rights and the necessity of a quick transition considering its impact on investment, growth and employment. The basic decision was to restitute to previous owners who were expropriated since 1949 by former GDR government. Compensation is to be paid only when restitution is technically difficult or involves large social costs. The adoption of restitution principle for privatization is often viewed as one of the greatest mistakes of German Unification. Restitution claims and unclear ownership situation impeded investment in East Germany.

One lesson from the German experience is that an immediate and clear policy announcement concerning property ownership in the North is critical in order to avoid unnecessary disputes on property. Even unification would take place in Korean peninsula, restitution of property ownership will be difficult to apply. One of the main reasons lies in the fact that unlike East Germany, private ownership was completely banned in North Korea a long time ago. With a complete absence of title records

for properties in North Korea, if restitution were adopted, conflict claims will be much more prevalent than in Germany. Sufficient attention has to be paid to the distributional aspect. It will at least be necessary to distribute ownership of housing in North Korea so people can start a new economic life in the market system with a minimum of initial property.

<Monetary Union>: The Western German government decided to establish a currency union with East Germany only a few months after the fall of Berlin wall 1989. It was a bold decision to achieve both transformation and unification as quickly as possible. The conversion rate was important because it affected inflation and the wage level and competitiveness of East German firms. The currency union was a strategic part of German unification. Much debated, the rate was set at full parity for wages and salaries, pensions, rents, scholarships, and individuals' savings of up to 4,000 Ostmarks(depending upon age). Other credits and liabilities were converted at a rate of two Ostmarks to one Deutschmark.²⁷⁾ During the debate, it was argued that, if converted at parity, the East German wage rate, amounting to 32% of the West German rate, would soon reach a 50%

27) See M.C. Burda(1990) p.3 and P.Bofinger(1990). pp.17-18. The Ostmark(OM), the GDR currency, was converted at the following exchange rate:
1:1 for wages, salaries, pensions and government transfers
1:1 for savings account of GDR residents up to OM 6,000 for persons aged 60 over and up to OM 2,000 for children aged 15 and younger, and up to OM4,000 for all other citizens.
2:1 for remaining savings account balances of residents
2:1 for deposits of enterprises and the government and for debt of state enterprises, the government and individuals
3:1 for accounts of outside the GDR.

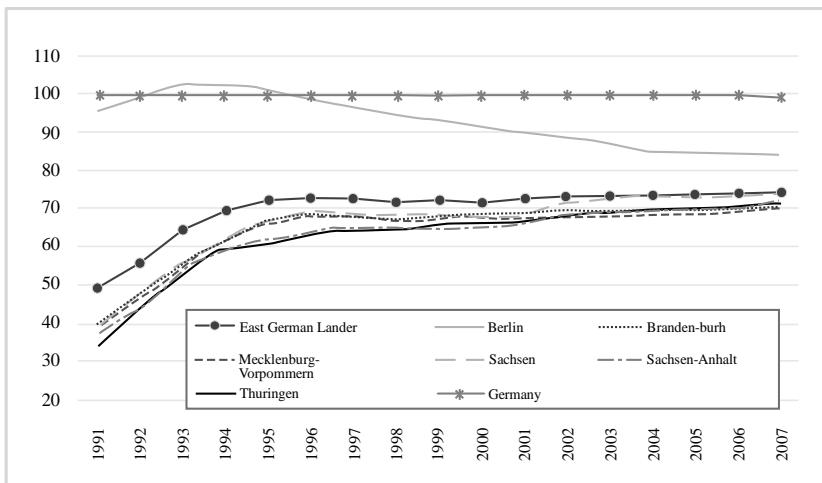
level. Given low labor productivity, this wage rate was considered to be too high for most East German enterprises to survive. However, if the conversion had been made at 2:1 in favor of the Deutschmark, it was feared that large-scale East German emigration would follow.

The conversion resulted in almost a 15% rise in the Deutschmark money stock M3. However, on the basis of the estimated economic size of East and West Germany at that time, an increase of 10% would have been appropriate. Therefore monetary overhang created by the favorable conversion rate was expected to lead to price increases. However, increases in money supply do not seem to have much effects on consumer prices. This was partly due to cautious behavior of East German households and partly due to stabilization efforts of the Bundesbank.

A more serious effect of monetary union occurred regarding wage competitiveness. The average wage in East Germany at the time of unification at a 1:1 conversion rate was about one-third that in West Germany. Productivity in East Germany was estimated to be also one-third that of West Germany.²⁸⁾ After the West German free union movement had been expanded to East Germany, the unions set wage parity as an early target. From April 1990 to April 1991 wages rose by 65%. By 1991, East German wages had increased to more than 50 percent of West German wage levels.

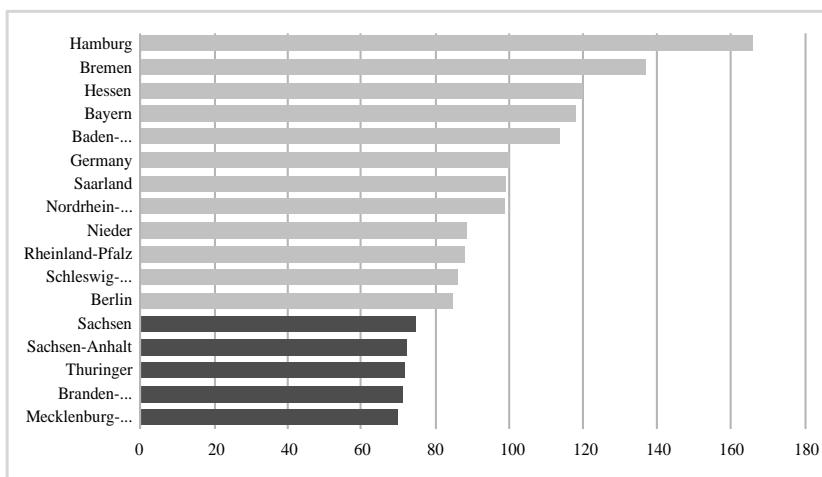
28) See P. Bofinger(1990), The Kiel Institute for World Economies estimates that GDR labor productivity is only about 35 percent of West German levels. However the 50 percent estimate for the GDR's relative labor productivity was made by the Deutsche Institute fuer Wirtschaftsforschung, Berlin, in 1987 for the year 1983.

[Figure 5] GDP per capita relative to German average(100=german average)



Source: Twenty Years after the German Unification, Sebastian Dullien, FHTW Berlin Presentation at KDI, Feb.19, 2009

[Figure 6] GDP per capita relative to German average(2007)



Source: Twenty Years after the German Unification, Sebastian Dullien, FHTW Berlin Presentation at KDI, Feb.19, 2009

3. Implications for Korea

There are two alternatives for Korea to achieve transformation and unification: Unification after transformation or unification with transformation at the same time. The first strategy to keep the border in order to restrict labor mobility and commodity trade. We saw in the case of Germany that unification with transformation created twin shocks. A demand shock from domestic to imported goods. If East Germany had instituted economic transformation program while maintaining its own currency, it would have been able to adjust the exchange rate so as to reduce the cost of economic transformation and social liberalization programs. A supply shock, as labor mobility increased and with the monetary union, the labor market became completely integrated. Rapid wage increases which greatly exceeded productivity growth caused increases in cost leading to the decline in aggregate supply. In order to prevent sharp decline in output and a corresponding increase in unemployment, the government should be able to use exchange rate and wages as policy tools.

The German experience suggests that unemployment is the main reason of migration rather than income gap. Therefore, the currency conversion rate should be determined by economic reason not by political consideration. In addition, an income policy that can restrain the excessive wage increase in North Korea is needed. This does not mean that labor mobility between the two Koreas should strictly be limited for a long time, as this would constrain the efficient use of resources.

1) Labor market and Social Security

The unification of both Germanies on October 3, 1990 and the GEMSU on July 1, 1990 led to an unprecedented “collapse” of production, employment and social security structures in the former East Germany. Industrial production is down to one-third of its last GDR-value, employment declined by more than 35 percent down to 6.25 million in mid-1992, and unemployment reached 1.2 million by July 1992, an unemployment rate of almost 15 percent. Unsubsidized employment is well below 6 million, because 400,000 workers benefit from public job creation, 443,000 from early retirement program, and additional 417,000 from short-time work allowances. The causes of mass unemployment can be classified into two categories: economic and structural. The economic cause implies the increase in production costs (through a 1:1 exchange rate and a sharp wage increase after the unification) and the decrease in demand for the former East German products.

For a unified Korea, mass unemployment looms too, essentially for structural reasons. Moreover, if political consideration overwhelm economic ones in the process of integration, for example, in the decision of money exchange rate, the size of unemployment will even be greater. Also, a reduction of the sizable North Korean military force will add to unemployment. South Korea has yet to develop any extensive labor market policy mechanism that could be extended into the North. Neither has an unemployment insurance scheme been established, and South Korea only has some program designs that are to be realized in the mid-1990s. Labor market institutions such as training,

retraining of displaced workers and job placement services are also in a early stage of development in South Korea.

Unification of the two Koreas and the consequent freedom of travel would also-as in the German case- heighten the probability of a massive North-to-South a migration. Beside the apparent gap in living standards, a reunion of families could bring in a large influx of people from the North to the South. A significant amount of labor inflow could be observed in the South Korean labor market, where labor shortage. It is observed that currently there are around 100,000 illegal foreign workers filling this labor shortage. However, the current labor shortage in South Korea is a result of rapid economic growth realized in the latter part of the 1980s, and a slowdown of the economy may ease the shortage. Furthermore, it would be difficult to absorb the inflow of labor in a short period of time if the magnitude reaches one half to one million persons. Housing and other social services may become equally under pressure, especially in the urban areas in the South already experiencing chronic shortages.

<The Challenges for Korean Unification>: Koreans are understandably interested in the progress and the obstacles encountered in the process of German unification and economic transition in East Germany. It is likely that, sooner or later, Koreans will face the similar task of transforming a socialist North Korean planned economy, into a market economy, while at the same time, integrating the two completely different economies. Under unification, the transformation of the centrally planned North Korean economy to a market-based one will require massive financial transfers from South Korea since a large number

of the heavily subsidized, state-owned enterprises and farms will need to undergo large scale restructuring and modernization.

In the short and medium-term, this will lead to rising unemployment. Among the affected industries, heavy industry, coal mining, and small-scale farming will be hit hardest due to low productivity and inadequate capital stock levels. Industrial workers, coal miners, and farmers will thus represent powerful pressure groups for continued protection and subsidization. The conversion of the North Korean factories from military to civilian production, together with substantial military-spending reductions and demobilization will also intensify pressures for government assistance.

If the North Korean industrial sector fails to achieve significant cost advantages and productivity gains after unification, then the South Korean investors could become reluctant to make sizable investments in the North. Without adequate capital inflows, North Korea could be confronted with structural, and not just transitional unemployment. Lower wage costs and modest benefit packages for North Korean workers would, however, keep many jobs open for a longer period of time during the adjustment period. Following unification, Korean investment flows to elsewhere could decline considerably due to increased internal demand.

The successful transition from a centrally planned to a market based economy will require the immediate replacement of Communist bureaucrats and managers in North Korea by qualified and well-trained people. Such a move would be needed to prevent politically motivated people from obstructing the economic reform process. If the administrative structure was dominated by former

Communist officials, the changes needed to successfully transform the North's economy would not be made since the move to a market economy would threaten the party's existence and the privileges of Communist party members. Strong opposition to the necessary, but painful, economic reforms would also come from the North Korean population since large subsidies for most basic necessities such as food, clothing, shelter, and transportation would have to be removed.

Economic liberalization measures such as the freeing up prices, removal of trade related barriers, private property rights, currency convertibility, and the privatization of state-owned enterprises, would eliminate the need for extensive micro-management of the North Korean economy. The forces of supply and demand could determine resource allocation, prices, and production. Nonetheless, some kinds of administrative guidance or government intervention would be required to bring about a successful renewal of the North Korean economy. The government could use a number of policy tools in order to encourage private sector decision making in directions it considers desirable, including special tax treatment, low-interest loans, channeling public funds towards certain investment, and providing information and advice. Government intervention would also be needed in order to influence the rate of industrial and rural development, as well as to control speculative and rent-seeking behavior on the part of both the private and the public sectors.

Several years would have to pass before the benefits of liberalization, macroeconomic stabilization, and privatization would be likely to become widely evident in North Korea. Economic growth will require the accumulation of capital and

skills to make productive use of it. But it will take time to build factories, train workers, and to locate markets for the products produced by the new factories. Consequently, people's expectations of marked improvements in their physical and material well-being would be difficult to meet within a decade.

Ultimately, the success of economic reforms in North Korea would depend on whether people possess the patience to wait for the reforms to bring about noticeable changes in living standards. The risk of widespread social unrest brought on by economic reforms could be diminished somewhat by introducing social welfare programs. These measures could discourage, to some degree, the southward migration of people from the North in search of higher wages, employment, and better future prospects.

By contrast, the principal burden on the South Korean economy after unification will be accelerating inflationary pressures stemming from North Korean reconstruction demand and increased demand from North Korea for South Korean consumer goods. The opening-up of a new market with more than 24 million consumers with pent-up demands will be the main source of inflationary pressure if demand growth increases beyond the economy's full employment level of output. Labor and material shortages, brought on by an expanding construction sector in a unified Korea, would add to the problem. Moreover, wage hikes and labor unrest could cause a sustained rise in the general price level, and thereby seriously affect the international competitiveness of Korean exports. The government could adopt numerous measures in order to dampen inflationary pressures, including a tight monetary policy with relatively high interest

rates and increased imports.

The financial cost of Korean reconstruction and restructuring could amount to US\$230-250 billion over 10 years period. With burdensome foreign debts, sluggish economic growth, shrinking industrial production, and persistent food and material shortages, North Korea is in no position to finance any portion of the costs of rapid unification. This means that the financial burden associated with Korean economic, monetary, and social integration would have to fall almost entirely on South Korea. The annual funding of US\$23-25 billion needed to rebuild the North's moribund economy would represent more than one-third of South Korea's present state budget of about US\$80 billion. These funds would be directed primarily toward public investment in social infrastructure, new plant and equipment, and unemployment benefits. Some funds would also be allocated for pollution cleanup, telecommunications modernization, privatization funding, and the upgrading of the educational system.

The current economic challenges of industrial restructuring, market-opening and import promotion measures, as well as financial deregulation and liberalization suggest that South Korea will not be in a financial position to cope with unification within the current decade. Rising domestic wages, a rapid appreciation of the Won, protectionist sentiments in major export markets have combined to bring about drastic changes in South Korea's trade structure. These developments are forcing the country's manufacturing sector to shift production into more technologically sophisticated and profitable products such as consumer electronics, machinery, and motor vehicles. Small and

medium-sized South Korean firms in labor-intensive and low value-added industries such as footwear, textiles, and toy have also begun to move their manufacturing facilities abroad to low-wage Southeast Asian and the Caribbean countries in order to remain internationally competitive.

With the prospect of a cheap labor supply under unification, there exists the incentive for South Korean businessmen to establish labor intensive industries in the North. In the absence of rapid unification, increased high-level talks focusing on political cooperation, as well as expanded economic and cultural exchanges are likely.

2) Need for a Gradual Approach

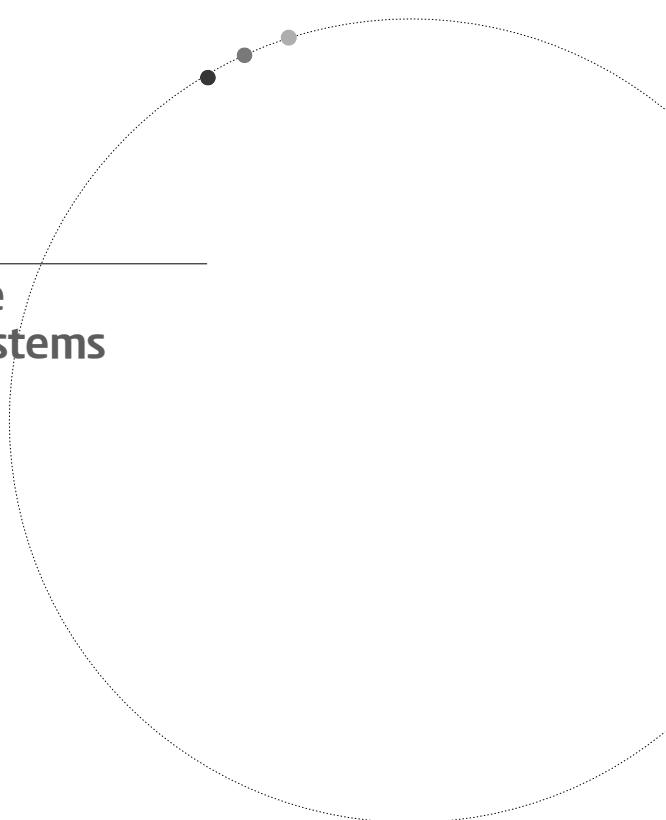
The South Korean government's policy of gradually broadening the areas of cooperation, and economic and cultural exchanges is aimed at building trust between the two countries. Because many South Koreans are now enjoying relative prosperity for the first time in their history, they do not want to see their material well-being or lifestyles diminished in any way by costly, rapid unification. Accordingly, the gradual approach to unification is widely supported by various sectors of South Korean society, particularly among the middle class. They are clearly aware of the unavoidable economic difficulties and hardships which can be caused by the rapid absorption of an underdeveloped economy by a highly developed one. The absorption of the former East German economy by West Germany served as a valuable lesson for South Korea. Even though South Korea has developed into the world's 12th largest trading nation and 15th largest economy,

it could not support the North in the same way West Germany is now supporting the former East Germany. Unlike the more industrially diversified and much wealthier German economy, South Korea remains a middle income, developing country with a per capita GNP of only US\$ 20,000 compared to Germany's per capita income of more than US\$20,000.

