

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Chun, Hongtack

### Research Report Path to Inter-Korean Economic Integration: Gradual Merger Within Temporary Separation

KDI Policy Forum, No. 256

**Provided in Cooperation with:** Korea Development Institute (KDI), Sejong

*Suggested Citation:* Chun, Hongtack (2015) : Path to Inter-Korean Economic Integration: Gradual Merger Within Temporary Separation, KDI Policy Forum, No. 256, Korea Development Institute (KDI), Sejong, https://doi.org/10.22740/kdi.forum.e.2015.256

This Version is available at: https://hdl.handle.net/10419/200901

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



## WWW.ECONSTOR.EU

KDI Policy Forum Vol. 256 (eng.), May 21, 2015 Questions about Article Hongtack Chun (82-44-550-1001) Subscriptions Publication Officer (82-44-550-4346)

Path to Inter-Korean Economic Integration: Gradual Merger Within Temporary Separation

Hongtack Chun Dean,

KDI School of Public Policy and Management

Broadly speaking, the unification of the Korean Peninsula can unfold in either rapid or gradual scenarios. The rapid scenario may be further divided into two tracks: immediate and simultaneous political and economic unification or fast political unification coupled with gradual economic unification.

- The latter track would have the North Korean and South Korean economies remaining apart for a designated time period after political unification. During this temporary arrangement, the North Korean economy would be managed as a special zone and two different economic systems would continue to coexist on the peninsula.
- The objective of this paper is to explore methods of running the economy in North Korea and of gradually integrating the economies of the North and South during a designated time period. It assumes both sides have agreed to rapid political unification but opted for a moderate pace in merging their economies.
  - The operation and integration of the economic system will naturally span various areas, including the labor market, currency and finance, health and medical care, and trade. However, in this paper, the focus will be placed on the labor market, which will be a key sector while the two economies remain separated, and social security areas such as employment insurance, pension, and public assistance, which will be important in terms of political and social stability and the cost of unification.

<sup>\*</sup> This is the translated version of KDI Policy Forum released on May 27, 2013.

<sup>\*\*</sup> This essay is based on A Study of Inter-Korean Economic Integration: Temporary Split Operation of the North Korean Economy (December 2012 research report, KDI), edited by this researcher. For more details, please refer to the aforementioned report.

- As for the labor market, operating the North Korean economy as a separate special zone will require phased entry of its residents into the South for work. Simultaneously a market economy system should be introduced into the labor market with an employment safety net.
  - Mechanisms for determining price (wages) through free supply and demand must be installed in the labor market and the full employment policy must be abolished.
  - Nevertheless, it will be necessary to create an employment safety net for the unemployed and to provide public assistance for those who are unable to work.
- The basic South Korean pension and public assistance systems should be assimilated in North Korea as quickly as possible. However, considering the gap in economic capacity and wages between South and North, North Korean pension and public assistance systems should be operated differently from the South Korean system. In other words, while the pension payment formula should be the same for South and North Korea, the average income level used to calculate payouts should differ temporarily between the two sides. The vested rights that North Koreans have accrued from their subscription period should be preserved, but other preferential benefits (such as pension for services rendered) should not be recognized.
  - Pension financing and bookkeeping in South and North Korea should be split, and any deficit in the pension financing for the North Korean zone should be covered by fiscal support from the South.
- During the first two to three years after a special economic zone is established in North Korea, it is particularly important to obtain information about North Korean economic and social statistics, accounting, and the administrative organizations in charge of these.
  - One priority is collecting information on related areas in order to design a system for split operation of the systems for pension, public assistance, and the employment safety net.
  - To accomplish this, a fact-finding team comprised of government and civilian experts should be dispatched and joint surveys should be conducted on each area of concern.
- There are also other important elements that are only briefly touched upon or are not covered at all in this paper.
  - This paper only offers a broad outline about the unification scenario under which the "North Korean Special Administrative Zone" would be established and governed.
  - An estimate of the scale of financing needed for gradual integration of the employment safety net, pension, and public assistance is also needed, but because of the limitations of research sources and the period of research, this question will have to be deferred for subsequent research.

