

Draft

The Korean Pension System: Current State and Tasks Ahead

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I. Introduction

A country's pension system serves as a basic component of its social safety net. The importance of the pension system is more pronounced in Korea than in many other countries due to its fast aging population and increasing costs to support the elderly. The old-age dependency ratio¹, which currently stands at 10.0 percent, is expected to rise rapidly to 18.9 percent in 2020, and 29.8 percent in 2030 (National Statistical Office). Moreover, the traditional system of old-age support within families is on the decline; and this trend will become more amplified over the next few years. Hence, strengthening public pension schemes and promoting the private pension market is one of the most urgent policy issues that Korea currently faces.

Unfortunately, however, the future of Korean public pension schemes is not bright. All four pension schemes – the national pension, government employees pension, military personnel pension, and private school teachers pension – are likely to face financial troubles in the near future. Korean public pension schemes strongly favor early contributors to the point that their benefits are much higher than their actual contributions. This imbalance between low contributions and high benefits makes the whole system financially weak and vulnerable. The military personnel pension has already been in deficit for several decades and the government employees pension is about to follow suit. The imbalance is also aggravating inter-generational equity, as the government has no choice but to either lower the benefit levels of late contributors or raise their insurance premiums to restore financial stability to the system.

The problem is not limited to Korea. Many developed countries have already experienced similar problems because of population aging or slow economic growth. Nonetheless, we can find some successful pension reforms, which overcame political resistance to cut pension benefits or to raise the pensionable age. More recently, some Latin American countries including Chile have privatized their public pensions and many advanced countries are also considering privatization. The World Bank advertises privatization as an unavoidable choice in the 21st century (World Bank, 1994). The

¹ Ratio of persons aged 65 and over to persons aged 15-64.

privatization, however, is not a panacea. Although, it may solve the financial problem, it can also bring about some undesirable side effects. Administrative costs may increase due to excessive competition between private insurers to attract customers (Munnell, 1999). Low-income earners may be left out with little or no pensions due to their insufficient contributions. We should therefore take into full consideration our social circumstances as well as the merits and demerits of each strategy in pursuing pension reform.

For many years, experts in academia have pointed out the structural weakness and financial instability of public pension schemes and the inefficiency in fund management, and pressed for a fundamental reform of the system. But the discussion often became entangled in political disputes among interested parties and the reform did not materialize. If not properly dealt with now, however, the instability is sure to result in greater economic and social burden.

In this context, this paper has two main objectives. First, it describes the current situation of Korea's old-age income security system along with its problems. Second, it presents proposals to improve the income security system in preparation for the 21st century. We argue that the reform measures should be compatible with ever-changing economic and social circumstances as well as being financially sustainable. In addition, excessive reliance on public pension schemes should be avoided and a multi-pillar pension system that incorporates the complementary roles of three parties, namely, the state, private corporations, and individuals, should be set up.

II. Current State and Problems of the Old-Age Income Security System

1. Public Pension Schemes

A. Current State

1) National Pension Scheme

The National Pension Scheme (NPS), covering workers in establishments with 10 or more employees, was implemented in 1988. In 1992, the compulsory coverage was expanded to those firms with 5 or more employees. It was expanded further in 1995 to farmers, fishermen, and the self-employed who reside in rural areas and, finally in April 1999, to the self-employed in urban areas. This rapid expansion of coverage resulted in a sharp – about quadruple – increase in the number of participants from 4,433,000 in 1988 to 16,230,000 in February 2000. However, 5,320,000 persons, approximately one third of the total participants, are exempt from mandatory contribution for various reasons. It would therefore be fair to say that the era of ‘national’ pension has yet to arrive.

Table 1 shows the financial state of the NPS up to 2000. The reserve has been rapidly increasing as coverage expanded and as the contribution rate rose from 3 percent to 9 percent of the payroll. The small number of pension beneficiaries also limited the growth in expenditures. The NPS reserve in 1999 amounted to 45 trillion won, about 9.6 percent of GDP. A tentative figure for 2000 is 55 trillion won.² This increase in the reserve, however, does not guarantee the financial stability of the NPS in the long run. Rather, it merely reflects its early stage of development.

² Ministry of Health and Welfare, *2000 National Pension Fund Management Plan (Draft)*, Sept. 1999.

