

The National Pension Scheme of the Republic of Korea

Bong-min Yang, Ph.D.

*School of Public Health
Seoul National University*

This paper presents the experience of the Republic of Korea in setting up a National Pension Scheme (NPS) and assesses its likely effectiveness in coping with future challenges. The Korean NPS has features of both a pay-as-you-go system, as it does not have adequate reserves to guarantee the promised annuities, and a fully-funded system since payments are regularly made into a pension fund which could then be invested. It also has aspects of both public and private pension systems; public in terms of the management and regulation of its coverage and benefits, and private in terms of its financing where the involvement of the central government is limited to subsidizing the operational expenses of the management agency, called the National Pension Corporation. The Korean NPS is likely to face future challenges due to rapid demographic changes such as the increase in the elderly population and the reduction of family size due to low fertility rates. These changes are likely to seriously test the viability of the NPS, the coverage of which seems to have expanded too fast too soon. The paper provides two main lessons for other developing countries: (a) a pension system should be based on accurate financial and demographic projections which affect its long-term sustainability; and (b) it is better to take a gradual approach by starting with a limited coverage, low-benefit package and upgrading it over time in keeping with the performance of the economy.

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Bong-min Yang

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Foreword

This paper was prepared for a project on Social Development in East Asia. The project was organized by the World Bank Institute under the auspices of the Program for the Study of the Japanese Development Management Experience which is financed by the Human Resources Development Trust Fund established at the World Bank by the Government of Japan.

The principal objectives of this Program are to conduct studies on the Japanese and East Asian development management experience and to disseminate the lessons of this experience to developing and transition economies. Typically, the experiences of other countries are also covered in order to ensure that these lessons are placed in the proper context. This comparative method helps identify factors that influence the effectiveness of specific institutional mechanisms, governance structures, and policy reforms and thereby ensures a better fit between the lessons from East Asia. A related and equally important objective of the Program is to promote the exchange of ideas among Japanese and non-Japanese scholars, technical experts and policymakers.

The outputs of the project on Social Development in Asia include seven papers on topics such as pension systems, health insurance, education, and employment policies which are all published in the WBI Working Paper series. In addition, a set of papers focusing on the social policy experience of Japan over the past fifty years is being processed separately as a book-length manuscript.

Farrukh Iqbal, Program Director
World Bank Institute

The Evolution of the National Pension Scheme

We will examine this topic in three segments. The first is devoted to a brief history of the scheme; the second to various factors contributing to the evolution of the scheme; and the third to public pension schemes.

A Brief History

To promote a more stable life with improved welfare for the Korean people, the National Pension Scheme (NPS) was implemented in January 1988. It is a part of Korea's Social Security Program; it includes the following programs: Public Pension, Social Health Insurance, Unemployment Compensation, and Industrial Accident Insurance.

The first pension program in Korea was introduced in 1960, providing pension coverage for government employees. This was followed by the pension scheme for military personnel in 1963 and one for private schoolteachers in 1975.

During the 1960s, the government of Korea pursued a policy of "economic growth first and distribution next." With rapid economic growth in the 1960s, unequal opportunities and distribution of income among social classes emerged as concerns for policymakers and politicians. To provide the poor with basic needs, the government passed the first welfare act, the National Welfare-Pension Act, in 1973 (Oh 1993). The Act was meant to introduce pension schemes for the entire population in the following years. However, the economic recession resulting from the first "oil shock" in 1974 triggered high unemployment rates and a 16 percent inflation. It forced the implementation of public pension schemes to be delayed indefinitely.

With high economic growth and stabilizing price levels during the 1970s and early 1980s, the government reviewed the 1973 National Welfare-Pension Act and reintroduced it as the National Pension Act in 1986. This new Act specified that the first public pension scheme was to be implemented in January 1988, and that the National Pension Corporation was to be created as its administrative body.

The first compulsory pension scheme was introduced in January 1988, covering workplaces that had 10 or more employees. Then in January 1992, compulsory coverage was extended to workplaces with five or more employees. In July 1995, it was extended to the self-employed in rural areas. And in August 1995, it was extended to cover foreigners in the workplace. The self-employed in urban areas are scheduled to be brought under compulsory coverage beginning July 1998. However, with recent economic crises in Korea, the extension of the plan to cover self-employed urban residents is somewhat uncertain.