#### 1. Purpose and Scope

In broad terms, scenarios that describe the unification of the Korean Peninsula can be divided into two categories: gradual unification and rapid unification.

Under gradual unification both sides will have pursued reconciliation and cooperation and built up mutual trust. Against this backdrop, they would gradually move toward unification by reducing the differences between their political, economic, and social systems and the quality gap of those systems.

In the rapid unification scenario the North Korean regime is imploding and it allows the South Korean government to take the lead in swiftly reunifying the Korean Peninsula in exchange for a large amount of aid. This scenario could follow two scripts. The first involves a political change that triggers a massive migration of North Koreans. It becomes the impetus for unification, similar to what happened in Germany, and would very likely leave South Korea with no choice but to immediately unify its economy with the North to halt the migration.

In the second rapid unification scenario, a decision by the North Korean government rather than a sudden, large-scale migration is the catalyst; the leadership agrees to immediate assimilation of South Korea's political system and gradual economic integration while maintaining control over the North Korean population.<sup>1</sup> Unhurried economic fusion would mean disparate economic systems would continue to coexist on the Korean Peninsula for a certain period of time.

In this paper, it is assumed that South and North Korea have agreed on immediate political unification on the one hand but gradual economic integration on the other hand to transform North Korean economy into a special administrative zone (hereafter, the North Korean Zone) to facilitate phased economic integration with the South. The purpose of the paper is to determine the most economically desirable way to manage the North Korean Zone and achieve gradual economic unification in this hypothetical situation. The governance and integration of the economy in the North Korean Zone

<sup>1</sup> One important variable that could affect the development of this scenario is who is controlling North Korea. Several possibilities are the Kim family, an alternative reform-minded government, or a government elected by the North Korean people.

would require considering all areas—including the labor market, social security, currency and finance, health and medical care, and international trade. But in this paper the focus will be placed on the labor market, which would be the key to temporarily managing the North Korean economy separately from the South Korean economy. The paper will also address areas related to social security, such as employment insurance, pension, and public assistance, which are important in terms of political and social stability and the cost of unification.<sup>2</sup>

#### 2. Labor Policies for the North Korean Zone

#### A. Labor Market Management and Job Creation

Integrating the labor market system in South and North Korea will be a comparatively easy task because, in principle, all that needs to be done is to transplant the relevant South Korean components into North Korea. However, considering the pre-integration transition period, when the two economies are still separated, certain components will need to be adjusted or supplemented. The checklist to integrate the dissimilar systems is summarized as follows.

First, labor contracts should be made with the free consent of the employer and the employee. Second, the autonomy of employers to hire workers should be recognized even during the period of economic separation. Third, the autonomy of employers to terminate workers is to be expanded to South Korean levels. However, it is advisable to consider temporarily banning termination of workers during the period of separation.<sup>3</sup> Fourth, working hours, working days, and labor protection should fundamentally conform to South Korean standards. However, work schedules must be flexible, in accordance to the working hour and overtime provisions of the Labor

3 The government should consider, for example, setting up a transitional regulation that would prevent South Korean corporations that have acquired North Korean corporations from terminating employees for a period of one year. But even in this situation, in the interest of encouraging South Korean companies to expand into North Korea, the government must provide them with support for maintaining employment to reduce the burden on the company.

<sup>2</sup> Please refer to the full report for information on the areas of health/medical care and currency/finance.

Standards Act, and to add a transitional provision for working days will need to be added to accommodate demand for labor in North Korea during the separation period. The government must consider, for example, permitting a six-day workweek for the initial three years of this period, provided that employers and workers concur.

North Koreans should be free to choose their line of work, even in the initial period of the separation period. A labor market will take shape only when they can select their occupation as an expression of their desires, preferences, educational level, and area of expertise. Thus, the current arbitrary workplace assignment system in the North must be abolished. Naturally, freedom to change residency must accompany the individual freedom to choose a job. The opportunities to exercise these new freedoms will rise as more state corporations are privatized and more private companies are established.

Job-related migration by North Koreans to the South during the separation period will have to be regulated during the separation period.