Table 1. Financial Trends of the National Pension Scheme

(in billion won)

Year	Revenues			Expenditures			Accumulated Reserves
	Total	Contributions	Others ¹⁾	Total	Benefits	Admin. Costs	
1988	528.2	506.9	21.3	0.3	0.3	0	527.9
1989	712.0	627.9	84.1	6.7	5.7	0.9	1,233.3
1990	1,019.3	834.0	185.3	53.8	42.6	11.2	2,198.7
1991	1,279.5	984.8	294.7	150.7	110.9	39.8	3,327.5
1992	1,662.8	1,223.4	439.4	240.0	216.5	23.5	4,750.3
1993	3,222.7	2,639.4	583.4	361.3	333.1	28.2	7,611.8
1994	4,341.5	3,325.7	1,015.7	597.6	519.1	78.5	11,355.7
1995	5,393.5	3,966.3	1,427.2	793.9	755.5	38.4	15,955.4
1996	6,868.7	4,943.6	1,925.2	1,153.2	1,117.6	35.5	21,670.9
1997	8,162.2	5,675.7	2,486.5	1,932.4	1,499.8	432.5	27,900.7
1998	12,119.9	7,840.7	4,279.2	2,486.4	2,425.5	60.9	37,534.3
1999	12,189.9	8,328.2	3,861.7	4,525.9	4,424.6	101.3	45,198.3
2000p	13,298.7	9,105.8	4,192.9	3,465.0	3,354.7	110.3	55,032.0

Note: 1) Returns on investments and other miscellaneous income.

Source: National Pension Corporation, *National Pension Statistical Yearbook*, various issues.

A correct assessment of the long-run financial stability should be based on the difference between the amount of reserves necessary for all future pension payments and the actual balance held by the Pension Corporation, in other words, the volume of net implicit pension debt. The net implicit pension debt was estimated to exceed 120 trillion won as of the end of 1998.³

The financial vulnerability of the NPS stems from its structural imbalance. The initial benefit level was initially set at 70 percent of the lifetime average income for persons with 40 years of contribution. This high level of benefit requires contribution rates of 22-24 percent, which are far above the current level of 9 percent. If this imbalance between contributions and benefits remains intact, the annual benefit payments will exceed the annual contributions by the year 2020 and the fund is likely to be exhausted

³ The estimated volume of net implicit pension debt ranges from 127 trillion won by Kim, Y. H. (1999) to 30 percent of GDP by the World Bank (1999, p.25).

around 2031 (National Pension Reform Board, 1997). To remedy this structural problem, the National Pension Reform Board was formed in 1997. Its members included government officials and private representatives. Partly following their advice, the government amended the National Pension Act in 1998. The average income replacement rate was reduced from 70 percent to 60 percent and the minimum pensionable age was set to increase gradually from 60 to 65. The contribution rate (currently 9 percent) will be adjusted every five years from 2010 on to narrow the gap between contributions and payments.

This parametric reform is expected to help restore the financial sustainability of the NPS in the long run. The National Pension Reform Board estimated that the ratio of the reserves to the annual expenditure would be 9.9 in 2040, 8.8 in 2050 and 8.7 in 2080 (Table 2). But these estimates are based on the assumption that the future contribution rate will be gradually raised upward to reach 19.1 percent in 2025. If the current contribution rate of 9 percent is sustained, the fund is expected to be exhausted by 2040. Raising the contribution rate by more than twice the current level is sure to face resistance from contributors. It may also yield negative effects on employment and productivity growth. Thus, it seems necessary to reconsider the option of reducing the benefit level further as proposed by the National Pension Reform Board.

Table 2. Financial Prospects of the National Pension Scheme

(in trillion won, at 1995 constant prices)

Year	Reserves	Revenues	Expenditures	Reserve ratio ¹⁾ (-fold)	Dependency ratio ²⁾ (%)
1998	38.5	11.9	0.7	54.0	1.7
2000	66.8	16.7	1.4	44.8	3.0
2010	295.6	46.6	11.3	26.1	13.4
2020	758.5	106.2	42.2	17.9	23.8
2030	1,439.9	179.4	111.3	12.9	35.4
2040	1,974.2	240.6	199.0	9.9	43.6
2050	2,332.9	298.8	265.2	8.8	44.1
2060	2,810.4	371.1	316.0	8.9	10.8
2070	3,419.2	458.5	391.1	8.7	41.3
2080	4,204.0	574.0	483.1	8.7	41.1

Note: This table assumes that the average income replacement rate is maintained at 60% and that the contribution rate will be adjusted to keep the NPS in balance (contribution rates: 11.55% in 2010, 14.10% in 2015, 16.60% in 2020, and 19.10% in 2025).

1) Reserve ratio: the ratio of reserves to total expenditures.