Factors that Contributed to the Evolution of the National Pension Scheme

As indicated above, pension schemes were introduced one by one, bringing an ever-growing proportion of the population under the scheme's umbrella. Over the years, several factors contributed to this evolution.

First, during the last three decades, there was a rapid increase in the elderly population. The population structure of Korea is gradually changing from a "pyramid" (developing country) type to the "inverted pyramid" (developed country) type. This change in the population structure raised the issue of financial security of the elderly after retirement. To resolve this problem, the national pension scheme was thought up by politicians.

Second, with changes in lifestyle and economic opportunities, families gradually shrunk. More and more of the elderly were separated from younger generations (either voluntarily or involuntarily) as the latter formed nuclear families. Traditionally the elderly had lived with their offspring and thus their financial security after retirement had been a family issue. But as more elderly people were being left to be socially independent, their financial security became a social issue and the need arose for their protection following retirement.

Third, the policy of strong economic growth resulted not only in multiple social classes, but also in producing a feeling of exclusion in the poor. Politically it was necessary to have a measure that would ease complaints of this excluded sector of the population. To compensate for the maldistribution of income as well as the negative consequences it brought to the poor, the National Pension System was proposed.

Fourth, urbanization and the continuous growth of the industrial sector were blamed for various accidents, including industrial and traffic accidents. With these increasing over the years at annual rates of 7.5 percent and 11.8 percent, respectively, a need emerged for protecting household incomes from unexpected losses. And here the pension scheme was considered an imperative step (Min 1986).

Fifth, economic growth and the resulting increase in household income made the introduction of the NPS possible in the 1980s. With economic growth in the last two decades, the share of the population in the formal labor sector had grown significantly. People agreed to pay certain percentages of their income as pension premiums for their own future benefit. The fact that the stabilization of price levels in the 1980s made the real value of the pension fund sustainable also enabled the government to push the plan forward.

Sixth, spurred by a strong economy and rapidly improving living standards, the average Korean became increasingly welfare-conscious. The average Korean believed that pension insurance and health insurance were basic requirements for Korea's becoming a developed country based on Organisation for Economic Co-operation and Development (OECD) standards. Thus the government had to satisfy the welfare needs of people from various walks of life by introducing pension plans (along with health insurance).

Seventh, pension schemes were strongly supported by policymakers—partly because they could be a source of investment capital for massive government-initiated economic projects. Good examples of such projects are the heavy industry promotion plan in the late 1970s and the housing project for middle-income families in the late 1980s. (Jun 1988; Oh 1993.)

Eighth, ever since 1960, the after-retirement incomes of government employees had been insured by their own pension schemes but there was no such protection available for industrial laborers and the self-employed. Some concerned academicians argued this as a serious social equity issue. By introducing the NPS, the government would be taking steps to resolve this inequity existing among occupational categories. (Oh 1993.)

Although there were some conflicts in the proposals concerning the details of pension coverage, financing, and benefits, in principle all sectors of the economy—politicians, workers, households, and the government—agreed to have a national pension system. Having the NPS was viewed as long-term compulsory savings, but not as a transfer of payments from one sector of the economy to another. The whole process toward achieving the NPS was made possible without much resistance mainly because Korea's welfare-conscious population was able to pay premiums thanks to the unprecedented growth of their per capita income in previous decades. This history reminds one of the assertion that the best solution and guarantee for a healthy retirement income system is a strong economy.

However, several professionals in the social security field argue that the main reason why the NPS was introduced in Korea was to have investment capital for major government projects, rather than meeting the welfare needs of the general population (Jun 1988; Oh 1993). It is debatable whether the Korean government constructed the NPS to use the fund for macroeconomic projects, or whether the government is using the fund for government programs because it is available through the NPS.

Public Pension Schemes

There are four types of social security pension programs in Korea: the National Pension for corporate employees and the self-employed; the Civil Servant Pension for central and local government employees; the Military Pension for military personnel and their associates; and the School Pension for private schoolteachers and school employees. Each scheme is financially autonomous and managed by a different administrative entity. For example, the NPS is administered by the National Pension Corporation, a semipublic administration, while the School Pension is administered by the School Pension Management Corporation. Table 1 shows a brief description of the four schemes.