The estimated number of people who would migrate to South Korea in search of work (assuming economic separation is possible amid rapid political unification) is 1.1 million, or about 4.5 percent of the population of North Korea as of 2011. This estimate is based on the migration ratio from East to West Germany during the unification of Germany in 1989 to 1990 (a period akin to the situation that may facilitate setting set up the North Korean Zone). This figure is lower than conventional estimates, which are based on a scenario in which rapid German–style unification occurs. Since this paper assumes a slower unification pace, we must not rush to the conclusion that a large–scale migration is certain.

South Korea has 700,000 foreign laborers who are legal residents (as of June 2012) and 320,000 illegal residents, as estimated by the Ministry of Justice, for a total of 1.02 million. Therefore, it nearly matches our estimate of 1.1 million North Koreans who would migrate to the South to work. If the North Koreans replace the foreign workers, it would not have a major impact on the South Korean economy.

Nevertheless, there are two reasons why a migration of 1.1 million people would be too large to be overlooked. First, while some of the North Korean migrants would replace foreign laborers, it is very likely that others would be incapable of doing so. Second, it would be practically impossible for foreign laborers to be instantaneously replaced by North Korean migrants. Therefore, phased migration of North Koreans to the South instead of all at once would help minimize the migration's effect on the Korean economy, and it also would correspond to the fundamental rationale for establishing the separation period. Consequently, it is advisable to set up the following standards to manage the migration of North Koreans to the South during the separation period.

First, the migration to the South should be divided into three phases and correlated to their purpose. It will take a minimum of three years to stabilize the North Korean economy, during which time a unified currency is prepared. An additional seven years or so will be needed for the per-capita income in North Korea to reach 30 percent of the level in South Korea.<sup>4</sup> Therefore, if the separation period is set at 10 years, the first stage will be the first three years, the second stage from year four to year six, and the third stage from year seven to year ten.

During phase one, migration would be restricted to North Koreans who have secured a license to work in South Korea, proof that he or she has been hired. Job licenses should be capped at 200,000 in the phase one and authorized by the Minister of Employment and Labor to prevent an excessive inflow.

Furthermore, a cap should be set on the number of job licenses that can be issued by businesses according to their size to prevent North Korean migrants from concentrating in certain businesses and to prevent problems that job brokers may cause. On the other hand, North Koreans who seek short-term training in South Korea with the intention of finding a job in North Korea should be unrestricted because they will return to the North before long and ultimately help stimulate economic growth there. At the same time, the number of foreign workers residing in South Korea should be gradually reduced, in proportion to the number of employment licenses that are issued to North Koreans. Meanwhile, starting in phase one, North Koreans will be allowed to travel to South Korea or visit relatives there for up to one month.

During phase two, 300,000 additional job licenses would be issued for a total of 500,000. Starting in this phase, students who wish to migrate to South Korea for their

4 For more details about the standards used to define the period of separation, refer to page 1 of the full report,

academic studies will be allowed entry provided that they have been admitted to a school. Since the North Korean students will be counted in their school's total enrollment, no admission ceiling should be imposed on them. In addition, starting in the second phase, North Koreans will be permitted to travel to the South to live with their relatives, provided that those relatives are able to support them and that the North Koreans promise not to work. During phase three, the number of job licenses will be increased by 500,000 to a total of 1 million, doubling the maximum in phase two.

Even as North Koreans are permitted to migrate to the South in these three phases during the separation period, utmost effort must be made to create a variety of employment opportunities inside North Korea. This is because the more employment opportunities there are inside North Korea, the less incentive North Koreans will have to migrate to the South. Of course, it is important to bear in mind that preventing large-scale migration to South Korea involves not only labor policies but also the entire gamut of economic policies, including privatization of buildings and land, the currency conversion ratio, finance and taxation, corporate restructuring, reduction of the armed forces, and education. One way to significantly dampen the desire to migrate would be to grant private home ownership rights to residents on the condition that they would live there for a certain amount of time. In addition, policies for creating jobs—including maintaining existing jobs as much as possible during the privatization of corporations, gradually decreasing the size of the armed forces and providing soldiers with job training before they are discharged, and promoting investment in North Korea—will also temper migration desires.