2) Dependency ratio: the ratio of the number of pensioners to that of contributors.

Source: National Pension Reform Board (1997).

2) Government Employees Pension Scheme

The Government Employees Pension Scheme (GEPS), the oldest public pension scheme in Korea, was introduced in 1960. The number of participants increased from 237,000 at the time of introduction to 982,000 in 1997. The number is now decreasing (down to 952,000 in 1998) due to the increased layoffs and early retirements prompted by the recent government restructuring. This downward trend is expected to last until the year 2002. Meanwhile, the number of pensioners as a percentage of contributors rose from 0.3 percent in 1980 to 9.4 percent in 1998.

The GEPS has been modified several times during the last 40 years. The initial contribution rate was 4.6 percent, shared equally by the employer (the state) and the employees, and it now stands at 15 percent. The minimum pensionable age was initially set to 60 in 1960 and then abolished in 1962, entitling all retirees to immediate pension benefits regardless of their age. An additional retirement allowance plan was introduced in 1991. The scheme is similar to the severance payment plans provided in the private sector and has been partially (up to 1995), and then fully (since 1996), funded by the government.

An early sign of financial instability of the GEPS surfaced in 1995 when it ran into deficit for the first time in its history. The problem was further aggravated in 1998 when a large number of new retirees (approximately 20,000 more than the average in previous years) sharply increased the benefit payments. The deficit amounted to 1.4 trillion won in 1998 and is estimated to have increased to 2.8 trillion won in 1999.

Table 3. Financial Trends of the Government Employees Pension Scheme

(in billion won)

Year	Revenues					Expenditures			Accum. Reserves
	Total	Contributions by		Gov't Subsidies ¹⁾	Others ²⁾	Total	Benefits	Admin. costs	
		Gov't	Employees						
1988	807.2	262.0	275.2	0	5.8	443.3	442.9	0.4	380.3
1989	916.3	306.4	322.9	0	8.2	515.3	512.6	2.7	1,783.0
1990	1,131.9	379.5	407.5	0	10.3	701.3	695.9	5.4	3,578.6
1991	1,386.7	464.9	485.1	14.2	20.7	891.9	885.1	6.8	4,043.6
1992	1,653.7	536.4	574.4	121.3	13.6	1,179.2	1,171.4	7.8	4,491.8
1993	1,989.9	654.1	655.9	246.8	18.2	1,579.4	1,571.4	8.0	4,900.3
1994	2,276.2	702.6	721.2	307.2	21.0	1,895.7	1,886.3	9.4	5,241.4
1995	2,545.4	758.2	755.6	459.9	25.1	2,594.2	2,584.1	10.1	5,149.5
1996	2,963.1	951.5	950.8	535.8	37.8	2,409.1	2,397.6	11.5	5,680.5
1997	3,328.7	1,030.9	1,012.6	641.0	47.7	2,787.0	2,774.2	12.8	6,201.5
1998	3,652.7	1,009.0	965.4	1,297.3	44.6	5,048.7	5,011.9	36.8	4,784.4

Note: 1) Transfers from the government budget to finance the retirement allowance plan.

2) Returns on investments and other miscellaneous income.

Source: Government Employees Pension Corporation, *Government Employees Pension Statistical Yearbook*, various issues.

The government raised the contribution rate to 13 percent in 1996 and then to 15 percent in 1999. But these measures are far from sufficient to avoid the crisis. The total exhaustion of the fund is foreseen in around 2001 (Moon et al., 1999) and the deficit is likely to skyrocket to 1.8 trillion won in 2005, 6 trillion in 2010, and 31 trillion in 2020 (see Table 4). In fact, due to lack of liquid assets, the GEPS failed to meet its payment obligation in 2000 and had to borrow 1 trillion won from the government. A bigger sum of government support looks inevitable this year.

Table 4. Financial Prospects of the Government Employees Pension Scheme

(in billion won)

Year	Total Expenditure	Revenues		Balance	Reserves
		Total	Contributions		
2000	3,211	2,328	2,281	-883	554
2001	3,895	2,440	2,440	-1,455	0
2002	4,471	2,591	2,591	-1,879	0
2003	4,014	2,809	2,809	-1,204	0
2005	5,256	3,410	3,410	-1,846	0
2010	11,179	5,229	5,229	-5,950	0
2015	21,468	7,295	7,295	-14,174	0
2020	40,915	9,748	9,748	-31,167	0
2030	111,356	16,130	16,130	-95,227	0
2040	193,458	33,274	33,274	-160,184	0
2050	315,214	58,570	58,570	-256,644	0

Source: Moon et al. (1999).