Since the economies of North and South Korea are complementary in nature, there exists the potential for considerable gains to be made from increased trade once impediments to bilateral economic interaction are removed. Not only will lower transportation costs induce an expansion of inter-Korean trade, it could also result in higher real incomes for both countries. Besides increased inter-Korean trade, opportunities exist for joint development of tourism, natural resources, and fisheries.

It is not possible at this time to determine the extent of likely future plant closings in North Korea once unification begins to take hold. What is clear is that whatever fraction of industry survives will require substantial amounts of money to restructure and modernized. In addition to the large amounts of funds that will come from South Korea, some financial assistance, albeit reluctantly, could come from Japan, the United States, and the European Community. The Successful transition would eventually lead to the collapse of the Communist party in North Korea and its replacement with a more democratic society. Only a democratically-elected regime would have the legitimacy and popular support to undertake far-reaching economic reforms needed. Once the difficulties associated with unification such as unemployment and inflationary pressures, among others, are

overcome, a unified Korea could be in a position to increase bilateral trade with China and Russia. A large, prosperous, and highly competitive Korea would be strategically located to play a leading role in the development of the economies of the Asia-Pacific region, an area with enormous potential.



Chapter 5

Comparison of the Social Security Systems

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The economic and social system of unified Korea will impose on North Korean citizens a sudden transition and adaptation to market economy system, and this will mean the collapse of an existing distribution system and social security system in the north as well as overall reformation thereof.

In this context, in the case of full-scale industrial restructuring including the introduction of price liberalization system, a basis in the transition process to market economy, and promotion of privatization of existing government-operated enterprises, etc., sets in, a corresponding reformation in income distribution system and social security system of the north also will have to be made.

Construction of the social security system for a unified Korea should, under the basic ideology of article 2 of the Framework Act on Social Security, secure the national minimum so that all people in the North and the South can lead a life worthy of human dignity, create a system and condition for each individual to improve living standards, and pursue the harmony between fairness and efficiency in its implementation.

However, in the initial period after unification when the gap in the existing economic and social system between the North and the South remains large, the preparation of measures to secure financial resources to meet the sharp rise in demand for

social welfare would be unavoidable. From the experience of unified Germany, we can see more than 40~50% of financial transfers that the federal government and state government in the West German region offered to the East German region was spent for costs related to social welfare for the citizens in the old East German region.

Such an experience of the unified Germany suggests that in case integration of social-economic systems between the North and the South has been achieved in any form and, as a result, finance of unified Korea is put under serious pressure, the major reason thereof would be the expenditures for social security of the citizens in the north.²⁹⁾

Therefore, it is necessary to separate the management of social welfare finance of the North and the South until the social security system of unified Korea is equally applied to the people in both North and South Korea while the unified Korean government provides partial financial aid for the social security of the citizens in the north at the same time.

In the same context, it is desirable to promote specific measures

29) Hartmut Koschyk, Deputy Finance Minister of Germany, who attend on Oct. 4, 2010 the press interview with Han Modrow, former East German citizen, citing the report of Halle Institute of Economic Research Partners(IWH) regarding German unification cost, said 2.2740 trillion euro (about 3525 trillion won) was estimated to have been spent in 20-year period, but if social security cost is subtracted it is reduced 1.0009 trillion euro (about 1551 trillion won). Germany, in the process of unification, invested huge amount of social security cost (45% of total unification cost) to lift the living standards of the citizens in East Germany to the same level as those of West Germany at a single stroke. Germany is said to cite this measure as one of the mistakes it had made. (Refer to the Oct. !1 edition of the Chosun Daily.)

for the health·medical care and social welfare system of unified Korea and those for reducing the qualitative and quantitative gap in resources, being mindful of gradual and phased integration that corresponds to the changes in economic and social structures in both the North and the South.

This is because in order to accomplish a substantial integration of economic and social systems between the North and South, it is necessary to promote a job-creating function and market economy system in the north and thus raise the capacity of the citizens in the north to bear the burden of paying contributions to social insurance, minimizing the financial burden of unified Korean government.

In addition, the expansion of relative poverty accompanying the changes in labor market structure both in the North and the South caused by excessive inflow and supply of low-income labor force into the south is expected; furthermore, increase in the burden of contributions to the social welfare fund of the working class, resulted from the changes in social·economic conditions including the rapid spread of low fertility and an aging society, seems unavoidable. So, these constraints should be taken into consideration in preparing for the integration of the social security system from the initial stage after unification.

The key to solving the problems would be at first to forecast the initial process of unification led by the South and detailed measures to promote in each sector of social security that might need to be implemented after unification, and then prepare a 「road map」for integration of the social security systems of the North and the South from a mid-to-long term perspective.

Since information on the qualitative-quantitative content of the existing social security of the north is lacking, the primary necessity should be the collection of data right after unification that will make the forecast of the size of basic needs of 24 million North Koreans possible along with the in-depth analysis thereof.

In general, the economic system and social security system are closely related in the socialist system because the social security system has been used as an important means for economic development through maximization of the investment ratio by maintaining a low-income structure.

In other words, while in South Korea the social welfare system is considered important for its role as a social safety net to deal with the elements of diswelfare that appear in the process of economic development, including industrial disaster, diseases, unemployment, etc., operation of the welfare system under the socialist system has been a means rather than an objective in itself, and the noted fact that the welfare system has its roots in incentive policy aimed at productivity improvement will also help understand its role in socialist societies.

Although North Koreans under the old system could have the lowest level of material security including free education, free or low-cost housing and medical care service provided by the state albeit at low quality levels, since it is unavoidable for the north to go through the transition to the market economy system in the process of economic and social integration between the North and South, the maintenance of social welfare service like the one provided for free by the state would not be possible,

considering that inflation is expected to be prevalent due to the increase of unemployment and shortage of goods supply in real economy sector for a short period of time.

Therefore, in seeking measures for efficient reestablishment of the social security system in the north after unification, the following matters need to be examined: first, characteristics of the social security system of the north; second, differences in the social security systems of the North and the South; third, experiences and lessons from the integration of the social security systems of unified Germany and transition economies in old Eastern Europe.

1. Characteristics of the Social Security System of North Korea

North Korea has been operated under a social system in which the state monopolizes production means and leads production and distribution according to central planning; to understand the social security system of North Korea, understanding of a North Korean-style income distribution process is required.³⁰⁾ The North

30) From a purely theoretical perspective, the current distribution system of the north can be explained as follows. North Korea has a social system where the state monopolizes all production means and leads production and distribution in accordance with central planning. It can be said that the basis of North Korean economy starts from socialist possession of production means, and all consumption relations are recognized only for socialist possession with the exception of individual possession for individual consumption. As to this, the North Korean 「Socialist Constitution」(amended April 1992) prescribed that “In Democratic People's Republic of Korea, only the state and cooperative organizations can possess production means” (article 20), “Individual possession is the possession for the purpose of individual consumption”(article 24). This standpoint of North Korea on the production and

Korean distribution system has a dual structure based on ‘national income’³¹⁾, and the truth and falsity of its income distribution

distribution system can be drawn from the ‘surplus values’ concept of K. Marx. Marx, to explain the value of products, thought the value of labor invested in the production process consists of 1) wage, value of labor paid to the laborer, and 2) surplus value, and insisted that the profit of the capitalist is earned by obtaining that surplus value, and accordingly the income should belong to the laborer. The redistribution process of surplus constitutes the basis for analyzing real conditions of security of democratic living provided through the state distribution system. The fact that North Korea uses the term ‘living expenses’ instead of ‘wage’ referring to the payment provided for labor in the ‘Socialist Labor Law’ (enacted April 18, 1978), etc. shows the logic that originated from such a standpoint. That is, wage that is money income in capitalist societies is economic in nature, paid for selling labor and a means of exploiting laborers, while in socialist societies the money income of citizens is earned through living expenses that are calculated and paid in accordance with the socialist system of rewarding their labor, and living expenses, unlike wage in socialist societies, are an important means of securing the material cultural life of socialist laborers.

So, the theory goes, since laborers in the north are co-owners of production means in social relations, they do not need to receive wages or pay them. North Korea argues that they are already in the third stage of the social redistribution of surplus value, the last stage required to realize such an ideology. The first stage is characterized by the exchange of money and labor between an owner of production means and an employee. The second stage is where, in relations between the state and its citizens, surplus value is socially redistributed through taxation. However, since differences in labor conditions or structure of the payment system still exist in stage 2, taxation only allows nominal redistribution of surplus value. In the third stage, redistribution of surplus to all citizens is made through direct redistribution by the state, and here it is not distribution according to productive contribution but distribution according to needs.

Therefore, according to the argument of North Korea, they are in the stage 3 after the ‘abolition of agricultural tax in kind’ (April 29, 1966) and legal abolition of taxation in 1974. But abolition of taxation was just a result of taxation becoming meaningless because all production means were socialized, and considering the fact that the state takes profits (profits from dealings) under its control, this can be interpreted as collecting substantial taxes.

31) <North Korea: Concept of GSP=C+V+S>: GSP is an index former socialist countries often used to estimate the total output of a country. It is the sum of the depreciation amount of all kinds of intermediary goods, facilities and equipment used for production (C), payment for laborers (V), and social net income (S) that the state manages

system is as follows:

Existing security of living for North Korean citizens is made through primary distribution (first-stage distribution) and redistribution (secondary distribution). In the primary distribution process, citizens receive cash or in-kind income for direct·indirect participation in the production process that is called ‘initial income’; and in the secondary stage, additional distribution is made through a national distribution system or budget function, which is called redistribution. More specifically, the redistribution is made through the stage budget, social insurance, declared value system, etc.,

Of North Korean budget items, 「Social·Cultural Scheme」 is directly related to social security. North Korea argues that “taking into consideration such benefits given on a national level as

in the form of profits of dealings, etc. The result of investing labor and accumulated old labor is defined as GSP, ‘Gross Output Value of Social Products.’ However, direct comparison of this with national accounts of capitalist countries has a problem in consideration of the following differences: first, GSP does not include non-production sectors (administration, military, education, science, art, health, facilities management, housing, transportation, etc.) where the material production process is not included; second, since the production amount of each production unit is counted up to the total production amount in the calculation process, such cases happen where a size of production is double counted; and third, the price of production is not a market price drawn from the law of scarcity, but an artificial price reflecting labour value. The newly created part of GSP (net products or sum of added value) is called ‘National Income (NI: National Income)’, and NI is defined as the outcome value of subtracting depreciation amount and cost of invested intermediary goods ($NI=V+S$) from GSP. On the other hand, in the case of the GDP of South Korea, “ $GDP=GSP$ -intermediary input+added value in non-production sectors” is valid since GDP is totaled in such a way that if an item of goods produced in a certain period are used for the production of other end goods in the same period, the production amount of the intermediary goods is subtracted in computing the final total. (As to theoretical analysis on this argument, refer to Yun Ha-chung (1986, pp.111~117).

free compulsory education, free medical treatment, rest and repose at state expense, paid vacation, child care·education facilities, paid maternity leave, subsidies for temporary loss of labor due to illness or injury, old-age pension, living security for the elderly and orphans without someone to look after etc. in addition to the basic needs of food·clothing·shelter paid from the government finances, real income of their citizens further increases.” As described above, the distribution system of North Korea is based on the principle that the state monopolizes the means to increase welfare of the people within its distribution system and positively makes political intervention for the security of its citizens.

Naturally, due to the nature of its system, north Koreans cannot seek any improvement except receiving the minimum amount of goods essential for sustenance with the wage (living expenses) distributed at the first distribution, the so-called primary distribution, and other than that, they have no choice but to depend on social welfare benefits that the state provides additionally on a communal basis, including education, housing, medical care service, etc. that are necessary to raise living standards. Paradoxically, the social security system of the north does not constitute additional benefits provided by the state but is just a process of redistributing citizens’ income that should have been completed at the first income distribution stage.

The fact to be noted here is that in such a society as North Korea where short supply of all kinds of consumer goods in real economy causes chronic excess of demand, a phenomenon called ‘monetary overhang’, which means that consumers cannot make consumption as much as they want even if they had money,

occurs. As a result, the state's fiscal activities, of which the medium is money, is weakened, and even if the government expands fiscal spending, this will only result in the lowered level of the real purchasing power of its people.

Although the income distribution system of North Korea is run in the manner that the state monopolizes the means to increase people's welfare and makes positive political intervention for the security of people's living, in reality, excessive budget spending on economic development and national defense, etc. that are not directly related to the security of people's living standards leaves a small size of the budget left to be redistributed through a national distribution system. Analysis shows that the emphasis that North Korea puts on 「military-centered」 policies under such political slogans as 'construction of prosperous and powerful nation' and 'military-first' cause more rigidity in the national budget, deepen the distortion in distribution of available resources and hinder the balanced industrial development.

In other words, the existing system of securing the people's living standards has its limitation in securing sufficient living for its citizens and realizing equal distribution. With regard to the living expenses, or initial income, there may be room to think that relatively more equal distribution is made compared to capitalist countries based on perfect employment and low income despite the gap between class and sectors. However, the reality is that 'social meritocrats' including officials of the party, military authorities, bureaucrats of the State Administration Council, etc. take more benefits in consumption, and such socialist practices as exchanging backsheesh and bribes in the stage of

‘distribution based on needs (redistribution)’ exist. Also, the unfair structure of the society is said to be sinking more deeply into this situation.³²⁾

In addition, unlike their theoretical argument, after the institutional transformation of the former communist bloc, severe difficulty in supply of daily necessities and financial difficulties have continued due to the disintegration of the economic cooperation structure within the bloc, including the abolition of such benefits as socialistic friendly prices etc. Such a situation leads to low production activities of state-run enterprises and a decrease in the profits of government enterprises and cooperative organizations, which are the basic fiscal resources. Under the circumstances, the social security system of ‘redistribution based on needs’ in the second redistribution stage is far from working correctly. Furthermore, the overall portion of the budget related to social security falls far short of the level required to maintain the system.

Under the above described income distribution system of North Korea, the core of living security provided to the citizens consists of in kind and cash subsidies, a distribution policy and a low-price policy artificially maintained by government regulations. They can be classified, by the form of payment, into the livelihood security provided through living expenses and pension earnings

32) According to the research of Roh Yong-hwan·Yeon Hacheong (1977), in the case of the former Soviet Union (1973) ‘Gini coefficient (total equality =0, Maximal inequality=1)’ measured using money income was 0.27, but the Gini coefficient taking into account non-monetary real income in the second distribution was 0.31, which means that the degree of inequality was more severe.

of laborers, distribution of clothing·food·housing, sale of daily necessities at low prices (price subsidy), and the basic living security provided in the form of free education, free treatment of all people, etc. <Table 11> is an overview of the policy means for securing the living standards of people in North Korea. This should be referred to when establishing plans for basic living protection and deciding on the size of financial resources required for people in the north in the initial period after unification.