Since it is essential that the North's full employment policy be abolished in order to introduce a labor market during the separation period, employment may become a major issue. Accordingly, aggressive support must be provided to establish new private companies to create jobs. While privatization of state enterprises should not be delayed, the tempo should be adjusted, considering the kind of shock that massive layoffs can cause in markets. At the same time, no time can be wasted in helping restart North Korean factories that are capable of being operating again in order to allay unemployment.

Another important task would be education and job training for North Korean

laborers to enhance their job search. In addition, companies must be given incentives to invest in job creation, and obstacles to this investment must be removed as fast as possible. To this end, a variety of financial and tax-oriented benefits must be offered to incentivize investment in North Korea; procedures involved in obtaining various permits must also be simplified. It is also important to expand the number of people who are self-employed and assist the formation of small and medium-sized enterprises.

Another key labor policy undertaking in the North would be replacing arbitrary wage-setting by the government with guarantees that wages will be determined by the market. However, this action will probably lead to wage inflation. If wages increase at a faster clip than labor productivity, it will not only discourage new investments but also harm the competitiveness of existing industries. Hence, the most important task in wage policy is to have increases in line with productivity growth as much as possible. To accomplish this, the currency conversion ratio should reflect the actual value of the South and North Korean currencies, and any exorbitant wage demands by North Koreans will need to be controlled. Moreover, measures will be needed to prevent South Korean labor unions from colluding with North Korean counterparts for exorbitant wage increases.

#### B. Creating a Safety Net for the Unemployed

Since the number of the unemployed will increase significantly when economic reforms are made in North Korea, measures must be taken to create an appropriate safety net. It would be tempting to assume the German model of unification would be completely applicable since the employment insurance systems in West and East Germany were similar to those in found in South and North Korea today. However, South Korean employment insurance system is not comparable to the West German one in several key aspects. West Germany implanted its insurance system in East Germany and it became the safety net for unemployed East Germans. It would be inappropriate for South Korea to follow this path with its current Employment Insurance System (EIS). This is because, first, a large number of South Koreans are not covered by EIS and, second, the system is not capable of supporting a large unemployed in North Korea. In short, it would be impossible for South Korean employment insurance to provide an immediate safety net for jobless North Koreans.

Continuing our assumption of economic separation after political unification and the North turned into a special economic zone, the plans for designing unemployment assistance and employment insurance for North Koreans can be summarized as followed.

The unemployed should first be divided into those who are able to work and those who are not. The latter should receive some kind of public assistance such as South Korea's basic living guarantee system. Those who are still capable of working should receive unemployment assistance in the form of South Korea's Employment Success Package. Funded by taxpayers, the package provides job training and aggressive job referral service for those who are not enrolled in EIS. When designing the unemployment assistance system in the North Korean Zone, the living allowance for recipients should be higher than the living allowance for public assistance.

It will also be necessary to introduce South Korean-style employment insurance in the North Korean zone. There is one final point that ought to be emphasized here. Since public assistance, unemployment assistance, and employment insurance are all interconnected, it is necessary to search for ways to deliver them through an integrated welfare and employment service infrastructure. A unified delivery system for employment and welfare will be able to provide efficient and convenient service.

# 3. Operating Pension and Public Assistance Systems in the North Korean Zone

#### A. Integrating and Operating Pension Systems

Not only did Germany reunify earlier than expected but currency, economy, and social unification occurred much faster than anticipated. West Germany was unprepared for unification. However, the speed of political changes made swift absorption by West Germany the only option. West Germany used social insurance system to mitigate the severe social problems that resulted from rapid economic unification. As a result, the social insurance sector had to shoulder huge expenses during unification. If unification of the Korean Peninsula follows the same patch the cost will place a tremendous burden on South Korea.

In this section of the paper, an attempt is made to identify how pensions and public assistance system can be devised to help reduce the cost of unification. While the premise of this paper is separation and gradual integration of the two economies on the peninsula along with the establishment of North Korea as a special zone, Germany's experience offers a number of valuable lessons that must be considered.