In sum, the GEPS is facing serious financial instability. A short-term factor may be the rapid increase in expenditures due to the recent public sector restructuring. However, the fundamental reason lies in its structural imbalance. The replacement rate of the GEPS is 70 percent of the final monthly wage of the retiree with 30 years of participation. The benefit level is very high compared to the civil servants pension schemes in other countries including the US (CSRS, 56 percent), France (60 percent), and Germany (56 percent). For the last 40 years, the Korean government has been keen to increasing benefits while maintaining the contribution rate at low levels. For example, the minimum pensionable age was set at 60 in 1960, and then abolished shortly after. The abolition is regarded as one of the major causes of the financial instability of the scheme. The government has also continuously expanded the salary base on which the benefits are calculated. The result is unsustainably high benefits and low contributions.

3) Private School Teachers Pension Scheme

The Private School Teachers Pension Scheme (PSTPS) was introduced in 1973 and implemented in 1975, that is, 15 years later than the GEPS. The two schemes are very similar in structure in that both share the same kind of financial problems. The number of pensioners increased from 13 in 1982, seven years after its introduction, to 20,084 in 1999, with an average annual growth rate of 34.6 percent. This increase reflects a rapid aging of the participants. The number of participants in PSTPS increased from 40,347 in 1975 to 207,664 in 1999, with an average annual growth rate of 8 percent. In 1982, only 0.1 percent of the participants had been in the scheme for more than 20 years. But by 1999, their share increased to 17.4 percent. Upon retirement, these pensioners are sure to impose a heavy burden on the finances of the scheme.

So far, the PSTPS has been in surplus as shown in Table 5. Its accumulated reserves amounted to 3.8 trillion won at the end of 1999, which corresponds to about 5.6 times the total expenditure in that year. It is noteworthy, however, that its revenue for the period of 1975-99 grew by 27 percent per annum while its expenditure grew at a much faster rate of 49 percent. If the expenditure continues to increase at this rate, a financial crisis is inevitable. Furthermore, the pension payments as a percentage of contributions increased from 2 percent in 1975 to 49 percent in 1985, and eventually surpassed 100 percent in 1999. Given no structural change, the scheme will suffer a deficit from mid-2020s and its future will be similar to that of the GEPS. Kim Hyun-Kook (1999) estimates that under the current trend, the fund will be completely exhausted by 2016 (see Table 6).

Table 5. Financial Trends of the Private School Teachers Pension Scheme

(in billion won)

Year	Revenues						Expenditures			Accum. Reserves
	Total	Contributions by			Gov't Subsidies	Others ¹⁾	Total	Benefits	Admin. costs	
		Employees	Employers	Gov't						
1975	4.6	2.2	1.4	0.8	0.1	0.1	0.2	0.1	0.1	4.5
1980	42.4	13.4	9.5	3.8	0.4	15.1	6.8	6.4	0.4	98.2
1985	139.7	48.9	23.6	8.9	0.6	57.7	44.2	39.9	3.5	448.2
1990	302.3	95.0	54.7	20.3	0	132.4	112.6	109.5	3.1	1,163.6
1991	343.4	110.4	65.6	24.0	0	143.4	130.4	127.3	3.1	1,364.1
1992	469.0	129.5	77.9	28.4	0	233.3	181.3	176.6	4.7	1,614.2
1993	546.5	148.8	89.2	32.4	0	276.0	209.8	205.0	4.8	1,907.5
1994	635.2	162.3	99.0	35.7	0	338.2	322.1	316.7	5.4	2,170.1
1995	594.9	172.0	106.5	38.2	0	278.2	321.2	316.3	4.9	2,390.5
1996	772.4	218.3	136.2	51.8	0	365.9	341.2	335.6	5.6	2,758.6
1997	889.1	244.1	151.9	56.7	0	436.4	396.7	390.0	6.7	3,190.4
1998	995.7	241.5	151.4	57.1	0	545.6	552.2	545.9	6.3	3,442.8
1999	1,068.3			72.8		682.4	682.4			3,828.7

Note: 1) Returns on investments and other miscellaneous income.