[Table 11] Existing North Korean Policy for Securing People's Living

	Policy Means	Related Laws and Regulations ¹⁾	Subject of Financial Procurement
Living Expenses (Wage)	<ul style="list-style-type: none"> · Pay wage under the living expenses ranking system and additionally pay bonus, grant and cash prize · Reduce working hours of women with many children while securing normal wage(pay wages for 8 hours for actually working 6 hours) 	Constitution Labor law Child Care-Education Law	State Institution, Industrial Complex, Social Cooperative Organization
Food	<ul style="list-style-type: none"> · Food distribution system subsidized by government · Other price subsidies for side dishes, etc. 	Constitution Labor law	State
Clothing	<ul style="list-style-type: none"> · Free or at a low price 	Constitution	State
Housing	<ul style="list-style-type: none"> · Subsidy for rent for office clerks · laborers · Free use of cooperative farm · Security of group lodging of workers · Protection of housing facilities of the disabled · the aged 	Constitution Labor law	State
Education	<ul style="list-style-type: none"> · Free · compulsory education for 11 years · Provision of scholarship · dormitory for college students and vocational school students · Free education of nursery and kindergarten · Provision of school uniform & textbooks at a low price · Special education for orphans and men of national merit 	Constitution Labor law Child care-education law	State, Social Cooperative Organization, Students Obligatory labor

	Policy Means	Related Laws and Regulations ¹⁾	Subject of Financial Procurement
Health · Medical care	<ul style="list-style-type: none"> · Overall free treatment · Sanitary control, prevention of industrial diseases, food hygiene, child nutrition, physical training promotion 	Constitution Labor law Child Care-Education Law Public Health Law	State Social Cooperative Organization
Employment & Labor Condition	<ul style="list-style-type: none"> · Secure 8 hours of work for ordinary laborer(Heavy labor 6~7 hours, women with 3 or more children 6 hours) · Maternity hospital·nursery·kindergarten for women · Paid leave system (secure 14 fixed days a year, 7~21 days by occupation), national holidays, repose·recuperation leave · Free provision of laborer protection devices·essential goods for work·nutritional supplements) 	Constitution Labor law Child care-education law Public health law	State, Social Cooperative Organization
Social Insurance	<ul style="list-style-type: none"> · Old age pension (Men aged 60, women aged 55 or more) · Temporary subsidy·pension for people who lost the ability to work · Special living protection for men of national merit including soldier with honor, etc. and families of war dead · Pension for families of war dead · Secured paid leave for pregnant women(60 days before childbirth, 90 days after childbirth) & childbirth subsidy, provision of child rearing subsidy for women who bore triplets funeral subsidy 	Constitution Labor law Child care-education law Social Insurance Law, On National Social Security	State

Note. 1) Refer to North Korea's 「Socialist Constitution」(Amended April 1992), 「Public Health Law」(Enacted April 3, 1980.4.3), 「Socialist Labor Law」(Enacted April 10, 1978.4.10), 「Child Care-Education Law」(Enacted April 29, 1976), 「On National Social Security」(Enacted Aug. 30, 1951), and 「Social Insurance Law」(Enacted Dec. 19, 1946.).

2. Comparison of the Social Security Systems of North and South Korea

South Korea and North Korea have each settled their different social security systems based on different political systems and ideologies, as seen in <Table 6>, and both their content as well as legislation history difference is evident: the difference in nature between the principle of equity of the South and the principle of equality of the North. Therefore, it is hard to make a two-dimensional comparison and analysis of the social security systems of the North and the South.

The social security system of North Korea is, as mentioned above, making a uniform distribution on a basic level based on the labor of its people, and theoretically distribution is made under a centrally planned economy through ‘primary distribution’ in the first stage and ‘redistribution’ in the second stage. So, at least theoretically and legally, social security payment is universally made to all its people.

On the other hand, in the case of the social security system of South Korea, though there is the aspect where equalitarianism is applied through income redistribution elements, for instance, basic assistance of national pension and health insurance assistance, etc., differential payment is generally applied according to income level and insurance payment level. However, it resolves social risks in the case of market failure through public assistance and positive intervention of the state through social welfare services, and thus pursues the basic living and protection of rights thereof for each individual.

The social security system of South Korea has been developed in accordance with 「Framework Act on Social Security」(Article 3) with the three axes of “social insurance system” to protect people from social dangers including disease·disability·old age·death, etc; “public assistance” to secure minimum-level living and to support self-reliance of people without ability to maintain living or have difficulty in living; and “social welfare service” to support all the people who need help to lead normal social lives by offering consultation, rehabilitation, and introduction of jobs, or the use of guidance and social welfare facilities, etc.

1) Social Insurance Systems of North and South Korea

The social insurance system, which includes pension, medical treatment·industrial accidents·employment insurances, etc., will be the basis of the social security system of unified Korea and perform the function of providing security against social·economic dangers of people in the North and the South. Accordingly, establishment of the general system that will cover the object of application, measures to raise fund, management and operation thereof, etc. is required.

<Pension system>: In the case of South Korea, in addition to the existing pension system applied to special occupations including public official·military personnel·private school teachers and staff, etc., the national pension system was first introduced in 1988 and its object of application was expanded to the self-employed in urban areas, and was finally launched as the national pension system (for all people) in April 1999. On the other hand, North Korea implemented a pension system based on 「Social Insurance Law」 and expanded its benefits

to farmers of cooperative farms in 1985, thus institutionalizing pension benefits for all people.

As to the amount, South Korea adopted an income-proportionate pension that reflected the wage level while the person was working, while in North Korea the dominant system appears to be an income-proportionate pension but the difference is that payment is made not only in cash but also in kind.

As to the pension fund, in South Korea, on the basis of national pension, both the employer and worker donate 4.5% of subscriber's income, and subscribers of residence-based or voluntary insurance depend on the financial resources contributed by themselves, whereas in the north even though both the insured and the employer make contributions, the procurement ratio from state coffers and local finance seem to be relatively bigger.

In terms of delivery system, while in South Korea the government ministries that are in charge of special occupational pension (Ministry of Public Administration and Security, Ministry of National Defense, Ministry of Education & Human Resources Development) and those in charge of national pension (Ministry of Health and Welfare) are different, in the north it is implemented by the labor department of State Administration Council under the supervision of the Labor Ministry affiliated to the Labor Party Central Committee and has a unitary delivery system.
• **<Medical Security System>**: The medical security system of South Korea is composed of health insurance based on the social insurance principle and a medical care assistance system based on the principle of medical care assistance that will be described later in the report, while North Korea has a single form of national

medical security.

As to the financial resources of medical security, while in South Korea, the health insurance fund is raised through the contributions of the insured and employer and the fund for medical care assistance is raised from national finance, in the north it is funded by a social insurance fee contributed by the employer and the insured, while the cost for management and operation is in principle appropriated from the national budget.

North Korea, on the basis of a free national medical security system universally provided by the state, can be judged to have a more comprehensive medical security assistance system from an institutional aspect even though the qualitative level of its medical supply is low, regardless of whether or not substantial application of free medical assistance is being made.

As for its delivery system, in South Korea it is integrated into a health insurance management system as well as managed and operated under it, and North Korea has a unitary management system under the supervision of the 「Health Department」 of State Administration Council. Health care providers of South Korea are mostly composed of individuals or medical corporations except for a small number of public medical institutions, while the main agents of health care services in the north are public medical institutions.

<Employment insurance and Industrial accident insurance>: Employment insurance and industrial accident insurance in South Korea is common with the national pension and health insurance in that it is social insurance, yet its target is not the whole nation but confined to workers in business places. In the case of North

Korea, the unemployment subsidy had been provided based on 「Social Insurance Law」, but the unemployment compensation system was abolished when the nation entirely denied unemployment in the 「Socialist Labor Law」 in 1978. However, the industrial insurance system is in force with all workers as objects.

In applying the current employment insurance system of the south to the north right after unification, it is expected that the problem of failing to cover for the considerable number of jobless people that will be produced in the aftermath of the restructuring process after unification. In preparation against such a situation, basic living protection measures from a short-term perspective should be devised.

2) Public Assistance System

Public assistance in the south is the foremost social safety net through which the state and local governments secure basic livelihood for the poor. The main contents of this system are national basic living security, medical care assistance, income security for the aged, etc. On the other hand, public assistance of the north, except for some relief measures for victims of disaster, is a kind of distribution of a prize-giving nature that offers benefits to special classes of society that have made contributions to the state or their family members. Thus, it differs greatly regarding the object of application.

Administrative management of South Korea's delivery system is professionally performed by professional social welfare personnel assigned to nationwide eup·myun·dong offices, while in the north

officials responsible for original administration seem to be in charge.

3) Social Welfare Service System

In general, the social welfare service system in South Korea is run under the principle of gratuitous provision with the public budget of the central government·local governments and donations from civilians or organizations as its financial foundation.

North Korea has a systematic foundation upon which the state provides social welfare services to the aged and the disabled, etc. centered on children and women. Such classification of the north is similar to the categorized social welfare service sectors promoted in the south with the emphasis put on the welfare of mother and fatherless child, child welfare, welfare of disabled persons, etc.

For the welfare of the aged, South Korea is implementing such diverse services as the operation of welfare facilities for the aged, including nursing homes, sanatorium for the aged, senior citizens community centers, etc., a senior discount system, free health checkup, support of communal business places for the aged, and welfare service for the home-staying aged, etc. in addition to their income security. On the other hand, in the north, where welfare services for the aged are based on the 「Socialist Labor Law」, only the facilities of nursing homes for old people with no one to rely on and basic distribution are provided.

With regard to child welfare policy, while South Korea focuses on state support for children of poor families in accordance with the 「Child Welfare Act」, North Korea offers nursery·kindergarten

services to all children under school age with the charge placed on the state.

For the welfare of women, while South Korean policy is limited to special cases of the low-income family consisting of a mother and fatherless child, a woman without spouse or woman whose spouse lost labor capability, protection of women in prevention of prostitution, etc., North Korea put the emphasis on comprehensive protection of the female labor force through provision of maternity leave or working-hour reduction services (particularly for women with children), etc.

As to the welfare of the disabled, South Korea has a comprehensive system under the 「Welfare of Disabled Persons Act」 and 「Promotion of Employment of Disabled Persons Act」 that include support of livelihood for persons with severe cases of disability, and protection and diverse tax reduction-exemption, support of medical expenses, child education cost and cost for self-support, job placement, establishment and expansion of convenience facilities, etc., for low-income disable persons, whereas North Korea's policy for the disabled is mainly focused on the protection of the war-wounded, persons who gave distinguished service to the country, industrial accident victims; other than these, there are provisions for the establishment and operation of such facilities as homes for the aged and tender care center for disabled orphans, etc.

<Table 12> Comparison of Social Security Systems of North and South Korea¹⁾

	South Korea	North Korea
Social Insurance System		
Disease, Childbirth	Medical Insurance Act (1963), Implementation of Medical Insurance (1977), National Medical Insurance for All People (1989)	Social Insurance System (1946), Free Treatment System (1953)
Unemployment	Employment Insurance (1995), Application of employment insurance to all wage-earning workers (1999.10), Retirement allowance(1961)	Social Insurance System (1946), Abolition of Unemployment Compensation in 1978(2)
Old age Disability·Death	Retirement allowance (1961), National pension (1988), Public Officials Pension (1960), Military Pension (1963), National Pension for All People (1999.4)	Social Insurance System (1946), State Social Security System (1951) Socialist Labor Law(1978), Farmer Society Security System (1985)
Industrial Accident	Industrial Accident Compensation Insurance (1961), Application of Industrial Accident Insurance to All Wage-Earning Workers (July 2000)	Social Insurance System (1946), State Social Security System (1951) Socialist Labor Law continued Farmer Society Security System (1985)
Financial procurement	Social Insurance Premium	Social Insurance Premium

Public Assistance System		
Related Laws·Regulations & System	Protection of Minimum Living Standards Act (1961), Medical Care Protection Act (1978), Amendment of Protection of Minimum Living Standards Act (1982) National Basic Living Security Act (2000)	Written decision on the provision of daily necessities to laborers and office clerks (1948) and 9 amendments of the same law

	South Korea	North Korea
Objects of Application	<p>Under poverty line (less than W930,000 for households with 4 family members)</p> <p>Objects are selected through means test</p>	<p>There is no individual protection system for the poor.</p> <p>Secure basic living through national distribution system, etc.</p>
Kinds of Benefits	<p>Livelihood protection (Supplementary allowance of minimum cost of living), Education protection, Medical care protection, Residence allowance, Delivery allowance, Funeral allowance, Self-support allowance</p>	<p>Provision of basic living necessities</p> <p>Provision of state subsidy to the war wounded and dependent thereof, Reduction and exemption of agriculture tax in kind</p> <p>Security of education</p> <p>Security of housing, etc.</p>
Delivery System	<ul style="list-style-type: none"> -Policy-making, management and supervision by Ministry of Health and Welfare -Selection of objects through local administrative system and payment of allowance by Ministry of Public Administration and Security -Management by professional social welfare personnel 	<p>Diverse administrative departments, including Labor, Health, Education Ministry, etc. take charge.</p> <p>Ordinary administrator takes charge of this business.</p>
Financial Procurement	Support from government budget	Support from government budget

Social Welfare Service System		
Major Child Welfare Benefits	Child Counsel Center, Support of head of household, Free day-care service and education (some compulsory education) for low-income bracket, Protection in child welfare facility, etc.	Free education and education, Child counsel center, Accommodation and protection in some facilities (infant care facility, etc.)
Major Welfare Benefits for the Aged	Senior discount system, Free checkup (mostly medical insurance benefit), Welfare service for the home-staying	<p>Provision of grain to the family supporting the aged (300g per day)3,</p> <p>Medical care service is universally</p>

	South Korea	North Korea
	elderly, Old age allowance (the low-income aged) Support for communal business place of the aged, etc.	supported under free treatment system
Major Welfare Benefits for the Disabled	Disability allowance, Support of child education, Reduction and exemption of automobile tax, System of compulsory employment of disabled people, Security of convenient facilities Free delivery of assisting device Facility protection	For medical care and education, free treatment and free provision are applied. Housing of incompetent disabled persons in facilities, Job placement for those who can work, etc.
Protection of Related Facilities	Day-care service, Day-care facility, Charged-free Nursing homes for the aged, Social welfare center, Counsel Center, Rehabilitation facilities, etc.	Shelter, rehabilitation facility, nursing home for the aged, orphanage, day-care center (nursery), sanatorium, etc.
Related Laws-Regulations and System	Social Services Act (1970), Child Welfare Act (1961), Infant Care Act (1989), Welfare of the Aged Act (1981), Welfare of the Disabled Persons Act (1981), Disabled Persons Convenience Facility Promotion Act (1992), Disabled Persons Vocational Rehabilitation Act (1999)	Regulations on women counsel center (1948), Regulations on birthing center (1949), Socialist Labor Law (1972), Child Care-Education Law (1976)
Financial Procurement	The poor: Government financial support Ordinary people: Partially charged service (privately paid)	Supported from government budget

Note. 1) The year in () indicates the year of the first implementation or expansion to the class of people concerned.

2) According to the argument of North Korea, they abolished unemployment compensation system in 1978 due to the extinction of unemployment.

3) Of the socially secured persons, those who made distinguished services to the country receive 600g

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3. The Experience of Unified Germany and Its Implications for Korea

1) The Experience of Integration of Social Security of Unified Germany³³⁾

One of the major policy tasks that commonly emerged in the transition economies in the process of transformation into a market economy is the maintenance-reformation of the social security system. However, from the perspective of a transitional period, it is a matter of concern more for the big burden on government finance rather than the construction of security system under the market economy system. This is because financial deficit is very likely to occur with the increase in demand for social security for the protection of the livelihood of people since a structural transition to the market economy will cause an increase in unemployment, decrease in real income and reduction of subsidies on daily necessities, etc.

With regard to the issue of maintenance and reformation of the social security system of transition economies, unified Germany, which made a full-scale application of the social security system of old West Germany without a separate social security policy for the transitional period, was no exception: it spent a huge amount of money on social security and brought about immense financial deficit. Here, the research intends to look

33) This chapter consists of requotation, summary and revision-supplementation of Yun Ha-chung(Feb. 2001).

into the policy measures that unified Germany implemented for maintenance and reformation of the social security system, aiming at the protection of basic living of residents of the old East German region, and draw lessons for the unification of the North and the South.

<Inhibition of Population Migration in unified Germany>: It can be said that the latent desire of East Germans, who were disappointed at the increase in the gap in economic power between the east and the west as well as the closed nature of the Honecker regime despite the demand for openness (glasnost) from the Soviet Union, etc., to leave the region of East Germany was growing. Under the circumstances, migration of the citizens in the East German region to the region of West Germany started in full scale when the old East German government permitted travel across the border to Hungary and Austria without a visa in May 1989.