First, unification scenarios are subject to change. As late as 1990, when the two Germanys settled on a unified currency, they envisaged complete unification in measured steps. But only a few months later, rapid changes in the political and economic situation led to East Germany being completely absorbed by Western Germany. This left Germany with no choice but to completely overhaul its original plan for gradual integration of the pension systems. Thus, in the case of Germany, it was hard to predict change in the political situation which would affect integration of the pension system. This illustrates how developments on the Korean Peninsula could overtake government plans. Unexpected turns must be kept in mind in the strategic plans for pension integration and other aspects of economic integration.

A second item to bear in mind is the importance of integrating systems rapidly. West Germany minimized confusion and administrative costs of integrating pension systems by reducing the differences between its social insurance system and East Germany's, and integrating them in as short a time as possible. West Germany divided and categorized East Germany's unified social insurance system in greater detail and rapidly established a management regime for overseeing this. It created a new record-keeping system for East Germany enrollees, and within a few months it had completed all of the preliminary preparations, including processing new applications for the new system, recalculating pension payments, collecting insurance contributions, providing subscribers with information, and promoting the service. While there were naturally some unexpected hitches during this process, this rapid development of system infrastructure was made possible with active support from the West German government, which provided financial assistance and sent staff to help. Particular attention must be paid to the diversity of the support that the West German

government provided. Besides providing financial assistance and dispatching staff, it included training public servants in East Germany for the new system and reassigning them to new posts as well as forming sister relationships between the pension management regimes in East and West Germany. The third item is the need to respond to changes in circumstances after the systems have been unified. No one predicted the abrupt collapse of the East German economy, the jump in the level of wages, and the rapid increase in the number of pensioners. In particular, as the wages in East Germany rapidly increased, pensions were recalculated twice a year to keep them linked to wage movements, leading to a sharp jump in payments. Beginning in the mid-1990s, the average yearly pension payments in East Germany surpassed those in West Germany. This also intensified the imbalance in the pension budget, forcing the federal government of Germany to assume more of the burden of covering the deficit. Germany's difficulties in merging the two pension systems will likely be duplicated when the Korean pension systems merge. Germany's experience suggests the importance of adequately accounting for dynamic changes in factors outside the system when planning the initial model for integration.

In summarizing the lessons from Germany about pension integration, probably the most important is how to hold down associated costs. It would require implementation and integration of the pension systems as rapidly as possible while gradually narrowing the gap between South and North Korea in terms of economic ability and pay. In other words, the faster the pension systems and management regimes are brought together and integrated, the more the administrative cost can be minimized. On the other hand, the more haste is made in alleviating the gap between the South and North Korean systems in terms of standard of living and economic ability, the worse the effect on the productivity and economic ability in North Korea and the greater the burden of fiscal transfers to North Korea.

The next item we should pay attention to when drafting plans for pension integration is the important differences between the North Korean and South Korean systems. First, the North Korean pension system was introduced in the 1940s, meaning that it has a much longer history than the South Korean pension system, which appeared in 1988. Because of the nature of the labor market in a socialist country, people tend to have a longer employment record, which means that there are more people who qualify for a pension. Second, the pension system and industrial accident insurance are in one system in North Korea, but the pension of blue-collar workers and white-collar workers is not the same as the pension of collective farm workers. In addition, honorary military pension and pension for services rendered are operated separately. Third, the South Korean national pension system partially adopted a funded system, in which the pension fund accrued over time. In contrast, North Korea chose a pay-as-you-go system. This amounts to a generational transfer, in which pension contributions each year cover that year's pension payments.

While North Korea's old age income guarantee system is well-designed the pension system is virtually bankrupt because of the current financial conditions in the country. This implies that some segments of the older population are probably not receiving their full pension benefits. In addition, since pension payment in North Korea is linked to a public distribution system, in reality it will not be very compatible with the market economy system after unification. This suggests that the North Korean pension system will have to be effectively redesigned when the Korean Peninsula is reunified. If it is assumed that this is the case, transplanting the South Korean pension system into North Korea at the time of unification may be the most effective option.