Table 1. *Types of Public Pension Schemes*

<i>Pension scheme</i>	<i>Mandatory coverage began:</i>	<i>Target population</i>	<i>Contribution rates^a (percent)</i>
National pension	1988	Employees in the workplace	3 ^b
	1995	Rural agricultural and self-employed residents	3
	1998	Urban self-employed residents	3
Government employee	1960	Public sector employees and public schoolteachers	6.5
Military personnel	1963	Military personnel and employees	6.5
School teachers	1975	Private schoolteachers and employees	6.5

a. Percentage contribution rates of total earnings as of December 1997.

b. Becomes 4.5 percent if employees' contribution to severance reserve is included. A detailed explanation follows in the next section.

Source: National Pension Corporation (1997).

Since the inception of the NPS in 1988, as its coverage extended to firms employing five or more people and then to self-employed rural area residents, the number of enrollees grew significantly, from 4.4 million in 1988 to 7.4 million in 1996 (see table 2). Another 2 million enrollees will be added when the NPS extends its coverage to self-employed urban residents in July 1998.

Table 2. *Number of Enrollees in the National Pension Scheme over Time*

	1988	1990	1992 ^a	1994	1995 ^b	1996
Corporate employee ^c	4,431,039	4,640,335	4,977,441	5,382,729	5,541,966	5,677,631
Rural area residents	n.a.	n.a.	n.a.	n.a.	1,650,958	1,681,915
Voluntarily insured ^d	1,656	11,343	43,718	62,089	64,470	66,154
Total	4,432,695	4,651,678	5,021,159	5,444,818	7,257,394	7,425,700

n.a. Not applicable.

a. Compulsory coverage extended from firms employing ten or more to those employing five or more.

b. Compulsory coverage began for self-employed rural area residents, including farmers and fishermen.

c. Numbers in parentheses are the numbers of participating workplaces (firms).

d. Those whose participation is not mandatory—that is, urban area residents—can join the NPS voluntarily.

Source: National Pension Corporation (1997).

During the initial years of any social security pension program, contributions often exceed benefits because there are few beneficiaries. As programs mature, however, the growth rate in benefits generally exceeds that of contributions, and the system reserves dwindle. This has been the trend in many European systems over the past four decades. The Korean NPS is in its initial stage; as a consequence a huge fund has accumulated—22 trillion won (equivalent to US\$18 billion, based on an exchange rate of W1,200 to \$1), as of 1996 (see table 3). A portion of the fund is being invested in the capital market and macroeconomic government projects. The Ministry of Finance and Economy manages the portfolio of assets.

Table 3. *Public Pension Schemes and Their Statistics, 1996*
(1,000 people; billion won)

	Number of insured (A)	Number of beneficiaries (B)	B/A (percent)	Fund accumulated
National pension	7,829	109	1.4	21,671
Government employee	971	64	6.6	5,680
Military ^a personnel	152	49	32.2	-651 (deficit)
School teachers	191	5	2.6	2,759

a. As of the end of 1995.

Source: Kim (1997).

The National Pension Scheme and the Role of the Private Sector

Among issues we will explore under this heading are financing, the NPS's benefit structure, indexation for inflation, and replacement ratio. We begin by taking a closer look at the nature of the pension scheme.

The Nature of the National Pension Scheme

It is not clear whether the Korean NPS is defined as a public pension system or a private one. On the one hand it is a public system in the sense that it is compulsory, and is planned and designed by a government authority while being managed by a government-controlled semipublic corporation—the National Pension Corporation (NPC). Also, it is a public system since it is classified as part of the social security system by the government. On the other hand, it is private in nature because financing is entirely the responsibility of employers, employees, and rural households. Although classified as part of the social security system by the government, general tax revenue has nothing to do with the NPS. It is not the “social security old-age pension” per se by the OECD standard. This is why Horlick (1987) classified this kind of system as a mandated private pension system rather than a public system.

However, the term “public pension” is understood differently within Korea. The country does not have a tax-financed social security old-age pension which pays flat-rate benefits to all elderly Koreans. But since the coverage, benefit, vesting, portability, and financing of the NPS are all managed and regulated by the government, it is considered a public pension system. It is a public earnings-related mandatory social security system, although financing is managed entirely by private households and private firms.

The Korean NPS is undoubtedly an output of the combination of government efforts and private sector participation. Unlike other countries' public pension systems, the private sector plays a very important role in the Korean NPS. Regardless of the meaning of terminology, the target of the Korean NPS is, as in other countries, an old-age security program that replaces a certain percentage of work-time earnings. It aims to permit pensioners to maintain a reasonable standard of living after retirement. To examine whether such a goal could be achievable within the current NPS context, it may be necessary to see its financing and delivery structure.