Since then, with the complete opening of the border between East and West Germany as well as the collapse of the Berlin Wall on Nov. 9, 1989, migration of the citizens in East Germany to the west was accelerated: As of the end of March 1990 some 3% of population in East German region, or 500,000 people, was recorded to have crossed the border.³⁴⁾

As a result, with the increase in migration of the citizens in the East German region after unification, the population in the West German region sharply increased: The population growth rate in West German region for a five-year period before and

34) Short-Term Investigation Group for Study of Economic and Social Integration of Germany (1990) Refer to p.51.

after unification (1989~93), as seen in <Table 7>, was about 1.3% on annual average, which was much higher than that before unification.³⁵⁾

On the other hand, the East German region saw about 1.25% decrease in population on annual average, and looking into the population migration between East Germany and West Germany from 1989, when the population in East Germany started to decrease, until 1993 it shows that the number of people who moved from the East German region to the West German region was about 9% (1.405 million) of the total population in East German region in 1993. Contrary to this, the number of people who moved from the West German region to the East German region was just 0.5%.(352 thousand).³⁶⁾

35) In addition to the migration from the East German region, the increase in the number of foreign immigrants before and after the unification of Germany was also one of the factors that caused the increase in population in the West German region. The population of foreigners in the West German region in 1961 accounted for 1.2% of the total population but it increased by 7.2% to 8.4% as of the end of 1990, and the number of foreigners in the whole of Germany also increased from 6.4% of the total population in 1989 to 8.7% at the end of 1994.

36) Roh Yong-hwan et al.(1998) Refer to p44

<Table 13> Population Migration in East-West Germany before and after Unification

(Unit: 1000 persons, %)

Year	Population (Population Growth Rate, %)		Size of Migration (person)	
	West German Region	East German Region	East Germany→ West Germany	West Germany→ East Germany
1987	61,077 (0.11)	16,641 (0.10)	-	-
1988	61,450 (0.61)	16,666 (0.15)	-	-
1989	62,063 (1.00)	16,614 (-0.31)	388,396	5,135
1990	63,254 (1.92)	16,111 (-3.03)	395,343	36,217
1991	64,074 (1.30)	15,910 (-1.25)	249,943	80,267
1992	64,865 (1.23)	15,730 (-1.13)	199,170	111,345
1993	65,534 (1.03)	15,645 (-0.54)	172,425	118,975

Data: Korea National Statistical Office, 『Comparison of Economic-Social Conditions before ·after Unification of Germany』, July 1996. Statistisches Bundesamt, Statistisches Jahrbuch, 1993, 1994.

Meanwhile, a great number of workers who migrated from the East German region to the West German region could not bear the intensity of labor in manufacturing businesses in the West German region, and the social security system of unified Germany in its initial period that offered the same level of unemployment allowance as that of West Germany was the factor that accelerated the unemployment of workers in the East German region.

Actually, the total number of the employed in the East German region in 1989 was about 9.9 million, but this number sharply decreased; for instance, 1.7 million lost their jobs in just the year 1991. As of 1994, the total number of the employed in

the East German region was reduced to 6.3 million. As a result, the number of those registered jobless in the East German region increased from 142,000 in June 1990, before the integration of economy·society·currency, to 672,000 by the end of 1990, an increase of as much as 500,000 in a short period of six months. Furthermore, the number of the unemployed increased to 1.3 million at the beginning of 1992 when the special regulation on reduced operating hours expired.³⁷⁾

Such a high unemployment rate in the old East German region offered citizens there a motive to migrate to the West German region, and the federal government had to face the realistic limit that it could not force them to refrain from migrating to the west, a movement caused by the income gap between the east and west, with just the income determination theory based on the principle of the market economy.

Under the circumstances, the German federal government with a view to control the migration of the population that occurred due to the income gap between the east and the west, gave priority to the promotion of job stabilization to mend the fall of economy in the East German region and massive unemployment, which resulted from the integration of the currency. The federal government provided income subsidy,

37) Those who most suffered from the increase in unemployment were female workers: In 1990, they accounted for 48.7% of the total of the unemployed, but this number reached 65% in 1994. The female unemployment rate was 21.5% on annual average, about two times higher than that of the male unemployment rate (Refer to p.408~409, Korean Embassy in Germany (1996).)

implemented the measures for labor-absorption and income security, and applied the social security system that was identical with that of the West German region starting from the initial period of unification. But as a measure to reduce technical friction that might occur from the full application of the West German system, it permitted reservation or partial application for a limited period of time.

At first, federal government applied the past records of beneficiaries of existing social security system in East German region including subscription period, etc., as they were and in this process, in the case that the allowance level offered by federal government happened to be lower than that of the former East German system, the existing level was maintained.

Also, the federal government put emphasis on an income security policy that maintained the existing income of workers by offering wage subsidy to enterprises, and combined it with investment promotion policy aiming at the speedy reconstruction of the economy in the east so that new jobs were created there.

The summary of the contents regarding the integration of the social security system of unified Germany revealed in ‘Chapter 4. Regulations on Social Integration’ of the ‘Treaty regarding the Realization of Currency·Economy·Society Integration of East ·West Germany」(Enforcement Date: July 1, 1990), the first-stage treaty on economic·social integration between East and West Germany, is as follows:

First, wage-earning laborers in the East German region who had limited rights for labor had become entitled to a diverse range of rights related to labor that were on the same level

as those of the West German region.

Second, since the integrative social security system of the East German region was switched to an individualized social security system established upon the principle of autonomy in the West German region, the old social security system that the East German citizens subscribed to was abolished, and each individual newly subscribed to pension insurance, medical insurance, industrial accident insurance, unemployment insurance in accordance with the standards of insurance premium payment in the West German region.

Third, in the case of West Germany, since there existed no unemployed people in the region officially, there was no social insurance³⁸⁾ related to unemployment. However, in order to secure the livelihood of the unemployed that might occur after unification, the unemployment insurance fund that the workers and employers of the old West Germany contributed to was used to provide an unemployment allowance and to conduct employment projects in the East German region.

Fourth, legal standards were specified for the reorganization of the social security system of old East Germany, which was an integrative social security system that concerned rehabilitation, disability, old age, death, etc., in accordance with the pension insurance system of the West German region.

Fifth, the content about replenishment of wage loss caused by

38) North Korea also abolished the existing unemployment compensation system in 1978. completely denying the existence of unemployment in the north under the 「Socialist Labor Law」

sickness under the integrative social insurance of old East Germany was switched to the continued payment of wages by employer and payment of sickness allowance by the medical insurance union of the West German region.

Sixth, for continued medical security of the citizens in the old East German region during the transition period from the system in which medical care was provided by the state to the West German-style system in which medical care was provided by the private sector, it was prescribed that the existing health-sanitation system in the East German region shall be gradually switched to the privately supplied medical care system of West Germany.

Seventh, the allowance level of the social insurance system that compensated industrial accidents that happened in working place was induced to be unified with the level of West Germany.

Eighth, for those who lost income due to old age or unemployment in the East German region, a cash allowance was provided for their livelihood through social assistance.

Last, considering the financial deterioration expected in the East German region in case the social security system of West Germany, which was structured in the form of individual social insurance, was introduced, financial support for unemployment insurance and pension insurance from the West German region to the East German region was agreed to be made.

As described above, the German federal government focused on controlling the large-scale migration of people through a job stabilization policy to mend the economic collapse and massive unemployment that happened in the East German region caused by

currency integration as well as through an ‘emergency social security system’ for the protection of the minimum living standards of citizens in the old East German region.

The federal government, by carrying out the employment maintenance policy and promotion of investment for the creation of jobs simultaneously for the East German region, focused on an income security policy so that the existing income of workers could be sustained, but it did not implement a separate social security policy of transitional nature.

However, the social security system that the federal government applied to the East German region generated enormous expenses that were intended for the social security therein. In other words, the federal government brought about enormous financial deficit by sharply raising the wage and pension levels in the East German region through wage subsidy and recognition of the existing records of subscription to social insurance, etc.

To look into the wage level that exceeded labor productivity, for instance, productivity in the East German region was less than 40% compared to that of the West German region, but the wage level recorded 68.4%; and per capita average wage in the East German region that had been only 40% of that of West Germany rose to 86% in 1993, greatly exceeding the pace of increase in productivity.

The level of social security and the wage, which was much higher than productivity in the East German region, shrank investment in the region and generated a disproportionately high unemployment, and thus became a pressing factor that encouraged the migration of citizens in the East German region to the West

German region.

As a result of economic integration, the nation faced financial pressure from the incurrence of unification costs on such a great scale that the annual amount of ‘net transfer’ from the West German region to East German region reached about 4~5% of the GDP of the West German region. Fifty percent of it was spent on the social welfare of citizens in the East German region, and that caused citizens in the West German region to raise a strong tax protest.

Promotion of overall integration without having an adjustment period was accompanied by the maladjustment of citizens in the East German region to the market economy environment and discontent, plus various economic·social costs.

Of course, such large-scale financial burden can be an unavoidable aspect accompanying unification, but it is also true that this was largely due to the rapid overall integration.

Many people who are concerned about the future after unification have warned against the possibility of the ‘exodus’ of citizens in the north to the south as well as the immense unification cost. Under the assumption that integration of the labor market is pushed ahead, the following factors will encourage the exodus as long as they persist: lack of low-wage workforce in the labor market in the south, the ever-present wage gap between the North and the South, low employment opportunities and high unemployment rate in the north, etc. As shown in <Table 8, 9>, while South Korea and North Korea have a bigger gap in economic power than East and West Germany at the time of unification, the gap in population between them is smaller

than that between the former East and West Germany. This means that South Korea will have a bigger burden regarding migrants than the former West Germany.

<Table 14> Comparison of Economic·Social Indexes Right After Unification of East·West Germany (1989)

	(W) West Germany	(E) East Germany	West Germany/ East Germany (W/E)
GNP (\$100 mil.)	12,000	500-1,000	24~12 times
Per Capita GNI(\$)	19,300	3,050-6,100	6.3~3.2 times
Population Size(1000 prs.)	61,715	16,675	3.7 times

Data: Study on German Economic·Social Integration, Short-term Research Group for Study of German Economic·Social Integration. Dec. 1990

<Table 15> Comparison of Economic·Social Indexes between South Korea and North Korea (2009)

	South Korea (S)	North Korea (N)	South Korea/North Korea (S/N)
Nominal GNI (South Korea 1 billion won)	1,068,654.1	2,863.6	37.3 times
Per Capita GNI (South Korea 10,000 won)	2,192.0	122.5	17.9 times
Population Size (1000 prs.)	48,607	23,380	2.1 times

Data: ¹Estimated North Korean Economic Growth Rate in 2009, The Bank of Korea. June 2010

Unified Germany, in terms of policy for health·medical integration, introduced the West German-style health·medical

care system to the East German region and made a large-scale investment in medical facilities for the improvement of medical care services therein. This was because the health·medical care service in the region was in short supply and of low quality due to the outdated medical equipment and technology and time-worn hospital buildings, while the demand for medical care was rapidly increasing; more than that, there were not enough facilities to meet the demand.

In order to raise the level of such inadequate health·medical care service in the East German region, participation of private medical institutions or charitable institutions, in addition to the government, through operation of medical institutions or provision of medical treatment, etc. was in great need. However, there were constraints in attracting private medical institutions to the East German region since profitability in the region could not be secured due to the low income level of the citizens there, and the gap in economic power between the east and the west during the division made the living conditions and environment of the region inconvenient for private medical institutions.

Under these circumstances, the government in the West German region had to adopt such special policies as indirect aid projects including the operation of counselling centers etc. for the purpose of supporting health care providers in the region to start practicing medicine or helping them to improve the quality of their service.³⁹⁾

39) Korean Embassy in Germany(1993): As for direct medical care aid projects, the government in the West German region first provided emergency aid of 520 million DM to improve time-worn medical facilities in the East German region and to encourage doctors in the region to start practicing medicine. After that,

as part of the 'joint measure to boost the economy of former East Germany', en bloc investment of 5.3 billion DM was provided; and as part of credit lending for regional development, 1.5 billion DM was supported. In addition, it provided health care professionals with an ERP loan worth about 2 billion DM at a low interest rate and appropriated a total 12.6 billion DM for an investment fund between 1992 and 1994. In 1993, the West German government also made the decision, as part of the Medical Sector Rescue Law, to provide financial support of about 700 million DM annually from 1995 to 2004 for the purpose of relieving hospitals in East German region from the burden of additional spending on investment. **As for indirect medical care aid projects**, the West German government promoted the operation of counseling support centers in general hospitals in the East German region and the projects to improve the quality of health care professionals, etc. simultaneously. To support the operation of counseling support centers, it provided 1.6 million DM in 1991, and appropriated up to 5 million DM, respectively, for 1992 and 1993. For qualitative improvement of health care professionals, it held seminars, workshops, meeting of experts and symposiums on subjects including public medical projects, psychopathology, autotherapy, prevention, food, food sanitation law, veterinary administration, water supply, addiction counseling, supply of medicine and medicinal supplies, genetic engineering, etc. In addition, about 2.5 million DM was spent in 1992 and 1993, respectively, for personnel training in the convalescence field from a long-term perspective.

On the other hand, numerous demonstration projects were promoted for the purpose of expanding the scope of medical projects in the East German region, and for the promotion of the structural reformation thereof. The following projects fall under this category: Psychopathology Demonstrationl Association (15 million DM invested from 1991 to 1993), Demonstration Project for Improvement in the Treatment of Cancer Patient (50 million DM invested from 1991 to 1992.), Demonstration Project for Improvement of Treatment for the Chronically Ill (15 million invested from 1991 to 1992.), Demonstration Project of Mobile Promotion of Prevention of Taking Narcotics (2 million DM invested from 1991 to 2.), and Demonstration Project for Integrated Office for Drug Addicts (5 million DM invested until the end of 1993.)



Chapter 6

Phased Integration of Social Security Systems of North and South Korea

Chapter 6

Phased Integration of Social Security Systems from Mid to Long Term Perspective

1. Basic viewpoints on the social security system

Existing results of research studies that have analyzed the experiences of transition economies and the unified Germany do not show corresponding views on whether a rapid or gradual reformation is more desirable for the social security of citizens. In that sense, there cannot be a total agreement on the time point suitable for a full-scale integration of the social security system and on what institution and organization would be suitable to secure a stable society for unified Korea. Therefore, the decisions should be made with great circumspection, considering the diverse economic-social conditions of the North and the South in the initial period after unification, and also taking reference from the experiences of transition economies in the former East-European bloc and unified Germany.

According to the results of research conducted by Kornai (1997), it was revealed from the experiences of transition economies that in the initial period of transition, people still expected a comprehensive and free social security provided by the government in the same old way without a proper understanding of the capitalist market economy and the elements that compose a competitive society: for

instance, price, tax, and payment of contribution to social security insurance, etc.

This suggests that a hasty construction of the social security system before people's understanding of the principles of the capitalist market economy has not formed is never desirable.

Considering such results of existing research studies, as to the form of social security system to protect the basic living of citizens of North Korea in the process of transformation, gradual construction of the social security system, which reflects the economic ability of unified Korea to bear the burden and diverse social conditions, should be promoted under the aim of ultimately unifying the social security system of which the foundation is that of South Korea.

This is because, considering their nature, costs for the social welfare sector are expected to be procured from the national budget as operating costs. Under the circumstances, if the social security system is rapidly applied to 24 million citizens in the north, it will generate an excessive financial deficit for the unified Korean government, resulting in the increase in tax burden on working class in the south.⁴⁰⁾

As for the time for introduction of the social security system of South Korea to the citizens of the north and the tempo of reformation, a circumspect judgement should be made, taking into consideration all those interrelated policy tasks of tackling

40) With regard to this, Park Jin (1997) estimated the projected cost related to social security for the citizens of the north, including pension, unemployment allowance, public assistance, etc., of which the result showed that the estimate is about 2.5~3.1% of GDP of 2000 of South Korea

unemployment and relieving the poor with basic living security, overcoming the limitations in the procurement of financial sources and budget constraints.

2. Separate Management on a Temporary Basis and Phased Integration

As to the social security system to be applied in the northern region, an ‘Integration Plan Centered on the South Korean Social Security System’ for a complete integration of economic·social systems of unified Korea should be prepared.

Since a complete integration of the social security systems of the North and the South are based on the premise of the expansion of the basis for economic self-support of the north, 「separate management of welfare finance of social security system on a temporary basis」 is desirable until the same social security system is equally applied to the citizens of both South Korea and North Korea.