Source: Private School Teachers Pension Corporation, *Private School Teachers Pension Statistical Yearbook*, various issues.**Table 6. Financial Prospects of the Private School Teachers Pension Scheme**

(number of persons, in billion won)

Year	Retirees	Revenues		Expenditures		Accum. Reserves
		Total	Contributions	Total	Benefits	
2000	14,872	880	559	677	650	3,678
2003	14,928	1,175	756	794	759	4,789
2010	18,024	2,020	1,479	2,097	2,053	6,183
2015	20,642	2,324	2,181	4,010	3,966	1,604
2016	21,029	2,352	2,352	4,495	4,451	-539
2020	22,337	3,176	3,176	6,845	6,801	-12,576
2030	23,672	6,518	6,518	14,320	14,276	-74,626
2040	29,669	13,336	13,336	33,530	33,486	-216,474

Source: Kim H.K., *Current Status of the Private School Teachers Pension Scheme*, mimeo, 1999.

4) Military Personnel Pension Scheme

The Military Personnel Pension Scheme (MPPS) started in 1960 as part of the GEPS, then was separated from the latter in 1963. Currently, approximately 150,000 officers are participating in the scheme. The MPPS has a similar structure to that of the GEPS, but there is a notable difference in the participants' average years of service. Whereas the retirement age of civil servants ranges between 55 and 63, most of the military personnel retire much earlier, with shorter periods of contributions and longer periods of benefits. In addition, those who participated in war (e.g. Vietnam War) are credited with two extra years for each year in combat when their contribution periods are calculated.

Due to this feature, payments under the MPPS began in 1961, the same year as the introduction of the scheme. The number of pensioners increased from 5,057 in 1961 to 14,000 in 1975, 25,000 in 1980, 31,000 in 1985, and around 40,000 in 1991. This continuous increase served as a major factor of the scheme's financial instability.

Table 7. Financial Trends of the Military Personnel Pension Scheme

(in billion won)

Year	Revenues					Expenditures			Accum. Reserves
	Total	Contributions by		Gov't Subsidies	Others ¹⁾	Total	Benefits	Admin. costs	
		Gov't	Employees						
1962	0.6	0.4	0.2	0	0	0.5	0.5	0	0.2
1965	0.8	0.4	0.2	0	0.1	0.6	0.5	0	0.3
1970	4.9	2.8	1.9	0	0.2	3.5	3.5	0	1.7
1975	13.3	3.6	3.8	5.3	0.6	9.4	9.4	0	3.8
1980	76.1	11.9	14.1	41.7	8.4	66.0	66.0	0.1	41.7
1985	185.5	27.5	31.9	121.4	4.7	171.1	171.1	0	100.7
1990	406.4	59.1	59.6	271.5	16.2	388.6	388.5	0.1	177.6
1994	825.7	95.1	95.1	596.9	38.5	764.7	764.6	0.1	304.7
1998	942.1	130.6	130.6	537.1	143.8	769.2	769.1	0.1	414.4
1999	1,013.0	158.6	158.6	565.1		1,003.0	1,002.9	0.1	-

Note: 1) Returns on investments and other miscellaneous income.

Source: Ministry of Defense.

In fact, the MPPS has received direct government support since the mid-1970s to make both ends meet as seen in Table 7. The government support amounted to 565.1 billion won in 1999 and is imposing a large burden on the government budget. In 1995, the support accounted for 1.3 percent of the general account expenditure and 5.7 percent of the total defense budget. The annual expenditure exceeded the annual contribution revenue in 1972, and the ratio of the former to the latter increased to 253 percent in 1980, 289 percent in 1985, and 316 percent in 1999. The situation will only worsen in the future unless a radical restructuring of the MPPS is pursued.

B. Problems

1) Structural Imbalance and Financial Vulnerability

As previously discussed, the most serious problem of the public pension schemes lies in the long-term financial instability emanating from the structural imbalance between benefits and contributions. The problem is particularly serious in public occupational pensions – the military personnel pension, government employees pension, and private school teachers pension. The National Pension Scheme will suffer less from financial instability, and may yield fewer deficits per participant. But the deficit of the NPS cannot be ignored because of its much larger size than that of all occupational pension schemes combined.

The NPS and public occupational pension schemes have different benefit formulas (Table 8). The pension benefit formula of the NPS consists of two parts, the basic part and the earnings-related part. The first part is not related to the individual earnings history and the same amount is paid to all beneficiaries, allowing income redistribution among them. Other public occupational pension schemes provide strictly earnings-related benefits.