In other words, the South Korean social insurance system would be transplanted into North Korea as is, but it would be operated separately, in consideration of their divergent financial conditions. One thing to note here is that assimilation of the social insurance system itself would not increase the cost of unification. Since the majority of social insurance payments are a function of wages and income, expenditures only increase when unemployment or wages rise. Therefore, if the system in the North Korean Zone can be operated successfully, and if the North Korean economy can maintain gradual, self-sustainable growth, the cost of integrating social insurance may be reduced significantly.

The basic principles for integration of the pension systems of South and North Korea based on the above assumptions can be outlined as follows. First, integration of the South and North Korean pension systems at the time of unification should basically involve transplanting and implementing the South Korean pension system in North Korea. Second, the most pressing task is to quickly rebuild the management regime for the North. Third, while the South and North Korean pension systems are to be integrated, they should be operated separately. That is to say, the same formulas should be used for the payment of disability pension, old age pension, and survivors' pension in both South and North Korea. The average income of subscribers that is applied in those formulas, however, should be different for South and North Korea, and the amount of payment should be calculated differently until the gap in economic ability between the two regions has been bridged. Fourth, while the vested rights of North Korean citizens should be preserved, existing benefits that are closer in nature to privileges should not be recognized. Fifth, the financing and accounting for the pension systems should be handled separately in South and North Korea, and the pension system in North Korea should be financed by the pay-as-you-go system. Sixth, any shortfalls in the pension budget in North Korea should be covered by the transfer support from the South Korean government. Finally, it will be necessary to prepare response measures for changing conditions in the North, including rapid fluctuations in wages or prices after the establishment of the special economic zone.

A more detailed examination of the measures for integrating the pension systems in South and North Korea that is derived from these basic principles will now be provided. Social insurance in North Korea is currently a combination of national pension and industrial accident insurance. This should be divided into national pension and industrial accident insurance in order to integrate social insurance in South and North Korea. In other words, the old age pension, disability pension, and survivors' pension that are currently in force in the North Korean system must be converted into the equivalent Korean systems and supervised by the new pension system. However, of these kinds of pensions, disability pension and survivors' pension should be placed under the authority of industrial accident insurance, since these are connected to the workplace. On the other hand, the North Korean pension system, which is divided into pension for blue–collar workers and white–collar workers and pension for workers on collective farms, should be integrated into a single national pension.

As the national pension system is expanded into the North, the regulations in the South Korean system dealing with scope and eligibility for enrollment are to be applied in their current state. That is to say, all North Koreans between the ages of 18 and 60 should be made eligible for enrollment, and North Korean refugees who had been residing in China and other areas outside of North Korea should also be included. Blue-collar workers and white-collar workers in the North should be converted to workplace subscribers, while the self-employed, including workers on collective farms, should become regional enrollees.

For pension payments, the current old age, survivors', and disability pension should be applied as they are, with the current North Korean systems being converted into their South Korean equivalents. However, payments related to the North Korean disability and survivors' pension systems, which are connected with the workplace, should be transferred to the authority of the industrial accident insurance system that is to be established for use in North Korea. Along with this, the honorary military pension that is currently in place in North Korea should also be converted to the disability pension section of the national pension, while the pension for services rendered, which is preferential in nature, should not be recognized.

When expanding the national pension into North Korea after unification, the most debatable subject may be to what extent the vested rights of subscribers and pensioners under the current North Korean pension system should be recognized. The fundamental issues are whether to recognize accumulated enrollment time and whether to recognize the pension payment owed to individuals. First, it will probably be necessary to guarantee the vested rights regarding the period of enrollment (the period of work) in North Korea before unification insofar as it is possible. But it would be advisable not to recognize the vested payment amounts and instead recalculate them based on the newly established national pension formula. When the pension systems are integrated, the minimum enrollment period in North Korea should be changed to 10 years, and the period at which payments begin should be set at 60 years of age to bring it in line with the South Korean system. Any future increase in the age at which payments are made should be applied to both South and North Korea. Furthermore. the delayed pension system, early pension with reduced payments, and old age pension for active workers, which are part of the current South Korean national pension system, are also to be expanded and applied in the North.