What we should be mindful of here is that separate management of social welfare finance on a temporary basis and ultimate integration of the social welfare system are both based on the premise of speedy vitalization of the economy in the north. Therefore, speedy recovery of a self-supporting economy in the north by making positive efforts, including the preparation of the tentatively called ‘General Plan for Economic·Social Development of Unified Korea’ that covers the whole area of the North and the South and making aggressive investments under the plan, for instance, transferring material resources and

human capital, including experts and technical professionals, etc., to the North, can not only absorb and offset the factors for migration of population to the South and reduce the burden of social welfare cost for North Korean region on the South Korean government, but also constitutes a premise of complete integration in itself.

Implementation of a unitary social insurance system is possible at the time when job creation capability and market economy in the north have developed to the level where individual enterprises, created through the privatization of government-run enterprises and insurants (employers and workers) can contribute to the social insurance fund.

To promote this, detailed examination of such measures as institutionalization of temporary financial support from the social insurance account of the south, provision, from the finance of unified Korean government, of a special protection for the social bracket that does not have the ability to pay the contribution, reeducation of the medical workforce and supporting medical facilities, etc. is necessary.

More fundamentally required is to motivate the citizens in the north to learn the principles of the market economy, including a positive attitude, endurance to achieve the goal, the desire to learn about new knowledge and technology, the rational way of thinking, economic activities, etc. through the provision of curricula on the principles of a market economy system based on a ‘learning-by-doing’ method.

As described thus far, integration of all kinds of economic-social systems right after unification is not a grand premise that has

to be unconditionally accepted. The most desirable situation for the integration of the social welfare system is when the integration in political·economic·social systems is completed and they have gone through a transitional period. Therefore, this research suggests a separate management of the social security system for some years after unification on a temporary basis and to leave the measure of integrating the social welfare system in the initial period after unification that unified Germany adopted out of discussion. Grounds for this suggestion are as follows:

First, since social welfare spending has downward rigidity in nature, when two systems with different spending levels are integrated, it is more likely that those measures that level expenditures up rather than those that level them down are to be adopted. Accordingly, the rapid adoption of integrated management of the integrated social welfare system will consume more costs than separate management thereof;

Second, since economic situations between the North and the South in the initial period after unification are quite different, the same articles and clauses of related laws regarding the objects of application, allowance, financial procurement, etc. cannot be applied correspondingly. And due to the income gap between the North and the South, the level of social security of South Korea is forecast to be absolutely superior to that of the north as it is in the present, and particularly more in the future. Naturally, the completely integrated management of the social security system in the initial period after unification is expected to consume more costs than separate management thereof.

Third, separate management of the social security systems

of the North and the South is expected to have the effect of easing the problem of migrants through appropriate application of regulations regarding migrants.

Last, we should be mindful of the fact that rapid and full-scale integration of the social welfare system in the process of unification can lower the growth potential of the economy of both the North and the South. Actually, in Germany, a drastic increase in social welfare spending after unification increased the financial burden of the federal government of unified Germany, which resulted in the deterioration of economic conditions.

As described thus far, the work of composing a new social welfare system in the north needs to be approached with caution under mid- to long-term goals, considering fairness to the citizens in the South, time spent in systemizing related information in the North, procurement of administrative personnel, short-term budgetary limit, etc. The economic and social integration between the North and the South in the initial period after unification is made possible only through the preparation of legal-institutional devices and financial aid.

Finally, the researcher would like to point out that long continuation of separate management of the social security systems of the North and the South is not desirable because it will delay social and cultural integration as well, and cause adverse selection, the problematic situation where only workers with high risk ratios will gather in the north. Therefore, it is advised that the period for separate management of social security systems of the North and the South should be determined as a certain number of years right after unification and made public, thus setting up the period

for preparation and adaptation.

<Measures for phased integration of social security systems of North and South Korea>: In the advent of unification of the Korean Peninsula, the recommendable phases for the integration of the social security systems of the North and the South can be classified as follows: the first phase for the initial period after unification shows the weakest form of integration where preparations for the protection of basic living of migrants are made, and the provisions regarding the application of the social security system to the migrants to the south are prepared; the second phase of separate management of the social security systems on a temporary basis is a more advanced form thereof where construction of the social security system for the northern region is promoted transitionally under the principles of the market economy system. In this phase, sharing the cost for social security between the North and the South can be examined.; and the third complete integration phase is the situation where the identical social security system is applied in any area of the North and the South, which means that legal integration has been completed to form a unitary social security system.

1) With regard to the integration of the social security system in the initial period after unification, in the situation where movement of the labor force is allowed even partially, the regulations of the social security system to be applied to the citizens of both in the North and the South should comply with the following four principles of the ILO, however, the third principle can be reserved temporarily:

First: As long as migrants are under the application of the

Social Security Act of the south, they shall be treated equally with the locals;

Second: With regard to the provisions of the Social Security Act to be applied in the case of retirement, disease, unemployment, industrial accident, etc., the provisions in the region where the place of employment is located shall be observed, provided that employment insurance shall comply with the law of residence; and

Third: the rights of social security acquired in the region of North Korea shall remain in the region of South Korea, and the history of subscription to the social insurance in North Korea is recognized even after the subscriber moved the residence to the south.

2) The phase of separate management is the phase where the complete integration of economic-social systems has not been achieved. This phase is a transitional period where transition from the social security system of the north to that of the south takes place and where adaptation to the new system is required. Accordingly, support should be provided in this phase for the citizens of the north to adapt to the new system by maximizing the effect of ‘learning by doing’ and thus make preparations for complete integration. In addition, in this phase, transfer of finance from the government of unified Korea to the region of the former North Korea is required. Many factors of social security spending will emerge in this phase due to the following reasons:

First, since there is a strong possibility that while the factors of social security spending increase rapidly, employment, the

source where social insurance premium is generated, will decrease, which will result in a serious imbalance in social insurance finance. In addition, since spending social security expenses is inescapable to maintain the minimum living standards of the citizens of the north, the government of unified Korea will have to provide support to social security finance;

Second, the financial support provided in this period has the effect of reducing the migration to the south as well as securing the minimum living standards of the citizens in the north;

Third, raising the contributions from the enterprises in the south can be considered to reduce the contributions of those enterprises that advance into the north as an economic incentive for launching businesses in the north as well as a measure to procure financial sources for supporting the north;

So, this separate management phase should be used as a period to reform the social security system of the North in preparation for the ultimate integration of those of the North and the South.

3) In the phase of complete integration, provision of financial support to the north is unnecessary. This is partly due to the intention to raise the capability of citizens in the north to pay the contribution, and partly because it might not be possible to provide support for social security sector of the north from the standpoint of fairness. In addition, in this phase, expenses should be concentrated more on such purposes as facility investment or the construction of social overhead capital, etc. than expendable expenses such as social security.

For the reasons described above, the most desirable time for the integration of the social security system is after the transitional

period is over and the economy of the north is vitalized to the level where citizens of the north can share the burden of social security expenses.

However, the gap between economic power of the North and the South cannot be reduced in a short period of time, and even after having a separate management period, complete integration of the social security system will come as a kind of shock to the citizens in both the North and the South. As mentioned earlier, since it is doubtful whether the financial capacity of the government of unified Korea can provide financial aid to the social security system for 24 million people in the north, a comparatively big difference in the level of social security allowance between the North and the South will have to be maintained even after the integration is realized.

3. Integration of Health and Medical Care

In the case of health and medical care sector, the reality thereof in the north is likely to be revealed as much worse than experts in related fields have expected. This calls for financial investment from the government of unified Korea to improve medical facilities to meet the demand for health and medical treatment services that will drastically increase for citizens in the north, and to intensify the incentive system that will encourage positive participation of the medical workforce and hospitals·clinics from the private sector.

Nevertheless, in the initial period after unification, there will be limitations for inducing private medical organizations to the north due to the low income level and inadequate living conditions

in the region. From the experience of unified Germany that has exposed conflicts, collision of systems, confusion, etc., a harmonious process to integration will be difficult to expect, and when the economic crisis and food shortage of the north that have continued for so long are taken into consideration, difficulties in dealing with the reality of the health and medical care sector of North Korea will be much more severe than those that unified Germany had to deal with.

Policy for supporting the construction of the medical insurance system of the north from a mid- to long-term perspective: the health and medical system of North Korea is judged to be almost paralyzed as former Secretary Generals of WHO pointed out in paragraph 2 of chapter III, which resulted partly from economic difficulties caused by inefficiencies of the centrally controlled economy as well as the loss of economic partners after the collapse of the East-European bloc, and partly from the destruction of infrastructure that is required for health·medical treatment, which is caused by natural disasters such as the drought that has lasted since 1994.

The basic orientation of the unified Korean government for the integration of the health and medical sector can be summarized in the following: The success or failure of the restoration of the health·medical care system depends on the deep understanding of the unified Korean government that the fundamental limitation is more severe in the lack of the ability to supply health and medical care services, which are due to the inadequate infrastructure and shortage of facilities and equipment that are required for health and medical treatment, than in the nominal

problems such as the quantitative aspect of supply.

First, the qualitative aspects of the environment of health and medical care services, including the construction of health and medical care infrastructure, improvement in technological level of the medical care service workforce, elevation of the status of women, eradication of poverty, etc. as well as that of health and medical treatment itself will become important factors. In this context, a medical insurance system that can be comprehensively applied to all the citizens of the north should be prepared, and to this end, positive support from the international community and South Korea are essential; and

Second, to provide the north with good-quality health and medical care services, the infrastructure required for the provision of health and medical care services should be reconstructed. This should be based on the premise that comprehensive research into the actual condition thereof including the demand for health and medical care service facilities and equipment and demand of health and medical care service from the citizens in the north etc. Based on the results of the research, diverse international support and cooperation measures with respect to the aid of basic medicines and medical supplies, medical facilities and equipment, education and training of health and medical care workforce, construction of prevention system of infectious diseases, etc. should be taken.

In addition, matters to be considered concerning the integration of medical care include the certification of health care providers, the gap in medical treatment technology between the North and the South, and the fact that there must be a higher number of objects of medical care with low income in the north than in

the south, etc.

Considering the problems described above, it is unavoidable to support a part of the insurance premium from the state treasury to ease the burden of premium of the citizens in the north and to stabilize insurance finance.

Therefore, in introducing a health care system to the north that is based on that of the south, a realistic policy that takes the health care environment in the north into consideration should be prepared based on the following policy orientations:

First, to lessen the confusion that can be caused by the integration of health care systems of the North and the South, the expansion of exchanges of health care providers between the south and the North even during the separate management phase, for instance, mutual invitation of healthcare providers from the other side to training programs in an effort to overcome the gap in medical treatment technology and sense of difference, as well as sufficient prior preparations, is essential. Such efforts should go further to the joint establishment of hospitals or cooperation in medical treatment as well as the establishment of a patient transfer system between the south and the North;

Second, since existing health care systems of the North and the South have great differences not only in the system itself but in the method of financial procurement, conflicts are forecast to occur. As measures against such a situation, the role of unified Korean government in basic medical security should be strengthened; medical facilities and equipment should be reinforced; and appropriate curricula and education facilities to reeducate doctors and pharmacists should be prepared. All these are important tasks, however, at the

point in time in the complete integration phase when medical insurance finance is stabilized, the government should shift the focus of financial support it provides, from the fiscal transfers for deficit covering to investments for the expansion of public medical institutions such as health care facilities in farming and fishing villages, special hospitals ·clinics·facilities for the aged, infants and children, etc.; and

Last, the lesson we can learn from the experience of unified Germany is that diverse health·medical care-related demands will explosively occur after unification, from the improvement of time-worn medical facilities, qualification of health care providers, projects to treat diverse kinds of diseases, even to family planning. Therefore, it is necessary to gradually promote feasible exchanges from the initial period of unification with a view to relieve the burden of instantly meeting huge-scale health·medical care demands.

4. Administration of Migration of Population on an Optimum Level

From the experience of unified Germany, we can see that the policy to inhibit the migration of the population through offering subsidy on wage caused real income to exceed productivity, which brought about massive unemployment, and far from inhibiting migration, it acted as a trigger for it and resulted in a huge budget deficit. We should bear in mind this lesson from the experience that the unified Germany had with the migration policy it adopted.

Considering the gap in economic power between the North and the South in the initial period after unification, the policy

to absorb the factors for migration of population just by throwing in the resources of South Korea such as subsidy on wage for laborers in the north is not desirable.⁴¹⁾ Because the reasons for migration are diverse in reality, an overall administration policy that deals comprehensively with all those reasons is required. In particular, mid- to long-term measures that aim to minimize the budget deficit of the unified Korean government with an approach to solve unemployment, poverty and migration of the citizens of the north through vitalization of the economy in the north should be prepared.

Therefore, it is expected that the policy of dealing with the migration of people of the north to the south will include a difficult process of drawing a ‘National Consensus’ from diverse viewpoints of people from diverse social brackets.

The necessity to consider the absorptive capacity of the South Korean Labor Market: The matter of grasping the accommodation capacity of the South Korean labor market will be complex work with a lot of uncertainties that require forecasting the time of unification, unification type and economic indexes, including the economic growth rate, unemployment rate, change in industrial structure in the south after unification, etc. Under the circumstances, to reach a consensus on the migration of the citizens of the north to the south, relevant policies should be

41) As pointed out in ‘exodus’ in paragraph 2 of chapter III, the reasons for exodus of citizens of the north to the south will not be limited to the wage gap between the two. Norland (1996b) discovered through his survey that the reasons for the migration of citizens of the East German region to the west were ‘worry over unemployment,’ ‘worry over change in environment’ and ‘wage gap’ in the written order. This shows that the wage gap was not the main reason for the migration.

established in such a way that ‘economic surplus of migration’ can be maximized so that their implementation will also bring about the increase in the income of the citizens in the south, namely a win-win strategy.

Despite all the above-mentioned difficulties, the absorptive capacity of the South Korean labor market should be examined to decide on the economic factors to be considered for migration policy. This work basically requires the data on the demand for manpower by each industrial sector and the analysis of the current conditions including the level of participation of foreign workers, etc.

The increase in the supply of labor caused by the migrants from the north will have great impact on the South Korean labor market. Considering the absorptive capacity of the South Korean labor market, the impact will be particularly serious on those industries with severe lack of labor force; more specifically, textile, construction, assembly metal industries by industrial sector, small to medium enterprises rather than big enterprises by business size, production workers rather than officer workers by occupational category will be comparatively more affected.⁴²⁾

42) For instance, in case the lacking number of production workers (84,318 prs.) in South Korea as of Mar. 1997, including technicians, technical engineers, device-machine operators, etc. is filled by the migrants from the north and thus absorbed by employment or as job creation, the absorptive capacity of the south, taking the average family number of a household, 4.68 persons, in the north as suggested by Roh Yong-hwan and Yeon Hacheong (1997b) into consideration, will reach a maximum of 394,608 persons including dependents. Or, as suggested by Park Yung-bum, if 50% of the foreign workers of which the estimated number is 168,251 (No. of legitimate employees: 10,557; No. of industrial technology trainees: 58,810; and No. of illegal immigrants: 98,884) who stay in Korea as of the end of June 1996 are filled by the migrants from the north and thus absorbed as job creation, the South Korean labor market can absorb a maximum of 393,707 persons. Based

Theoretical consideration of migration inhibition policy: The policy on migration will have to reflect social conditions including the above-mentioned conditions of the labor market and different viewpoints of different people from diverse social brackets. In addition to such constraints, the accommodation capacity of social infrastructure such as housing, health care, education, transportation, public order, etc. in metropolitan areas, which are already in saturation, should also be examined.

In the case where the exodus of North Koreans to the south causes overpopulation and expansion of poor areas in the south as well as brings about ‘negative economic externality’, this can also emerge as a problem concerning absorptive capacity. In the research of Roh Yong-hwan and Baek Hwa-jong(1997)⁴³⁾

on such simple assumptions, the maximum absorptive capacity of the South Korean labor market of the migrants from the north is deemed to reach 800,000 persons.

- 43) With a view to look into the externality of North Korean migrants, the cases where the migrants to the south generate negative economic externality against the gross output within the south are considered as the following formula (1)

$$Y = f(K, L, \Theta(L_N)) \dots \quad (1)$$

$L = LS + LN; f(K), f(L), \Theta'(LN) > 0; f(\Theta) < 0$

(Here, Y = gross output within the south, K = gross invested capital within the south, L = gross invested labor within the south, LS = labor force out of the residents in the south before migration occurs, LN = labor force of migrants to the south, Θ = variable indicating externality of migration affecting the south)

If full employment is assumed under the above-mentioned economic condition, with the increase in the inflow of population from outside, both the productivity increasing factor ($f'(L) > 0$) and productivity decreasing factor ($f'(\Theta) < 0$) appear. In other words, if both sides of formula (1) are partial differentiated with respect to LN assuming all the other variables are fixed, formula (2) is drawn.

$$\frac{\partial Y}{\partial LN} = \frac{\partial Y}{\partial L} \cdot \frac{\partial L}{\partial LN} + \frac{\partial Y}{\partial \Theta} \cdot \frac{\partial \Theta}{\partial LN} \quad \dots \quad (2)$$

$\oplus \quad \oplus \quad \ominus \quad \oplus$

It is noted that in order for the migration to have positive effects on South Korean economy, migration should be centered on the skilled laborers so that marginal physical products created by the migrants is bigger than negative economic externality.