Table 8. Korea's Public Pension Schemes

		National Pension Scheme	Occupational Pension Schemes
Unit		Individual (Household for self-employed)	Individual
Premium	Contribution rate	Employer: 4.5% Employee: 4.5% Self-employed: 3% (1999) → 9% (2008)	Gov't /Employer: 7.5% Employee: 7.5%
	Contribution base	Ceilings on the base	No ceilings on the base
Benefit Entitlements		<ul style="list-style-type: none"> • Old-age pension: at least 10 years of contribution • Disability pension } more than • Survivor pension } 1 year of contribution 	<ul style="list-style-type: none"> • Retirement pension: 20-33 years of contribution • Lump-sum payment for disability and early death
Old-Age (Retirement) Pension Benefits	Formula	$0.3 \times (\bar{w} + W) \times (n/40)$ <ul style="list-style-type: none"> • Partially earnings-related and has an income redistribution component 	$(0.5 + 0.02n) \times W^*$ <ul style="list-style-type: none"> • Strictly earnings-related
	Base wage	W: Lifetime average wage of the beneficiary \bar{w} : Average wage of the whole contributors in the previous year	W*: Final wage of the beneficiary
	Indexation	Consumer Price Index (CPI)	Wage
	Minimum pensionable age	60 years (to be raised to 65)	Upon retirement
	Payment type	Pension only	The beneficiary can choose between pension and lump sum payment.
	Survivor benefits	60% of the basic pension	70% of the basic pension

The average benefit levels are also different between the NPS and occupational pensions. For example, suppose that two persons with the same 20 years of contribution have participated in different schemes. The person under the NPS will be entitled to a pension corresponding to 30 percent of his/her lifetime average monthly income, whereas the other person under an occupational pension will be paid 50 percent of his/her final pre-retirement monthly income. In addition, the payment will begin right after the retirement for the latter regardless of his/her age, whereas the former should

wait until he/she reaches the minimum pensionable age. Other differences between the NPS and occupational pensions lie in areas such as payment indexation and survivors' pension.

Overall, the benefit levels are higher in occupational pensions. This raises the uncomfortable issue of whether the general taxpayer (including low-income workers), should pay for the benefits of occupational pensioners even though the latter group, as a whole, enjoys higher wages. This inequity is certainly not a desirable feature of any social insurance system. To make occupational pensions financially sustainable and their benefit levels compatible with the NPS, a fundamental overhaul of their benefit/contribution structure is needed.

The NPS is also in need of repair. Its financial stability is not yet guaranteed despite the amendment of the National Pension Act in 1998. Hence, more drastic measures are needed to reduce the benefit level. The National Pension Reform Board recommended that the government lower the replacement rate from 70 percent to 40 percent with a 40-year contribution and a fixed contribution rate of 12 percent. The recommendation, however, was not accepted by the government.

2) Hasty Coverage Expansion

As explained earlier, the NPS expanded its coverage in 1999 to include workers in urban areas. This sudden expansion, with insufficient preparation, left many poor, self-employed and low-income workers outside the pension system. In addition, the horizontal equity between employees and the self-employed was not properly assured due to the technical difficulty in assessing the latter group's correct income level. Incorrect assessment distorts the income redistribution among participants in the NPS. For the period of February-April 1999, the average monthly income of 4,025 self-employed persons in urban areas as reported to the authorities was 842,000 won, which was less than 60 percent of the average income of employees (1,420,000 won). It is clear that most of the self-employed did not declare their incomes honestly. The amount of pension benefits for incumbent pensioners declined because part of it depends on the

average income of all participants.⁴ Consequently, many pensioners expressed their discontent.

The Ministry of Health and Welfare (MOHW) has since increased efforts for correct income assessment. As a result, the average reported income of the self-employed in urban areas gradually increased from 842,000 to 956,000 won by the end of 1999. But their income still remains less than 70 percent of the average income of employees (Table 9). It is also far below the benchmark level suggested by MOHW (Kim, Jin-Soo, 1999).

Table 9. Average Income of Participants in the NPS by Type (1999)

(in thousand won, thousand persons)

	Total	Employees ¹⁾	Other Participants						
			Rural Areas	Urban Areas ²⁾	Type I	Type II	Type III	Type IV	Type V
Number of Persons	10,536	5,226	1,395	3,914	615	831	1,225	606	637
Average Income	1,130	1,386	659	956	1,406	988	838	917	747

Note: 1) Employees in workplaces with 5 or more employees.

2) I : High-income self-employed II : Middle-income self-employed III : Poor self-employed IV : Employees in workplaces with 4 or less employees V : Temporary and daily workers

Source: Ministry of Health and Welfare.