Today, pension recipients in North Korea are given a conventional annuity that is proportional to their period of enrollment. For example, if we presume that the average monthly wages of a North Korean worker immediately after unification is USD\$100 (using the standard of workers at the Kaesong Industrial Complex), an elderly person who retired after working for 40 years would receive USD\$40 monthly pension payment (a maximum of USD\$80 if we add an equal payment for a spouse). While the absolute amount of such pension payments is much lower than that of South Korean workers, the North Korean income replacement ratio is much higher than South Korea when compared to the average income in North Korea.

The upper earnings limit in North Korea should be set at approximately 140 percent of the average wages of workers, to match with the relative level of the upper earnings limit in South Korea compared with the average wages of workers there. This limit should be readjusted each year in accordance with the rate of increase in wages. In addition, the inflation-linked method should also be applied to North Korea in the same way to prevent a decrease in the real value of pension payments because of an increase in wages and inflation after unification. In terms of sharing pension contributions, employees at a company should contribute 4.5 percent, and their employers should provide a matching 4.5 percent contribution, while the self-employed and other regional subscribers should make the entire contribution themselves. However, it will also be necessary for North Korea to similarly have the part of the South Korean national pension program that helps farmers, fishermen, and low-wage workers at microenterprises make their pension contributions. There will be no choice but to use the subsidies transferred from South Korean government to make up for shortfalls in the pension budget in the North Korean Zone. If the difficulty in financing necessitates the government to use the pension fund in the South, the government can consider the option of borrowing from the national pension fund by issuing treasury bonds, having the national pension fund purchase these bonds, and then redeeming the bonds in the medium or long term. However, the national pension budget in South Korea must not be negatively affected under any circumstances whatsoever. Also, in regard to the temporary separation of the North Korean economy, the residents of South and North Korea should receive the social insurance benefits that were provided in the place they were living at the time of unification regardless of where they may reside in the future.

#### B. Integrating and Operating the Public Assistance System

The public assistance system in North Korea is the standard social welfare system seen in socialism. It plays the role of the primary social safety net, with the government being responsible for raising funds and distributing those funds in order to guarantee a minimum standard of living for the people. This system is based on the principles of national responsibility, a guaranteed minimum standard of living, and equality. The North Korean public assistance program basically consists of two parts —a distribution system that provides food, clothing, and shelter and a medical care system. Since the former of these is administered by the government, the amount of free distribution that North Koreans actually receive is determined by the economic ability of the government, and no consideration is given to what people need or how income is distributed. It is worth noting here that the public distribution system basically began to fall apart during the mid-1990s because of worsening economic conditions. After the North Korean government adopted economic reforms on July 1, 2002, a limited market economy has begun to partially replace some of the services of the public distribution system.

The following principles are proposed for integrating the public assistance systems in South and North Korea. They are based on a scenario of gradual economic unification (that is, complete unification after temporary separation), and take into consideration the North Korean public assistance system and the example of the integration of public assistance in East and West Germany. First, while there are four South Korean welfare programs that can be categorized as public assistance programs—namely, the national basic livelihood security system (introduced in 2000), the basic old age pension (introduced in 2009), the severe disablement allowance (introduced in 2010), and the earned income tax credit system (introduced in 2009)—only the national basic livelihood security system should be applied in the North Korean Zone. Second, at the time of complete unification, the North Korean public assistance programs should be abolished, and the public assistance system in North Korea should be assimilated with the South Korean system. Third, the South and North Korean public assistance systems should be operated separately. In other words, in determining how many people are eligible to receive public assistance and how much they should receive, consideration must be given to the economic conditions in North Korea during temporary separation period. Fourth, the financial support for public assistance should be provided through fiscal transfers from South Korea. This is to say, while the public assistance system should serve as a final defense for the problems caused by the mass unemployment that is expected to occur as a result of the temporary separation of the North Korean Zone, payment for the system should come out of the general budget of South Korea.