Financing

There are two basic ways to finance pension plans: the pay-as-you-go system and the fully funded system. Under the pay-as-you-go approach, contributors pay for the benefits of current pensioners directly as a current disbursement out of operating income. The Korean NPS, however, uses the fully funded system.¹ Under this system, payments are made on a regular basis into a pension fund, which then can be invested. The fund is controlled by a separate trustee, which is designed to meet the current as well as projected benefits of pension plan members. The NPS Trustee—the National Pension Fund Operation Committee, chaired by the Minister of Finance and Economy—manages the portfolio of assets in its own way, investing the accumulated fund in order to take advantage of market investment returns. It is hoped that enough money is held in reserve to guarantee the payment of promised annuities.

1 Debate is going on as to whether the Korean NPS is a fully funded system or a pay-as-you-go system. Under the fully funded system, the present value of promised future benefits is supposed to be calculated by actuarial methods, and plan sponsors (employers, employees, and self-employed individuals) must contribute to the pension fund to build up assets in amounts that are equal to those actuarial liabilities. Some argue that the Korean NPS is a pay-as-you-go system because the payment of promised annuities are not guaranteed by the reserves, and because contribution rates are not based on actuarial estimates.

The financing of social security pension programs is done mostly by collecting pension premiums from target populations. The premiums are collected as contributions, but they are in fact formulated as payroll taxes in the case of corporate employees, and as earmarked taxes in cases of local area residents and the self-employed. Receipts also include yields from invested reserves. Unlike some OECD countries, general revenue financing is extremely limited in the Korean NPS. The only financial involvement of the central government is to subsidize the operational expenses of the NPC (National Pension Corporation).

Table 4 and table 5 show premium rates for employers, employees, the self-employed, and local residents (farmers and fishermen included). The contribution rates have been changing as the pension system matures. As of the end of 1997, the total contribution rate for those in the formal employment sector is 6 percent—2 percent from the employer, 2 percent from the employees themselves, and the other 2 percent from the corporate severance reserve.² Since the corporate severance reserve is made possible by equally shared contributions from employers and employees, actual contribution rates for pension funds from employers and employees are 3 percent each, shared equally.³ The total contribution rate in this sector is scheduled to rise to 9 percent in 1998. However, with macroeconomic breakdown in late 1997 and early 1998, the actual implementation of the rate increase is uncertain.

Table 4. *Change in Contribution Rates—The Formal Employment Sector (percent)*

	1988–92	1993–97	1998 onward ^a
Employer	1.5	2.0	3.0
Employee	1.5	2.0	3.0
Severance fund ^b	n.a.	2.0	3.0
Total	3.0	6.0	9.0

n.a. Not applicable.

a. Increase in rates from 1998 onward is planned by the government, but actual implementation is uncertain.

b. The severance fund is a corporate fund reserved for employee retirement or resignation.

Source: National Pension Corporation (1997)

Self-employed rural residents, including farmers and fishermen, have been covered compulsorily by the NPS since July 1995. Their contribution rates are 3 percent of their total monthly earnings at the moment, but this is scheduled to go up to 6 percent in the year 2000, and up again to 9 percent in 2005. There is a flat government subsidy rate of 2,200 won per capita for farmers' and fishermen's contributions, regardless of one's income level.

² Traditionally, most of the large Korean firms had a severance pay system, paying employees substantial amounts granted on separation from the firm or on retirement. Such a system was not used in a large number of small firms. Therefore the current NPS is a new old-age pension system for the self-employed and those employed in small firms. It is, however, a replacement of the existing severance pay system for those in large companies. Many firms still have a large amount of reserves in the form of severance reserve that is used as a financial source of pension fund contributions.

³ In general, the corporate severance reserve in a firm is financed by employer contributions. A debate, however, is going on as to whether the reserve can be defined as purely an employer contribution or equally shared between the employer and employees. The latter definition argues that since the employer-funded half of the contribution would have gone to employees as wages in the absence of such a severance reserve scheme, the reserve should be considered a contribution that is equally shared between employers and employees.

Table 5. *Projected Change in Contribution Rates—The Informal Sector*
(percent)

	<i>July 1995–June 2000</i>	<i>July 2000–June 2005</i>	<i>July 2005 onward</i>
Insured people	3.0	6.0	9.0

Source: National Pension Corporation (1997).