The situation is unlikely to improve within a short period of time because of the deficiency in income assessment mechanisms. The incentives for the self-employed to underreport their income may even increase when the contribution rate rises gradually from 3 percent to 9 percent of earnings. Sharing information with the National Tax Service will be of some help, but the latter's income assessment tools are limited as well. In addition, the increase in irregular employment due to the enhanced flexibility

⁴ The decline in the average income of all participants in 1999 (11.1%) was due to the decline in real income due to the economic crisis (4.0%) as well as the adverse effect of the expansion of coverage to those in urban areas (7.1%). The Ministry of Health and Welfare responded by raising \bar{w} (Table 8) in 1999 (1,130,250 won) to the level in 1998 (1,271,595 won) (MOHW, 2000 *National Pension Payment Adjustment (Draft)*). However, this provisional response cannot solve the distortion in income redistribution.

of the labor market will also complicate the task.

Therefore, a structural reform with a long-term perspective is called for. Some people suggest that the self-employed be separated from the employees and that each pension fund be managed independently. But this cannot be a fundamental solution either. The problem lies in the regressive distribution between honest declarers and the dishonest ones, not between the employees and the self-employed.

Furthermore, many low-income, self-employed persons and temporary and daily workers are left out of the NPS. As seen in Table 10, 4,638 thousand persons, or 54 percent of the 8,624 thousand participants in urban areas, are currently exempt from compulsory contribution. Among these, 3,468,000 are too poor to pay the insurance premium. Many of them will remain excluded from the system or their benefit level will be considerably low due to their relatively short periods of contribution. If this issue is not properly dealt with in the near future, the social safety net under the NPS, excluding those with the greatest need for old-age income security, would be meaningless.

**Table 10. Current State of Participation in the NPS
(as of February 2000)**

(in thousand persons)

	Participants	Persons exempt from contribution		
		Not applicable ¹⁾	Unable to contribute ²⁾	
Workplaces	5,308	-	-	-
Urban	8,624	4,638	1,170	3,468
Rural	2,081	682	171	511
Total	16,230	5,320	1,341	3,979

Note: 1) Those who are excluded from the scheme because they cannot pay the premium, including students and those who joined the military service.

2) Those who defer paying the premium for temporary reasons, including unemployment and business failures.

Source: Lee, S.S., 2000.

3) Inappropriate Levels of Contribution and Benefit

Despite the 1998 amendments, the income replacement rate remains at 60 percent for those with 40-year contributions.⁵ This level is substantially high in comparison with 41 percent in the US, 40 percent in the UK, 50 percent in France, and 40 percent in Canada. The severance payment, when added to the pension benefits, increases the total replacement rate up to 80 percent.⁶ On the other hand, the appropriate post-retirement income is estimated to be 55-70 percent of the pre-retirement income if the retiree is to maintain comparable living standards (Schmitt, 1985).

Reducing the severance payments and converting part of them into pension benefits would be a good way to lessen the duplication of two schemes and to lower the replacement rate to an adequate level. In fact, partial merging of two schemes was planned when the NPS was introduced in 1988, but the plan was discarded unilaterally by the government in the 1998 amendments without sufficient discussion. Merging the NPS with the severance payment system would also make it possible to restrain the growth in labor costs. The NPS contribution is regressive in nature because there are ceilings on the contribution base. It therefore has stronger effects on low-income workers' job opportunities. In many OECD members with relatively inflexible labor markets, the large social security costs are regarded as one of the major causes of the high unemployment rate, in particular amongst low-income, unskilled workers (OECD, 1997).

This non-wage labor cost issue also is emerging as a major point of contention in Korea, where various kinds of social insurance schemes have been recently introduced and expanded. The total contribution rate is approximately 15 percent and the part paid by employers is over 7 percent, similar to the levels in other OECD members. When the cost of corporate severance payment schemes are taken into account (at around 8.3 percent of monthly wages), the employers' burden exceeds 15 percent. It will increase

⁵ The ratio is even higher for low-income workers at over 90%.

⁶ If the mandated severance payments are converted into corporate pension schemes, the income replacement rate reaches around 20 percent for those who have continuously worked at least 30 years (Moon, 1999).

further due to the imminent rise in medical insurance premiums and the more than twofold growth of the NPS contribution rate that is expected over next 25 years. The increased labor cost is likely to serve as a disincentive for employers to hire workers, resulting in a higher unemployment rate.

2. Retirement Allowance Scheme and Corporate Pension Scheme

A. Retirement Allowance Scheme

The severance payment system, or the mandatory retirement allowance scheme, is based on Article 28 of the Labor Standards Act enacted in 1953. It now covers all workplaces with five or more employees. Workers with more than one continuous year of service are entitled to receive, upon retirement, a lump sum payment equivalent to one month of the base salary for each year of service. The base salary is calculated as an average of salaries for three months before retirement.