In other words, they suggest the inflow of unskilled workers lowers average human capital level and individual labor productivity, which in turn lowers per capita average wage level and per capita output in the economy of the south--a bad affect on the income of the citizens of the south. Anyhow, it is doubtful whether such a migration policy that is focused on skilled workers can be realistically implemented.

This matter of selecting North Korean migrants based on their technical level means, if viewed from a little bit different perspective, that the size of the migrants should be controlled. In this case, in dealing with the problem of externality, such measures that make the migrants to the south bear the burden of visible·invisible costs for moving to the South and thus control the size of migrants, rather than those that employ physical means to control the inflow, are desirable.

In other words, if the cost borne by North Koreans in case they migrate to the south are bigger than the benefits they will earn by remaining in the north, the factors for migrating to the south can be absorbed to a certain degree.⁴⁴⁾ However, there

According to the theory of Roh Yong-hwan and Baek Hwa-jong, the inflow of migrants will certainly increase the output of the south by the first term in the right side, but in case the migrants act as an externality which is $\partial Y / \partial \theta < 0$, migration of North Koreans to the south can be justified only in the case where the level of increase in output caused by the inflow of population exceeds the level of reduction caused by externality.

is the possibility that such an argument will rise that binding down the rights of North Koreans, even temporarily, to move residence by implementing selective migration policy or imposing visible/invisible costs amounts to the discrimination between the residents in the North and the South, or it might even go further to be accused as the violation of basic rights of citizens of unified Korea.

Realistically speaking, considering such diverse factors for migration, it is impossible to solve the problem of migration with just one method.

In this context, in order to temporarily constrain the exodus of North Korean citizens to the south, it can be said that adoption of the two-track policy, which on one hand induces the citizens in the north to voluntarily give up the intention to move to the south by offering economic incentives to remain in the north and on the other hand is willing to consider combining the policy with a temporary employment of policy means of imposing physical barrier to control the movement, when deemed unavoidable for the economic and social stability of both the North and the South, is necessary.

From the standpoint of the ‘two-track policy’, some might suggest that administration of the North and the South be separated by designating North Korea as a ‘special administrative region’ as the most easy solution to the problem of migration from the

44) This can be understood in the same context in that the wage gap between regions can last for a long time because in a real economy because in the real economy it will cost to move to work in another region.

north. It is an idea that free movement of production elements and free movement of labor, in particular, should be inhibited, and the free movement of products should be constrained. However, such prohibition, the core of the suggestion, will not be possible to be implemented after unification and does not seem desirable.

That is because physical prohibition of movement of the population would not be politically possible, and also in consideration of the fact that not all kinds of population movement is harmful to the economy of the south. The inflow of population to the south, where manpower for simple labor is lacking, can help improve the economy to a certain degree.

Mid-to-longer term policy tasks regarding the administration of migrants: Priority should be put on offering economic factors that will induce the citizens in the north to prefer remaining in the region. In this context, integration of the social security system should be promoted with this factor of offering benefits for remaining in the north in mind. In the period of separate management of the social security system, there will exist the following policy alternatives from the viewpoint of an implementation strategy that partially restrict the application of the social security system to North Korean citizens who have moved to the south:

First, inclusion to the social security system of the south is deferred for those laborers who have migrated but have not found jobs;

Second, in case a laborer in the north who is receiving an unemployment allowance or who has applied for the allowance and is waiting to receive it migrates to the south, he cannot

receive the unemployment allowance in any region of the south; and

Third, in case a laborer of the north has migrated to the south, his history of subscription to employment insurance in the north cannot be recognized in the south. This regulation has the purpose of preventing such cases as citizens of the north migrating and intentionally retiring to receive the unemployment allowance as well as increasing the cost for migrating to the south.

However, while solving all the problems caused by economic-social integration through the long-term and fundamental approach of job creation, difficulties will continue until the effect thereof is visualized, and there still remains the problem of coping with migration from a short-term perspective.

It is deemed that such short-term problems should be solved by expanding public assistance. However, since the mid- to long-term demands for social security will increase intensively for several years after the integration of economic-social integration, we should take heed not to cope with such continuously occurring demands by employing institutional means that are suitable only for the initial period after unification as in the case of unified Germany.

5. Economic burden of unification and financial procurement measures

1) Discussion on unification cost

The viewpoints of discussions on unification cost differ on whether to confine it to the burden borne for the cost of short-term protection of basic living of citizens in the north or to include the economic development cost of the North Korean region to raise the per capita income level of the citizens of the north to a certain level compared to that of the south from a mid-to long-term perspective.

Besides, if the concept of unification cost is adopted in such a broad sense that it includes all kinds of social-psychological suffering and loss that might arise during or after unification (for instance, the ossi-wessi conflict appeared in unified Germany as well as economic costs), the size will grow a lot bigger.

A great number of people who worry about the future after unification warns about the economic burden of unification. They argue that while the North and the South have a greater gap in economic power than that of the former East-West Germany, the gap in population is smaller than that of former East-West Germany, which means that the economic burden of the south will have to be bigger than that of the former West Germany.

While per capita GDP of West Germany at the time of unification was estimated to be about 3.2~6.3 times that of East Germany, the gap in economic power between the North and the South is about 17.9 times as of 2009; and, in terms of population rate, while the population of West Germany at the time of

unification was 3.7 times higher than that of East Germany, the population of the South is about 2.1 times higher than that of the North.

Contrary to this, some argue that in terms of the burden of social welfare cost and characteristics in the structure of the population, the median age of unified Korea is 12 years younger than that of unified Germany, and life expectancy is lower than that of unified Germany. Furthermore, since Korea is not so much a welfare state as Germany, the cost related to welfare that is expected to be borne by Korea will be less than what Germany had to bear.⁴⁵⁾

Therefore, the unification cost can neither be decided in advance nor is a fixed target figure. It should be understood as an uncertain amount that is dependent on our will and the adoption of policies we make, taking the absorptive capacity of the South and the following considerations into account:

45) Comparison of the structure of the population between unified Germany and South-North Korea as of 1990 showed that the ratio of population aged 0~14 was 15.9% and 26.7%, respectively, that of the population aged more than 65 was 15.0% and 4.7%, respectively, and the median age was 37.8, 26.1, respectively. This means that the age of the population of unified Korea is expected to be much younger than that of Germany at the time of its unification (Eberstadt 1995, 117~119).

<Table 16> Economic-Social Burden and Benefits of Unification

Classification		Contents
Classification by integration phase	Crisis management cost	<ul style="list-style-type: none"> - Short-term costs necessary to minimize economic·social confusion in the north and to protect the livelihood of its citizens right after unification.
	System transformation Costs (Costs for Institutional Integration)	<ul style="list-style-type: none"> - Mid-term costs necessary for transforming the socialist system of the north to the system of the south
	Economic Investment Cost	<ul style="list-style-type: none"> - Economic integration costs required to raise the living standards of North Korean citizens to those of South Korean citizens.
Classification by Objective	Costs required to restore the region of North Korea	<ul style="list-style-type: none"> - Costs required for investments in S.O.C., living infrastructure and industrial sector. - Item: railway, road, electricity, unification of communication network, construction of administration network, improvement of backward industrial facilities and cultural facilities, program for adaptation to market economy system prepared for North Korean citizens, maintenance of public order, etc.
	Costs for relieving economic·social shock	<ul style="list-style-type: none"> - Costs required for measures against poverty and unemployment and for securing the basic needs of the citizens in the north. - Item: facilities for accommodation and support of settlement of migrants, supply of food and emergency relief items, facilities for job training·education, securing minimum living cost and health care·education·housing service
	Cost related to Integration of Social Security System	<ul style="list-style-type: none"> - Factors for expenditure generated in relation to the integration of social security systems of the North and the South in the phase of system integration - Item: basic security of health care, curricula and facilities to reeducate the doctors and pharmacists of the north, pension payment, unemployment allowance and cost related to job introduction.

Classification		Contents
Considerations	Private investment	<ul style="list-style-type: none"> - Consider the fact that private investment is not directly related to the national burden since it is a voluntary economic activity of a main agent of economy
	Net benefits of unification	<ul style="list-style-type: none"> - Extinction of division maintenance cost: reduction in national defense cost, diplomacy cost, costs related to administration of ideology and unification, maintenance cost of two governments, etc. - Increase in economic efficiency: increase in trade, realization of the economy of scale, promotion of efficient use of the territory, increase in trade with three Northeastern Provinces of China, Russia and the Far Eastern region and reduction in logistics cost - Intangible benefits: Extinction of war threat, advantages of a big country
	Fairness to the recipient of livelihood protection program in South Korea	<ul style="list-style-type: none"> - Costs generated in the process of considering fairness to the recipients of livelihood protection program in the South when providing support for the citizens of North Korea

First, the research of Yeon Ha-cheong (2002) pointed out that the longer the reform and opening of North Korea is delayed before unification and the later it is realized, the gap between the North and the South will increase. He continued, however, to say that this does not necessarily mean that the cost bearing rate of unification compared to GNP will increase; it is decided by some variables as seen in <Appendix I > 'Calculation Formula for Unification Time and Burden of Unification Cost, of this report.⁴⁶⁾

46) Yeon Hacheong, 『Study of North Korean Economy』Korean Studies Information

Accordingly, if in a broad sense the category of fixed costs required for emergency relief measures for the citizens in the north and construction of administrative foundation in the north in the initial period after unification is regarded as a policy variable, the importance of strategic judgement, considering the financial support capacity of South Korean government and the relationship among the unification time, unification cost, and cost-bearing rate, is that much grave.

Second, economic value of capital stock, speed of reformation and opening, level of efficient use of capital, etc. of the north after unification will also act as factors that affect the size of unification cost.⁴⁷⁾

Third, if detailed criteria including the exchange rate between the existing currencies of the North and the South, wage level·measures against unemployment·social welfare policy of the citizens of the north, etc. are taken into consideration, the size of unification cost will be more complicated to forecast.

So, in the present stage, making efforts to clarify the meaning of many assumptions upon which diverse unification costs are estimated as well as sharing with the public the concept of unification cost, situation set-ups of unification process, estimation methods, procurement methods, etc. are required rather than estimating the money required to reach a goal that is impossible to attain and highlighting the burden it will bring about, and thus raising confusion.

Co. Ltd. 2002. Refer to p.406~408.

47) After Germany was unified, 50~67% of capital stock of the former East German region was estimated to have no value in use. (Refer to Sinn, Gerlinde, and Hans-Werner Sinn, *Jumpstart, The Economic Unification of Germany*, MIT Press, Cambridge: Massachusetts, 1992[Requoted Norland 1996a, 6]).

2) Financial Procurement Methods

No matter what type of unification process we might go through, the unification cost⁴⁸⁾ will certainly constitute a financial burden on the government of South Korea for a considerable time. This calls for the preparation of measures for lessening the burden of unification.

First, as to financial procurement, according to the intertemporal solvency constraint of the government, reduction and appropriation of budget, tax increase, disposal of government assets, issuance of government and public bonds, foreign loans, central bank leverage (increased issue of currency), etc. can be considered as direct means for unification procurement measures.
49)

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- 48) For an example, the term, unification cost, which is used generally regarding the unification of Germany, means the size of financial transfer expenditure of the former West German government, which was required to raise the economic power of the former East German region to the level of West German region. Germany achieved a unitary state in 1989. However, for a complete economic integration, the three required elements, the currency integration cost, perishable expenses and investment expenses, are suggested. As to the estimated cost, there are many diverse ways of estimation, for instance, 3.1~11.4% of GNP of former West Germany for the first 10 years, etc. This is due to ambiguity of the definition of unification cost and uncertainties in forecasting the future. The results of estimation of the unification cost of the Korean Peninsula, which have been attempted in the recent years, also have been estimated by 'target income approach' that sets the income level of North Korea to be a certain rate of that of South Korea. So, the estimates of unification cost of the Korean Peninsula are diverse according to their assumptions. With regard to this, Park Jin (1997) has estimated the required cost related to the social security of the citizens in the north including pension, unemployment allowance, public assistance, etc. after unification, and the results suggests that it will amount to 2.5~3.1% of GDP of South Korea every year.
- 49) Intertemporal solvency constraint of the government of unified Korea can be simplified into "government spending-tax revenue=central bank leverage (increased issue of

But in terms of formation of the financial resources to invest in the economic reconstruction in the north after unification, the method of fully relying on the financial expenditure of the unified Korean government only through burdening taxpayers of the south will not be sufficient.

Second, from a mid-to long-term perspective, with a view to increase available capital while minimizing a negative ripple effect, it is necessary for the unified Korean government to continue to implement such measures as the creation of the conditions that will induce brisk investment of private enterprises of the south in the North Korean region as well as positive encouragement of participation of domestic and foreign capital from the private sector.

Promotion of efficient use of manpower in the north, and for industrial restructuring, creation of an environment that attracts investments are required.

Third, considering that attraction of direct investments of overseas private capital is an important alternative to supplement the limit of South Korea in its ability to invest, diversification of the routes to attract direct foreign investments should be devised, as well as simultaneously seeking the measures for international cooperation for basic living security and stabilization of the society in the north in the initial period after unification.

currency)+issuance of government and public bonds+foreign loans+others.” The items on the right side can be suggested as deficit covering measures outside of tax revenue. In the case of Germany, they employed all the means of these measures except for the increased issue of currency to procure the cost for unification, but currently most of the unification cost consists of loan capital such as issuance of bonds, particularly, foreign loans.

Along with the possibilities to use international public funds including the attraction of a special support program of World Bank or acquisition of loans from IMF and ADB, the fund claimed to Japan by North Korea for war damages can be examined as a source of financial procurement.⁵⁰⁾

For example, World Bank is supporting \$4.4 billion annually for ‘a special program for peace and sustainable development’ in the Middle East.

Fourth, increasing revenue sources by vitalizing the economy of the north through privatization of government-operated enterprises and disposal of national property can be an important measure for financial procurement, however, this can be suggested as a mid- to long-term solution.

Finally, some might argue that to lessen the economic burden after unification, the fund to be used for unification costs needs to be raised in advance. Although it can be said that prior preparation of the unification fund to be used for the emergency livelihood protection of citizens in the north in the initial period after unification is necessary, however, we need to approach this matter from the viewpoint that expanding the foundation for economic growth and development potential is a more desirable

50) The size of the fund claimed to Japan by South Korea for war damages was about \$500 million (\$300 million for free, \$200 at a cost) and settled through the 1965 「Korea-Japan Agreement」, in addition to that, Japan promised to provide a commercial loan worth \$300 million+. If the fund settled through the 「Korea-Japan Agreement」 is applied to North Korea with the same conditions, taking into consideration the population gap between the North and the South, change in price level in the mean time and interest rate, etc., the size of fund North Korea can claim from Japan for war damages is estimated to reach W100 million.

preparation for unification than prior preparation for the unification cost.

In other words, raising the fund for the unification cost has a positive aspect in that it will ease the shock on the national economy caused by the situation where required resources have to be instantly procured, and the burden borne from unification can be shared between the generation before unification and the generation after unification.

However, it needs to be reviewed whether putting aside for the unification cost at the present time, when it is difficult to achieve a consensus on the matter with military and political tension lingering between the North and the South, has sufficient grounds to be enforced at the cost of opportunity cost of social relations such as the delay in economic restructuring, setback in the investment for technological development and in the policies of social welfare sector, etc.

What we should be mindful of is the fact that the fundamental measure preparing for unification is strengthening the conditions that will facilitate the financial procurement of unification cost by securing sufficient foreign exchange reserves through the maintenance of sound finance and trade surplus as well as raising our cost-bearing ability through stable economic growth. In order to enhance our self-procurement ability as well as facilitate overseas procurement as mentioned above, raising debt capacity in the overseas market and attaining international cooperation are important policy tasks.

Chapter 7

Conclusion

Conclusion

Based on the necessity to make preparations for the unification of the Korean Peninsula, the policy tasks for the protection of basic living of citizens of North Korea, which are required until the economy in the region has secured self-supporting ability, as well as the measures required for integration of social security between South·North Korea have been examined in this research.