The Benefit Structure

Unlike employment-based private pensions, the Korean NPS covers old-age pension, disability pension, and survivor pension payments. Since it is a mandatory system, the vesting and portability of benefits are guaranteed.

THE PENSION AMOUNT. Regardless of the type of pension (old-age, disability, or survivor), there are two parts in the amount of pension payments paid to a household: the basic pension amount (BPA) and the additional pension amount (APA). The BPA is the amount of pension paid to a pensioner based (a) on his or her work-time earnings, (b) on the number of years he or she is under the pension system, and (c) on the average monthly income of all pension scheme participants. It reflects, therefore, the combination of earnings-related, contribution-related, and equity-purpose portions of the pension payment. The APA is the amount paid to a pensioner according to the number of his or her dependents. It is the family-burden-related portion of the pension payment. In this way, both earnings-related aspects and income-redistribution aspects are jointly incorporated into the current pension system.

OLD-AGE PENSION. There are several types of old-age pension payments within the Korean NPS. As shown in table 6, full old-age pension is paid to a person who has made pension contributions for at least 20 years and is at least 60 years old. One hundred percent of the BPA plus APA will be paid to the full pensioner on retirement. A reduced level of benefits will be applied to those who do not meet the full pension qualification. The types of less-than-full pension qualifications and their level of benefits are specified in table 6 as well.

Table 6. Classifications of Old-Age Pension

<i>Type</i>	<i>Qualification</i>		<i>Level of benefit</i>
	<i>Insured term</i>	<i>Age</i>	
Full pension	20 years or more	60	100 percent of BPA and APA
Reduced pension	15 years to 19 years	60	72.5 percent~92.5 percent of BPA and APA
Active pension	20 years or more	From 60 to 64 with jobs	50 percent~90 percent of BPA
Early pension	20 years or more	From 55 to 59 without jobs	75 percent~95 percent of BPA and APA

Source: National Pension Corporation (1997).

DISABILITY PENSION. Disability pension is paid to a person who gets sick or injured during the insured term. To qualify as a disability pensioner, a person must be physically or mentally disabled and his or her working capacity should be considerably lost, and the worker must have been insured for at least one year. The level of benefits are the APA plus either 100 percent, 80 percent, or 60 percent of the BPA, for first degree, second degree, or third degree cases, respectively, in which the degree depends on the severity of disability.

SURVIVOR PENSION. When a pensioner passes away, survivor pension is paid to the dependents (survivors) of the deceased pensioner who is entitled to the old-age pension or the disability pension of the first or second degree. It is also paid to dependents of an insured person whose insured term is a minimum of one year. The levels of benefits are the APA plus 60 percent, 50 percent, or 40 percent of the BPA—for 20 years or more, 10 to 19 years, or one to nine years of insured terms, respectively. Survivor pension is paid to the most intimate survivor of the deceased old-age pensioner or the deceased disability pensioner. The order of intimacy starts from the spouse, then moves on to children, parents, grandchildren, and grandparents.

Indexation for Inflation

Pension benefits are adjusted for inflation. Although indexing could threaten the actuarial soundness of pension plans, the Korean government took the unprecedented step of requiring pension plans to review benefit levels annually, and to adjust pension annuities accordingly. In this way, the benefits are “inflation-proofed.” Since inflation adjustments create new actuarial liabilities for funded plans, the annual costs of an inflation adjustment can be extremely high. Indexation could be an important factor that might result in the financial insolvency of the Korean pension scheme.

Replacement Ratio

The pension replacement ratio of preretirement earnings for a single pensioner with average earnings after 20 insured term years is estimated to be about 35 percent. This means that the replacement ratio would be 70 percent after 40 years. The replacement ratio for a pensioner, after 40 years of insurance, exceeds 70 percent if his or her monthly income is less than the average. It is below 70 percent if it is greater than the average level of earnings. In this way, the objective of income redistribution through the pension system is manifested in the Korean NPS.

The Comparative Perspective

The Korean NPS is a fully funded system. At least, that is what the government of Korea claims. In case of a budget deficit, it has to be financed entirely through an increase in contribution rates. Unlike other countries, central government contributions are only a minimal source of revenue for social security pension programs in Korea.

It is also a single-tier system with no contracting-out option. Since there is no private pension available, contracting-out is virtually infeasible. Although a private pension is not available, when a person retires—either through layoff or voluntarily termination—he or she receives a lump-sum severance payment from the company he or she has worked for. This is not an old-age pension system per se. But it either serves to financially help someone without a proper source of income, or enable them to start a new business. When a person retires, the severance payment works as if it were a pension payment for that person.