Public assistance eligibility, categories of payment, and the amount of payment in the North Korean Zone should be determined as follows. First, during the initial period of the special economic zone when the socialist-planned economy is being converted into a market economy, there will be a temporary increase in the kind of people who are eligible to receive assistance beyond what is allowed in the South Korean national basic livelihood security system. While the economic system is in the transitional phase, unemployment will be unavoidable, and there will be many people whose basic livelihood is threatened. Measures should be adopted to allow North Koreans to become beneficiaries during this time. One such measure could involve temporarily easing the "obligation to support" restrictions. These restrictions affect the amount of public assistance that can be given, for example, to those who have children capable of supporting them.

At the present, the national basic livelihood security system includes seven kinds of allowances: livelihood, housing, education, medical, childbirth, funeral, and self-support. In the early phase of the economic zone, priority should be given to providing livelihood, education, and medical service allowances. As a system for administering North Korea is developed and the region's economic situation improves, the categories of allowances that are provided in North Korea should be gradually expanded.

The payment amount for the livelihood allowance should be sufficient to guarantee the minimum cost of living. This should be calculated according to the actual conditions in North Korea during the early period of the North Korean Zone. However, the amount should be increased in phases in conjunction with the rates of increase in wages and inflation. By the time that complete economic unification is achieved, the livelihood allowance payment amount in North Korea should be similar to the amount in South Korea. The amount of the education and medical allowance should be enough to cover the actual costs of receiving such services in North Korea.

All of the costs that are incurred in implementing the national basic livelihood security system in the North Korean Zone are to be provided for by the fiscal transfer from South Korean government. The key social welfare system that can be implemented in North Korea during the unification transition is the national basic livelihood security system, and this system will contribute to social integration while also serving as a buffer against economic and social problems that arise while the economic system is being converted. These expenses—that is, the cost of the national basic livelihood security system incurred during unification—will account for a substantial portion of the cost of integrating social welfare system during the temporary period of separation.

#### 4. Conclusion and Lessons Learned

The paper outlined scenario in which South and North Korea agree that political unification should be carried out immediately but that economic unification should take place gradually. Toward this end, the North Korean economy is temporarily separated from the South Korean economy by designating the North Korean economy a "North Korean Zone" for a period of ten years. Within this scenario, a proposal is made for a gradual approach to integrating the economies of South and North Korea and operating the North Korean economy during the period of separation. This paper is significant in the sense that it represents an in-depth analysis of gradual measures for integrating the economic and social systems in South and North Korea, centered on the areas of the labor market, the employment safety net, pension, and public assistance. Further, this analysis was made in a scenario of gradual economic integration after unification, a subject that has rarely if ever been dealt with in previous studies.

Nevertheless, there are a number of matters that were not dealt with in detail or entirely excluded in this paper. For example, a unification scenario in which the North Korean Zone could be established under and the governance of the zone was only outlined in broad terms. Both of these factors were outside this paper's scope. It will be necessary for additional research to be conducted in these areas. Cost estimates will be needed on the separate operation and gradual integration of the employment safety net (employment insurance and unemployment assistance), pension, and public assistance systems. However, the limited materials and short research period available for this paper necessitate that these tasks be left to future researchers.

When we view the methods of operating the various sectors of the North Korean Zone, one thing that deserves particular emphasis is the reforms that must be implemented during the first two or three years of the North Korean Zone. The very first thing that must be done if it is decided to set up the North Korean Zone is securing statistics, accounting data, and administrative organization information for each area of the North Korean economy and society. Collecting accurate information about relevant areas will also be critical in designing a system for separate operation of the pension, public assistance, and employment safety net systems. To this end, a research team comprised of South Korean government and private sector experts from each area must be dispatched to North Korea. Drawing upon workers and other kinds of support provided by the North Korean government, this team must take part in a joint survey on the conditions of each sector. Considering Germany's approach, the fact-finding surveys in each sector should in principle be completed during the first three months. That implies the government needs to prepare plans about the personnel on the research team and how to conduct the surveys to ensure successful fact-finding.