This research assumed the disintegration of the distribution system and transitional economic recession that takes place in the transitional process to the market economy system in the north; it also emphasized the necessity of prior understanding of economic and social policy tasks including the emergency crisis management measures for the protection of basic living of citizens of the north until the economy of the region has a self-supporting ability and the cost for absorbing economic·social shock, etc. from short- to long-term perspective.

Making preparations for the integration of social security systems of South and North Korea is a very important task in that it prepares against the factors of social unrest that are expected after unification, and goes even further to bring economic and social integration forward. However, we should be mindful of the fact that a rapid integration can cause the delay of economic·social integration. From the experience of unified Germany, we should learn the lesson that a rapid economic·social integration caused a sharp rise in social security-related spendings after unification, and this increased the financial burden of the unified

German government as well as deteriorated the economic condition. Therefore, an instant integration of social security systems of South and North Korea is not a grand premise that has to be accepted unconditionally, rather, it should be considered in the dimension of maximization of net profit of integration.

First of all, the priority of social security policies concerning the region of the North before a complete institutional integration between the North and the South has been accomplished should be put on such tasks as compensating to a degree for the loss of rights that citizens of the North have secured from the former state, easing the economic shock they might feel in the transitional period to the market economy system and removing the factors of social unrest.

With regard to this, considering the fact that the size of cost required for basic living protection for the citizens in the north on a temporary basis until a full-scale social security system is established in the region after unification depends upon the scope of the recipients of the basic living protection program and basic assumption (policy target) of support level, the importance of political judgement of the government of unified Korea is all the more grave.⁵¹⁾ The required policy tasks that this report recommend for the phase after unification and before

51) With respect to this cost, Roh Yong-hwan·Yeon Ha-cheong (1977) estimated the minimum cost required temporarily to protect the basic living of the citizens in the north, including the costs for staple food, side dish, fuel, clothing, household items, etc. to amount to about 2.3% of the ordinary GDP of South Korea; and if all of these required resources are to be supplied by the tax burden on the citizens of South Korea, it is estimated that they will have to bear an additional 11% more tax.

a complete integration of economic and social systems of the North and the South are as follows:

First, it is inevitable to establish 「emergency relief and crisis management measures」 to protect the basic living of the citizens of North Korea in prevention of the confusion expected to be caused by the massive exodus of the citizens in the north to the south. In the initial period after unification, in particular, national-level services, including basic food rationing, education, medical care, housing, etc., should continue to be provided on a temporary basis through financial aid from the government of South Korea.

Second, as to the measures for protecting the minimum living standards of citizens in North Korea right after unification, priority should be put on such measures designed to protect their basic living from a short-term perspective as livelihood security for the unemployed, positive labor market policy, poverty relief programs, etc. rather than those designed to improve 「quality of life」 from a long-term perspective. This is because the work of composing a new social security system in the north is possible on the premise that the job creating function and market economy system have been settled to a level where individual enterprises and workers have the ability to bear the burden of paying their contributions to the social insurance fund. Besides, in view of the time spent in systemizing related information in the north, procurement of administrative personnel, short term budgetary constraints, lack of understanding of North Koreans of capitalistic economic activities, etc., this matter needs to be approached carefully as a mid- to long-term goal.

Third, the policy to protect the basic living of citizens in the north in the initial period after unification should not end up as financial aid itself; it should be promoted with the ultimate goal of workfare in mind through the provision of jobs. What should be noted here is the fact that preparing the fundamental basis for workfare in this basic living protection stage has an important effect of reducing cost-raising factors that will emerge in the full-scale social security system in advance.

Fourth, for the protection of basic living for North Korean citizens right after unification, prior preparations including setting up the minimum living standards, grasping the social brackets of recipients, prior decision on subsidy delivery system etc. should be made. For a short period of time after unification, it would be unavoidable to make a decision, considering the policy implications, on the size of financial aid that the South Korean government can afford to provide. As for the recipients of subsidies and distribution methods thereof, subsidies should be delivered in fixed amounts to low-income brackets centered on the aged·the firm·the chronically ill who have no ability to work as preferential recipients, gradually expanding the scope of recipients, and at the same time keeping fairness among them and trying to save cost by ensuring that only those who need subsidy can receive it. In this context, with a view to define the scope of recipients from a long-term perspective, such microscopic information as income or household budget of citizens in the north should be computerized, and the data should be utilized to distinguish those who should be induced to employment and those who need monetary aid.

Last, in the transitional period right after unification, for smooth

implementation of basic living protection of the citizens in the north, rapid establishment of the administrative system is necessary. In order to grasp recipients of subsidies, establish an adequate subsidy delivery system, supervise the effects of all kinds of support policies in a short period of time right after unification, establishment of administrative and management organizations is essential.

As described thus far, this research has suggested policy tasks for the unified Korean government after unification for basic living protection of citizens in North Korea based on the evaluation of integration of social security system of Unified Germany and the experiences of transition economies in Eastern Europe. If we project them to the future of unified Korea, emphasis should be put on 「securing the right to live」 and 「protection of workforce」 as policy priorities until all the systems of South·North Korea are completely integrated.

However, as another issue to be considered, since huge-scale social welfare-related costs will be spent for the basic living protection of the citizens in North Korea, social welfare finances of South·North Korea need to be managed separately until the integrated social security system is equally applied to citizens in both the North and the South.

That is because basically the costs in the social welfare sector required right after unification in nature will be appropriated from the public budget (state budget) rather than private investment spending. And an instant integration under the circumstances will bring about an excessive budget deficit, which in turn increases the burden of citizens in South Korea.

However, although the separate management of the social security system between the North and the South in the initial period will be inevitable, a long continuation of such a condition is not desirable. Because it will delay social and cultural integration, and furthermore, the problematic situation of adverse selection where workers with high risks will gather in the north might happen. Accordingly, the period for separate management of the social security system between the North and the South should be decided as a certain number of years from the time of unification and made public.

At this point, this report emphasized the fact that although a North-and-South unification will impose a new economic burden on us for a considerable period of time, however, viewed from the aspect of benefits, it will open a new development possibility for the Korean Peninsula as well as provide a fresh impetus for national economic development through the reduction of the peace dividend, benefits accompanying the economy of scale from a long-term perspective and removal of inefficiencies of division, etc.

First, Olson-type indirect benefits, including the reduction of national defense spending with the arms reduction and military downsizing, the cost generated from overlapping maintenance of diplomatic offices in foreign country, the cost that has been spent for a wasting diplomatic competition in international society and the administration cost related to unification etc., will gradually increase more than expected.

Second, economic benefits of huge scales are also expected: it will become possible to realize the economy of scale through

the expansion of the domestic market, meaning the increase in production elements and product markets, to enjoy the reduction in logistics cost through the use of the Siberian Continent and the Trans China Railway (connected to TKR TSR and TCR), to secure the participation in the exploitation of resources in Russia, the Far East and the Three Northeastern Provinces of China, and accompanying expansion of trade and economic cooperation with those regions.

Third, the Northeast Asian region, in which the Korean Peninsula, Japan, three Northeastern Provinces of China (Gilrim, Yorung, the Heuklyonggang) and the Far Eastern region of Russia are connected, is highly intercomplementary among the countries therein in terms of natural resources, technology and capital, and naturally, is very likely to emerge as a new economy bloc. Moreover, due to the geo-economic characteristics, the role of Korean Peninsula as a bridge connecting the Northeast Asian economic region will greatly increase and appear as ‘an important axis’ of the East Asian region.

Therefore, the kind of discussions that put excessive emphasis on economic burden, the negative side of unification, and downplay the benefits that it will bring will only generate the south versus south conflicts and create an air of anxiety among people. In this context, important considerations in preparing unification are as follows:

First, rather than highlighting the size of the burden of unification itself, it is necessary to clarify the diverse assumptions and their consequences that appear in the process of cost estimation and made them public, seek the solutions and measures to procure

financial resources, and awaken a fresh recognition of the beneficial aspects of unification such as the reduction in division cost, increase in economic efficiency, etc.

Second, the most important tasks to secure economic and social stability of unified Korea during the unification process are securing the basic living of the citizens in North Korea as a short-term goal, and making political and strategic preparations to fulfill the task of reducing the gap in economic life and social welfare and integrating the systems between the two regions as a mid- to long-term goal. That is, we should keep developing our economic ability sufficient enough to bear the economic burden of unification, and to heighten our ability to raise funds required for economic integration, our economy should keep growing.

Third, in order to overcome the problems accompanying the economic transformation of the north in a short period of time, prior examination on policy measures on the macroeconomic level regarding such policy tasks as the speed and scope of economic integration, the methods of privatizing national property and government-operated enterprises, currency exchange ratio, etc. should be made.

This research report in its nature contains intermediate-stage content, the collection and arrangement of information regarding the lessons from the experience of unified Germany, theoretical thoughts related to integration of social security, and existing information related to the subject. Therefore, logical validity in the process of drawing policy tasks and the necessity of more reliable verification can be suggested as limitations of this research.

In this context, for the preparation of detailed action plans for each phase of the social security system, it was deemed necessary to conduct the following research studies based on the results of this one:

First, further examination of the following subjects are necessary as an extension of this research: more detailed estimation of costs required for the protection of basic living of citizens in the north after unification, which includes education, health care, housing, etc.; the measures to secure minimum living standards of the citizens in the north during the transition of social security system; and the measures for the citizens in the north to adapt to a new self-supporting lifestyle in a new social security system.

Second, with regard to the cost for living protection of the citizens in the north after unification, more realistic estimates need to be drawn based on more diverse assumptions that include such factors as the currency exchange rate, wage level, and the ability of the south to supply basic daily necessities, etc. In this case, it also needs to be considered that the support from the south to the citizens of the north is provided in kind.

Third, preparation, etc. of specific policy tasks is required for the protection of the basic living standards of citizens in the north, considering that the number of the jobless and the absolute poor will increase during the transition to the market economy after unification. and accordingly, poverty and massive unemployment caused by the disintegration of the national distribution system and transitional economic recession in the north right after unification as well as the accompanying burden

of the unified government will be a major political issue.

Last, along with the continuous improvement of the four social insurance systems, the public assistance system and social security service system, which will be the foundation of the social security system of unified Korea, the measures, etc. to gradually expand these systems into the north should be devised as a policy task.

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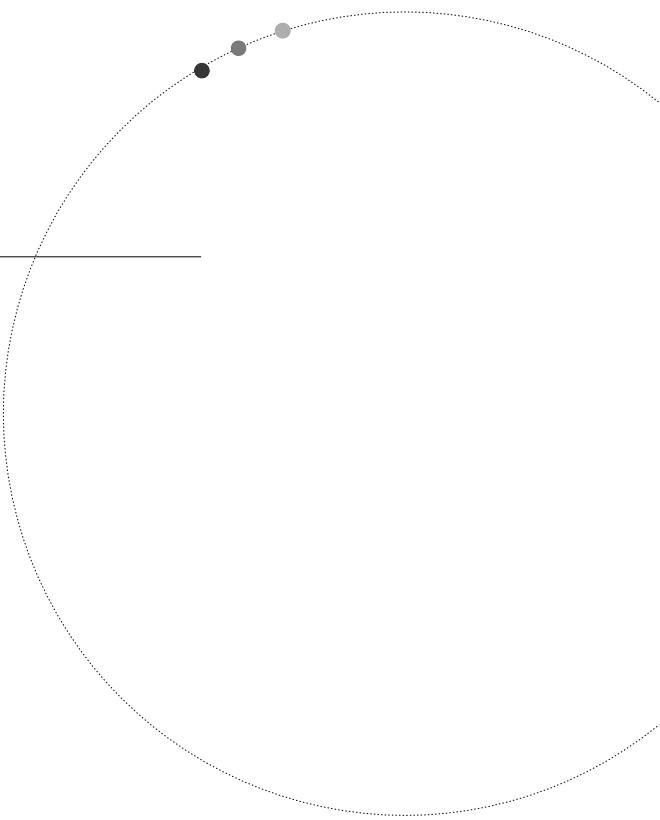
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Chapter 8

Appendix



Appendix

Appendix I : Results of Population Census Based on 2008 Announced by North Korea⁵²⁾

1. Population Distribution of North Korea By Age·Gender (1993 & 2008)	209
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Appendix II: Calculation Formula of Unification Time and Cost

52) The data presented here is prepared based on the Central Bureau of Statistics,
*Tabulation on the Population Census of the Democratic People's Republic of Korea(31
December 1993), DPRK, 1995』 and 『DPR Korea 2008 Population Census National
Report, Central Bureau of Statistics Pyongyang, DPR Korea 2009』*

1. Population Distribution of North Korea By Age·Gender (In 1993 & 2008)

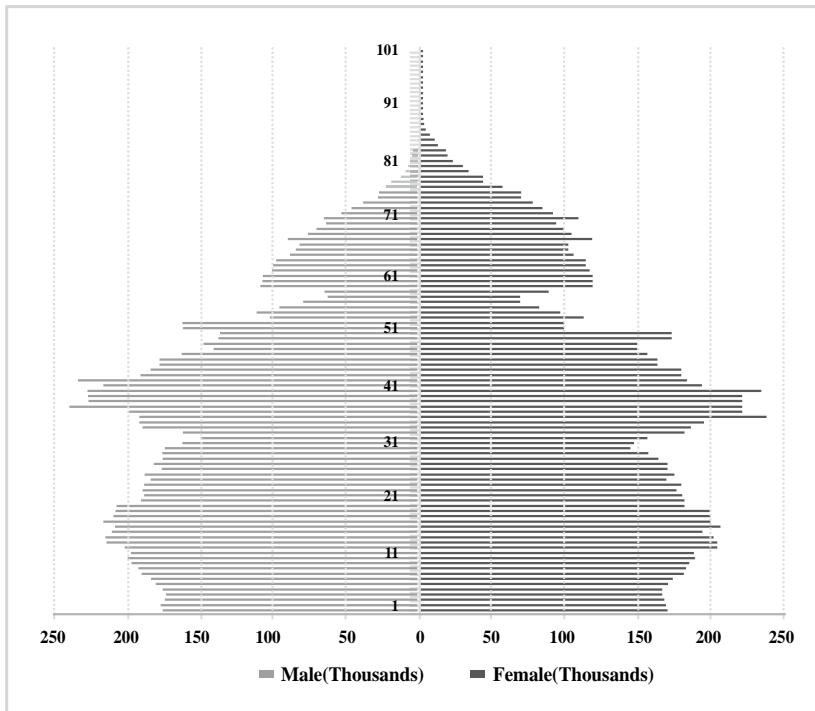
(unit: prs.)

Classification	1993 ¹⁾				2008 ²⁾			
	Total	Men	Women	Gender Ratio ³⁾	Total	Men	Women	Gender Ratio ³⁾
Total Population (A) ⁴⁾	21,213,378	10,329,699	10,883,679	94.91	23,349,859	11,059,489	12,290,370	89.98
Total Population (B) ⁵⁾	20,522,351	9,677,663	10,844,688	89.24	24,052,231	11,721,838	12,330,393	95.06
Aged 0~15	6,045,975	3,100,141	2,945,834	105.24	5,983,090	3,057,703	2,925,387	104.52
Aged 16~24	3,067,515	1,308,429	1,759,086	74.38	3,488,826	1,783,930	1,704,896	104.64
Aged 25~29	2,019,525	987,095	1,032,430	95.61	1,737,185	887,573	849,612	104.47
Aged 30~34	1,607,929	791,117	816,812	96.85	1,680,272	853,276	826,996	103.18
Aged 35~39	1,386,454	682,990	703,464	97.09	2,214,929	1,118,391	1,096,538	101.99
Aged 40~44	990,787	482,309	508,478	94.85	2,015,514	1,005,140	1,010,374	99.48
Aged 45~49	1,243,077	603,230	639,847	94.28	1,559,527	766,054	793,473	96.54
Aged 50~54	1,208,802	582,990	625,812	93.16	1,315,101	637,737	677,364	94.15
Aged 55~59	1,063,657	487,276	576,381	84.54	902,876	423,625	479,251	88.39
Aged 60~64	748,594	301,764	446,830	67.53	1,058,263	476,727	581,536	81.98
Aged 65 or older	1,140,036	350,322	789,714	44.36	2,096,648	711,682	1,384,966	51.39

Note: 1) North Korean Population Census in 1993; 2) North Korean Population Census in 2008

3) Number of men in 100 persons; 4) Total Population by City·Province; 5) Total Population by Age

2. Population Pyramid of North Korea in 2008



3. Population Distribution by Regional Unit of City·Province of North Korea

(unit: Prs., %)

Classification	Total	City	Farming Area	Urbanization Ratio ¹⁾	Percentage out of Total Population	
					Total	City ²⁾
Total	23,349,859	14,155,393	9,194,466	60.6	100.1	-
Yangangdo province	719,269	464,690	254,579	64.6	3.1	3.3
Hamkyungbukdo province	2,327,362	1,645,886	681,476	70.7	10.0	11.6
Hamkyungnamdo province	3,066,013	1,811,074	1,254,939	59.1	13.1	12.8
Gangwondo province	1,477,582	725,611	751,971	49.1	6.3	5.1
Jagangdo province	1,299,830	828,253	471,577	63.7	5.6	5.9
Pyunganbukdo province	2,728,662	1,431,936	1,296,726	52.5	11.7	10.1
Pyungannamdo province	4,051,696	2,629,943	1,421,753	64.9	17.4	18.6
Hwanghaebukdo province	2,113,672	972,632	1,141,040	46.0	9.1	6.9
Hwanghaenamdo province	2,310,485	821,954	1,488,531	35.6	9.9	5.8
Pyongyang	3,255,288	2,823,414	431,874	86.7	13.9	19.9

Note: 1) The percentage of city population in the total the population.