Under the current structure of the severance fund and the NPS, when a person retires from a firm, he or she collects two types of old-age security payment, a lump-sum severance fund and the NPS payment. When a person voluntarily quits, or is laid off, he or she is entitled to receive only the severance fund from the firm. No severance fund is available for the self-employed or rural residents in any case.

As mentioned before, another characteristic of the Korean NPS is that payments to a household are made up of two components: the earnings-related component and the income redistribution component. The latter is incorporated by allowing the receipt of an annuity that is greater than one's share if one's income is below the insureds' average, and less than one's share if above. In other words, the replacement ratio for a beneficiary whose income is below average is greater than the average replacement ratio, and that for a beneficiary whose income is above average is less than the average replacement ratio. This way, there are cross-subsidies from above-average income earners to below-average income earners through the pension scheme.

The pension replacement ratio of preretirement earnings with average earnings after 40 years of an insured term is estimated to be about 70 percent in the Korean NPS. This figure is comparable to those of the OECD economies. Most OECD countries have both tax-financed social security pensions and employment-based private pensions. Many countries have a "target replacement rate for social security and private pension," ranging between 50 and 80 percent of preretirement earnings (Torrey and Thompson 1980). The Korean government claims that as the minimum replacement rate suggested by the International Labour Organisation (ILO) is 54 percent, the estimated replacement ratio of 70 percent in the Korean NPS is relatively high, even when compared with some OECD targets. The 70 percent ratio does not include the severance payment made to some of the pension earners. For these people, the ratio could be higher than 80 percent when the severance payment is counted in.

The Policy Agenda: Lessons of Experience

Pensions are a complex area involving savings and investment issues, employment practices, taxation, and capital market institutions. An appropriate legislative framework is important to ensure the security of pension savings, to provide effective tax treatment, and to create a role for pension plans in the development of labor and capital markets. Since the Korean NPS is in the beginning stage of full implementation, its impact on wages and on export competitiveness is still not known. However, there are several problems with the Korean NPS detected to date.

Problems

During the initial years of any social security pension program, contributions often exceed benefits because there are few beneficiaries. As programs mature, however, the growth rate in benefits generally exceeds that of contributions, and the system's reserves are pulled down. This has been the trend in many European systems over the past four decades. Korea is following the same trend. A recent estimate by the National Pension Research Center (NPRC 1997) predicts that with the current annuity payment scheme, the accumulated reserves will end up in deficit by 2031. The deficit is expected simply because the benefit ratio is too high compared with the contribution rate. Demographic trends are also forcing the NPS, financed on a fully funded basis, into insolvency. It would be almost impossible to handle, both politically and financially, the insolvency issue when the deficit actually hits. Facing the insolvency problem, the government is preparing a major reform in the pension plan, lowering the replacement ratio from the current 70 percent to 55 percent. Public resistance is expected.

Contributions provide part of the income that is eventually used to fund retirement benefits. Pension plans also rely on investment earnings to pay off future pension promises. As experienced in other countries, such earnings have provided a substantial increase to the funds available to the plan. In Korea,

as discussed earlier, the accumulated pension fund is managed by a separate trustee, which is chaired by the Ministry of Finance and Economy. Since the inception of the Korean NPS in 1988, during the last 10 years, about 70 percent of the fund was invested on public projects, welfare programs, and financial markets. The estimated average return of these ventures has been about 10.75 percent, which is considerably lower than the average market rate of return of 14 percent (according to a 1998 inside report by the Ministry of Health). As a result of such misguided management, a significant amount of financial loss has been incurred, amounting to 865 billion Korean Won (equivalent to US\$700 million). Upon facing harsh criticism from potential beneficiaries, the Trustee promised that, from January 1998 on, the average market rate would be guaranteed to the invested NPS reserves. The fact is that there are no clear regulations or guidelines governing pension fund investment. The result is not only poor performance in pension fund portfolio management, but also a lack of clear linkage between the pension fund and the Korean capital market.

The NPS will be expanded to cover the urban self-employed, the only segment of the population that is not under the pension umbrella, in 1998. One worries, however, that it may not be easy to maintain an equitable system if total incomes of the self-employed are not properly documented. In an extreme case, an average urban self-employed individual whose reported income is higher than that of an affluent professional (for example, a physician or a lawyer) may have to subsidize the latter through pension schemes under the current pension payment structure.

The absence of private pension coverage may pose problems in Korea where public pensions provide protection on the expectation that other sources of income and supporting mechanisms will provide an adequate level of support. The problem will become more conspicuous if the replacement ratio is lowered to the proposed 55 percent or an even lower rate in the future. An alternative would be to convert the current severance payment scheme offered by corporations into an occupational private pension scheme—which would supplement public schemes, with some modifications in the public payment scheme. This will help enhance work incentives on the part of workers. The result would be a two-tier system. The first tier would provide a public, flat-rate, minimum-income benefit for all workers, while the second tier would be an earnings-related pension plan. Contracting-out could be an option for the second-tier program.

Lessons for Others

The Korean NPS is a recently developed funded system. It relies on accumulated contributions to finance pension obligations. Asset portfolios represent a large fraction of the total equity of public and private investment. If professionally managed, a pension fund can make a significant contribution to a functioning, competitive, and diversified capital market. It could be an important capital accumulation tool in developing countries, where insufficient capital accumulation acts as a barrier to long-term industrial investment.

The Korean experience tells us that regulations governing pension fund investments are necessary to protect fund assets from conflicts of interests and to control financial risks through diversification requirements. To achieve these ends, general and specific obligations and restrictions on the behavior of pension administrators should be enforced. The administrator or the Trustee should formulate an investment policy that fits the amount of investment risk that the plan's contributors are willing to take. Investment guidelines may include risk objectives, asset mix objectives, cash flow and liquidity requirements, and instructions for the measurement of fund performance.

A funded system makes good sense, especially when people's savings ratio is relatively low—though in Korea this is not the case. Increased national savings from pension funding in turn leads to additional capital investment and economic development. It is also a reasonable choice for a society that is

undergoing rapid aging, such as Korea. With rapid aging, a pension system would not be sustainable if it were a pay-as-you-go system.

Korea's NPS is still in its infancy stage, but financial insolvency is already on the horizon—and it is evident that the replacement ratio has to be adjusted downward. Projections on the financial sustainability of the NPS were done incorrectly from the beginning. The government was too ambitious, and was mildly naïve in designing the original system. Once a certain benefit package is promised to the participants, it may be very difficult (at least politically) to reduce or reverse it. With a dwindling economy and projected unfavorable demographic patterns, one has four options: raise contributions, reduce benefits, increase government financing, or shift the burden to the future generation. None of these roads are easy to take, if not impossible.

There are two lessons to learn from the Korean experience. First, an accurate financial projection on the sustainability of the programs involved is a prerequisite for a sound pension system. Second, a reasonable approach would be to start with a basic package, and then upgrade the benefit package along with economic growth. This gradual expansion approach is far better than the opposite one, which Korea is using now.

Even in times of prosperity, it is debatable whether a broad-based social security system can meet special needs, particularly those of more highly paid employees. Therefore the development of private pensions can be looked upon with favor and can be encouraged through favorable tax treatment, although the growth of private pensions remains determined by such factors as the state of the economy, competition, and collective bargaining.

References

The word *processed* describes informally reproduced works that may not be commonly available through libraries.

Horlick, M. 1987. "The Relationships between Public and Private Pension Schemes: An Introductory Overview." In *Conjugating Public and Private: The Case of Pensions*. Studies and Research No. 24, International Social Security Association, Geneva.

Jun., N. J. 1988. *Lectures in Social Policy*. Seoul: Seoul National University (in Korean).

Kim, W. S. 1997. "Reform of the National Pension Scheme." Paper presented at the Conference on Policy Directions of Social Insurance Schemes of Korea, sponsored by the Korea Social Policy Association, Pusan, November (in Korean).

Min, J. S., S. W. Nam, C. S. Chang. 1986. *Basic Model of National Pension Scheme and Its Impact on Social Economy*. Seoul: Korea Development Institute (in Korean).

National Pension Corporation. 1997. *National Pension Scheme in Korea*. Seoul.

NPRC (National Pension Research Center—headed by Kyung B. Chung). 1997. *Long-Term Projection of National Pension Reserves*. Seoul.

Oh, K. S. *Reform of Pension Plan*. 1993. Unpublished Ph.D. thesis. Choong-ang University (in Korean). Processed.

Torrey, B. B., and C. J. Thompson. 1980. "An International Comparison of Pension Systems." Working paper by the President's Commission on Pension Policy. Processed.