2) The percentage of city·province population in the total population.

4. Labor Population and Technical Professional Manpower

(Unit: Prs., %)

Classification	Total	Men	Women	Percentage in Total Population ¹⁾	Percentage of Female Workforce
Working-age Population(A) ²⁾	14,434,979	7,475,726	6,959,253	60.0	48.21
Working-age Population(B) ³⁾	18,069,141	8,664,135	9,405,006	75.1	52.05
Economically-active Population ⁴⁾	12,184,720	6,359,938	5,824,782	50.7	47.80
Labor force participation rate ⁵⁾	67.4	73.4	61.9	-	-
Technical Professionals and Experts					
Technical Professionals	442,042	154,856	287,186	3.63 ⁶⁾	64.97
Experts	1,011,034	667,710	343,324	8.30 ⁶⁾	33.96
Subtotal	1,453,076	822,566	630,510	11.93 ⁶⁾	43.39

Note: 1) Based on the sum of population by each age group

2) All the men aged 16~59 and women aged 16~54. (The standards of payment of old-age pension have been applied: men aged 60 or older, and women aged 55 or older)

3) The number of population aged 16 or more, both men and women, was calculated to be compared with economically-active Population.

4) All population, both man and women, aged 16 or more.

5) Economically-active population in working-age population(B)

6) The rates of technical professionals and experts are the rates compared to economically active population.

5. Population Distribution by Industry of North Korea

(Unit: prs., %)

Classification	Total	Men	Women	Percentage compared to Economically-active Population	Percentage of Female Workforce
Economically-active Population	12,184,720	6,359,938	5,824,782	100.0	47.80
Agriculture&Fishery	4,386,895	2,082,297	2,304,598	36.0	52.53
Mining	718,195	458,484	259,711	5.9	36.16
Manufacturing	2,882,982	1,507,014	1,375,968	23.7	47.73
Supply of Electricity-Gas	149,569	117,405	32,164	1.2	21.50
Water supply and Sewage purification	66,713	43,693	23,020	0.5	34.51
Construction	367,650	285,941	81,709	3.0	22.22
Wholesale·Retail trade	557,355	173,962	383,393	4.6	68.79
Transportation·warehouse	355,383	261,677	93,706	2.9	26.37
Lodging·Food Service	141,205	26,591	114,614	1.2	81.17
Information Communication	126,775	76,306	50,469	1.0	39.81
Banking·Insurance	26,228	12,374	13,854	0.2	52.82
Science·Technical Expert	118,132	80,574	37,558	1.0	31.79
Administration·Support Service	451,336	287,951	163,385	3.7	36.20
Public Administration·National Defense	724,178	439,586	284,592	5.9	39.30
Education	548,132	263,635	284,497	4.5	51.90
Health·Social Welfare	330,702	134,306	196,396	2.7	59.39
Art·Artistic Talent	130,582	72,290	58,292	1.1	44.64
Others	102,708	35,852	66,856	0.8	65.09

6. Population Distribution by Occupation in North Korea

(Unit: prs.)

Classification	Total	Men	Women
Total	12,184,720	6,359,938	5,824,782
High government official and Administrator	189,554	158,408	31,146
Experts	1,011,034	667,710	343,324
Technician and Related Experts	442,042	154,856	287,186
Office Job	102,146	18,565	83,581
Service ·Sales	816,899	54,197	762,702
Agriculture ·Fishery ·Forestry workers	4,244,642	1,920,030	2,324,612
Craft and Related Workers	2,124,061	1,398,470	725,591
Mechanic and Assembler	1,743,180	1,114,793	628,387
Elementary occupation	1,503,526	868,797	634,729
Others	7,636	4,112	3,524

7. Population by Gender in Major Cities

(Unit: prs.)

City	Subtotal	Men	Women	Gender Ratio
Pyongyang	3,255,288	1,549,778	1,705,510	90.87
Pyungsung(Pyungannamdo)	284,386	138,687	145,699	95.19
Sinuijoo(Pyunganbukdo)	359,341	170,004	189,337	89.79
Ganggye(Jagangdo)	251,971	120,305	131,666	91.37
Haejoo(Hwanghaenamdo)	273,300	131,554	141,746	92.81
Sariwon(Hwanghaebukdo)	307,764	147,135	160,629	91.60
Wonsan(Gangwondo)	363,127	172,014	191,113	90.01
Hamheung(Hamkyungnamdo)	668,557	317,602	350,955	90.50
ChungJin(amkyungbukdo)	667,929	317,899	350,030	90.82
Hyesan(Yanggangdo)	192,680	91,420	101,260	90.28
Gaesung	308,440	146,145	162,295	90.05
Nampo	366,815	176,767	190,048	93.01

8. Number of Households and Family Members By City·Province

(Unit: Household, prs.)

Region	Household				Number of Family Members				Average No. of Family Members
	Subtotal	Nuclear Family	Extended Family	Others	Subtotal	Nuclear Family	Extended Family	Others	
Total	5,887,471	1,853,851	3,902,311	131,309	23,133,692	5,607,069	17,265,499	261,124	3.93
Pyungyang	813,769	300,379	502,377	11,013	3,211,963	924,258	2,261,282	26,423	3.95
Pyungan namdo province	1,027,727	304,293	700,909	22,525	4,014,295	941,353	3,029,932	43,010	3.91
Pyungan bukdo province	688,583	212,485	460,216	15,882	2,707,833	621,635	2,054,170	32,028	3.93
Jagando province	327,412	102,496	217,859	7,057	1,287,279	297,694	973,508	16,077	3.93
Hwanghae namdo province	578,280	182,712	385,429	10,139	2,292,459	528,082	1,743,526	20,851	3.96
Hwanghae bukdo province	535,511	169,721	356,680	9,110	2,089,233	507,510	1,562,520	19,203	3.90
Gangwon do province	367,938	105,767	254,147	8,024	1,462,095	327,394	1,115,616	19,085	3.97
Hankyung namdo province	777,207	246,018	512,309	18,880	3,047,201	744,428	2,263,548	39,225	3.92
Hamkyung bukdo province	587,844	171,207	393,063	23,574	2,308,056	539,382	1,731,827	36,847	3.93
Yanggang do province	183,200	58,773	119,322	5,105	713,278	175,333	529,570	8,375	3.89

9. Population Distribution by Age·Gender

(Unit: prs.)

Age	City Population				Population in Farming Area			
	Subtotal	Men	Women	Gender Ratio	Subtotal	Men	Women	Gender Ratio
Total	14,155,393	6,716,215	7,439,178	90.28	9,194,466	4,343,274	4,851,192	89.53
0	199,007	101,587	97,420	104.28	142,454	72,681	69,773	104.17
1~4	794,602	405,438	389,164	104.18	573,976	292,467	281,509	103.89
5~9	1,074,221	549,145	525,076	104.58	772,564	393,903	378,661	104.03
10~14	1,168,423	601,684	566,739	106.17	852,927	433,598	419,329	103.40
15~19	1,131,912	543,694	588,218	92.43	731,084	340,268	390,816	87.07
20~24	884,212	350,183	534,029	65.57	557,136	205,756	351,380	58.56
25~29	1,024,997	500,104	524,893	95.28	624,849	301,087	323,762	93.00
30~34	1,034,546	520,674	513,872	101.32	638,013	325,246	312,767	103.99
35~39	1,372,573	695,278	677,295	102.66	834,531	415,553	418,978	99.18
40~44	1,233,232	615,179	618,053	99.53	777,022	384,869	392,153	98.14
45~49	959,811	469,458	490,353	95.74	596,528	293,482	303,046	96.84
50~54	822,746	397,004	425,742	93.25	491,342	239,752	251,590	95.29
55~59	552,813	256,733	296,080	86.71	349,595	166,425	183,170	90.86
60~64	640,330	284,780	355,550	80.10	417,811	191,825	225,986	84.88
65~69	559,114	230,165	328,949	69.97	354,160	149,261	204,899	72.85
70~74	395,860	134,204	261,656	51.29	266,757	94,072	172,685	54.48
75~79	198,574	46,959	151,615	30.97	136,888	32,267	104,621	30.84
80+	108,420	13,946	94,474	14.76	76,829	10,762	66,067	16.29

10. Distribution of Labor Population by Age·Gender¹⁾

(Unit: prs)

Age	Economically-active Population				Non-economically-active population			
	Subtotal	Men	Women	Women (%) ²⁾	Subtotal	Men	Women	Women (%) ²⁾
Total	12,184,720	6,359,938	5,824,782	47.80	5,884,421	2,304,197	3,580,224	60.84
16~19	765,189	333,338	431,851	56.44	882,237	509,575	372,662	42.24
20~29	2,717,463	1,168,857	1,548,606	56.99	861,122	659,733	201,389	23.39
30~39	3,520,325	1,903,132	1,617,193	45.94	374,876	68,535	306,341	81.72
40~49	3,257,068	1,736,892	1,520,176	46.67	317,973	34,302	283,671	89.21
50~59	1,693,967	1,033,502	660,465	38.99	524,010	27,860	496,150	94.68
60~69	213,855	172,789	41,066	19.20	1,757,712	683,394	1,074,318	61.12
70~79	15,969	11,027	4,942	30.95	982,125	296,490	685,635	69.81
80+	884	401	483	54.64	184,366	24,308	160,058	86.82

Age	Economically-active Population		Activity Rate ³⁾		
	City	Farming Village	Total	Men	Women
Total	7,442,234	4,742,486	67.43	73.41	61.93
16~19	432,210	332,979	46.45	39.55	53.68
20~29	1,638,365	1,079,098	75.94	63.92	88.49
30~39	2,173,503	1,346,822	90.38	96.52	84.07
40~49	1,991,602	1,265,466	91.11	98.06	84.27
50~59	1,059,520	634,447	76.37	97.38	57.10
60~69	136,153	77,702	10.85	20.18	3.68
70~79	10,400	5,569	1.60	3.59	0.72
80+	481	403	0.48	1.62	0.30

Note: 1) Working-age population is all of the population aged 16 or more, both men and women, to be compared with economically-active population.

2) Percentage of women

3) Activity rate = (Economically-active Population/All working-age population aged 16 or more) × 100

11. Economically-Active Population by Gender in City·Do (Province)

Region	Subtotal	Men	Women	Women (%)	Percentage
Total	12,184,720	6,359,938	5,824,782	47.80	100.00
Pyungyang	1,660,667	887,306	773,361	46.57	13.63
Pyungannamdo	2,149,974	1,149,780	1,000,194	46.52	17.64
Pyunganbukdo	1,458,191	752,414	705,777	48.40	11.97
Jagangdo	691,981	357,434	334,547	48.35	5.68
Hwanghaenamdo	1,199,874	608,926	590,948	49.25	9.85
Hwanghaebukdo	1,088,581	577,268	511,313	46.97	8.93
Gangwondo	744,519	384,877	359,642	48.31	6.11
Hamkyungnamdo	1,597,885	817,300	780,585	48.85	13.11
Hamkyungbukdo	1,226,316	636,376	589,940	48.11	10.06
Yangangdo	366,732	188,257	178,475	48.67	3.01

12. Total Fertility Rate of North Korea

(Unit: prs)

Age Group	Population of Women (W)	Number of Babies Born (B)	Fertility Rate by Age Group (B/W)
15~19	979,034	633	0.001
20~24	885,409	52,214	0.059
25~29	848,655	178,032	0.210
30~34	826,639	90,973	0.110
35~39	1,096,273	20,275	0.018
40~44	1,010,206	3,202	0.003
45~49	793,399	301	0.000
	6,439,615	345,630	0.401
$\therefore \text{TFR} = 0.401 \times 5 = 2.01$			

Appendix II: Calculation Formula of Unification Time and Cost

Based on the assumption that the target income is estimated with the aim of reducing the income gap between the North and the South, a formula to calculate the unification cost is set below, and the relationship between unification time and unification cost is explained in the following:

provided that $0 < \alpha < 1$ and $\beta = (F/YN) > 0$ here,

YS and YN are per capita GDP of North and South Korea, respectively,

α is a constant expressing the replenishment ratio of per capita income gap between South-North Korea. That is, α is a parameter that decides the direct cost required to ease the gap between the North and the South, reflecting the elements of unification cost related to productivity.

β is a ratio of fixed cost (F) in per capita GDP (YN). In other words, β is a parameter that reflects elements of unification cost that are not directly related to productivity. For instance, the costs required for the emergency living protection of the citizens of North Korea after unification or the cost required for building up administrative basis are not directly related to productivity.

LN and LS express the population of North and South Korea, respectively.

$[\alpha(YS-YN) + \beta YN]$ of formula(1) is the cost required for one

person of North Korean population. Accordingly, the bigger the gap in per capita GDP between the South and the North ($Y_S - Y_N$) and α grow, the higher the unification cost rises. In the condition where absolutely no financial aid is provided from the south to reduce the income gap, α becomes 0 ($\alpha=0$); whereas in the case the south replenish all the income gap, α becomes 1 ($\alpha=1$). However in case α is bigger than 1 ($\alpha > 1$), this means that the income level of the north is higher than that of the south, which is an unrealistic assumption. So, it can be said α is decided between 0 and 1.

On the other hand, based on the assumption that all the variables except Y_S are fixed, if both sides of formula (1) is partial differentiated with respect to Y_S , the following formula (2) is drawn. In other words,

if $g(x) \neq 0$ in the formula,

$$\begin{aligned} D_x \left(\frac{f(x)}{g(x)} \right) &= \frac{g(x)f'(x) - f(x)g'(x)}{g(x)^2} \\ \therefore uc &= \frac{[\alpha(Y_S - Y_N) + \beta Y_N]L_N}{Y_S L_S} \\ &= \frac{\alpha Y_S L_N - \alpha Y_N L_N + \beta Y_N L_N}{Y_S L_S} \end{aligned}$$

$$\begin{aligned}
 \frac{\partial UC}{\partial Y_S} &= \frac{Y_S L_S (\alpha L_N) - (\alpha Y_S L_N - \alpha Y_N L_N + \beta Y_N L_N) L_S}{Y_S^2 L_S^2} \\
 &= \frac{(\alpha Y_S - \beta Y_N) L_N L_S - \alpha (Y_S - Y_N) L_N L_S}{Y_S^2 L_S^2} \\
 &= \frac{L_N L_S [(\alpha Y_S - \beta Y_N) - \alpha Y_S + \alpha Y_N]}{Y_S^2 L_S^2} \\
 &= \frac{(\alpha - \beta) Y_N L_N}{Y_S^2 L_S} \\
 \frac{\partial UC}{\partial Y_S} &\frac{(\alpha - \beta) Y_N L_N}{Y_S^2 L_S}(2)
 \end{aligned}$$

And from the formula (2), the following relations are formed:

If, $\alpha > \beta$, $\partial UC / \partial Y_S > 0$, and

$\alpha < \beta$, $\partial UC / \partial Y_S < 0$.

In other words, based on the assumption that per capita GDP of the south (Y_S) increases, in case $\alpha > \beta$, the ratio borne of unification cost increases; and in case $\alpha < \beta$, the ratio borne of unification cost decreases.

Therefore, the following conclusion is drawn: if the economic gap between the North and the South increases as time goes on (Under the assumption that Y_N in the formula, ‘gap in economic power = $Y_S - Y_N$ ’, is fixed and only Y_S increases.), in case the compensation rate (α) of per capita wage gap between the south and the north is bigger (smaller) than the rate of fixed cost in per capita GDP, the burden of unification cost is reduced if unification is realized the faster (the later).