The current retirement allowance scheme therefore favors relatively high-income workers with a long history of service at one workplace. The scheme does not provide sufficient old-age income security for the majority of workers. Retirement allowances were often used by laid-off workers as living expenses during their job search periods, at least until the unemployment insurance scheme was introduced in 1995.

Box 1. Retirement Allowance Schemes in Other Countries

- Japan: Retirement allowance schemes are in place in more than 90% of all workplaces, despite no legal obligation. Pensions (53%) are more popular than lump-sum payments (47%).
- The US, the UK, and Germany: Voluntary corporate pensions
- France: Mandatory corporate pensions
- Taiwan: Mandatory retirement allowances. For those who continuously worked at least 15 years, the average two monthly wages must be paid for each year of service up to the maximum of 45 monthly wages.
- Singapore: Mandatory retirement allowances. For those who continuously worked at least 5 years, the average monthly wage must be paid for each year of service.

Table 11. Current State of Retirement Allowance Beneficiaries

Year	Workers covered by the scheme ¹⁾	Ratio to the total employees	Ratio to the economically active population	Ratio to the total population
1966	452,951	5.4	5.0	1.5
1970	945,675	9.7	9.3	2.9
1975	1,448,099	12.2	11.7	4.1
1980	2,841,317	20.7	19.7	7.5
1985	3,583,457	23.9	23.0	8.8
1991	5,118,915	27.5	26.8	11.8
1993	5,380,284	27.9	27.1	12.1
1994	5,695,912	28.7	28.0	12.7
1995	6,192,130	30.3	29.7	13.7

Note: 1) Figures prior to 1975 include workplaces with 30 employees or more. Figures include workplaces with 16 employees or more since 1975, and those with 10 employees or more after 1988.

Source: Ministry of Labor, *Survey Report on Establishment Labor Conditions*, various issues; Economic Planning Board, *Major Economic Indicators*, various issues.

B. Corporate Pension Schemes

The amendment of the Labor Standards Act in March 1997 allowed employers to convert their retirement allowance schemes into corporate pension schemes. Insurance companies started selling corporate pensions in April 1999. The differences between corporate pension and traditional retirement insurance are explained in Table 12.

Retirement allowance schemes currently cover only 30 percent of the total economically active population, a much lower level than in the US (50 percent), Japan (39 percent), and France (100 percent), and similar to that in the UK (29 percent). Ninety-eight percent of all workplaces with 30 or more employees have retirement allowance schemes and 25 percent of them have a progressive structure.⁷ The low rates of coverage indicate that it may be too early to discuss the universal introduction of corporate pensions, which are much more costly to employers.

⁷ On average, when computing the retirement allowances, 5 years of service is credited with 6.1 instead of 5 months, 10 years with 13.3 months, 15 years with 21.6 months, 20 years with 30.3 months, 25 years with 39.0 months, and 30 years with 47.7 months.

Table 12. Retirement Insurance vs. Corporate Pension

	Retirement Insurance	Corporate Pension
Main characteristics	- External reserve for retirement allowances - Managed by firms	- Legally allowed to substitute retirement allowances - Managed by individual workers
Payment entitled to	- Employers upon agreement by employees	- Employees
Links to loans	- Often used as collateral for loans to the firm	- Legally protected from being used as collateral or being transferred to other persons
Management agencies	- Life insurance companies, banks	- Insurance companies, trust account in banks, investment and trust companies
Eligible companies	- Firms with 16 or more employees	- Firms with 5 or more employees
Type	- Fixed interest rate (7.5%) only	- Fixed (6.0%) or indexed interest rate
Payment	- Lump sum only	- Lump sum or pension (insurance)
Account	- General account	- Special account (separated from GA)
Insurance premium counted as	- Corporate assets	- Offsetting assets for liability
Legal base	- Corporation Tax Act	- Labor Standards Act

Although there have been continued efforts to promote the introduction of corporate pensions in workplaces, the progress has been quite slow. From the viewpoint of workers, the relative merits of lump-sum retirement allowances and corporate pensions depend on i) the security of benefits and ii) the level of benefits provided by each scheme. The security of benefits is at stake when employers do not respect the Labor Standards Act or misuse the fund for other purposes. But these problems can be solved by guaranteeing retirement allowances for employees, even without introducing corporate pensions. For example, we may strengthen the wage guarantee system or mandate an external management of the reserves. On the other hand, the importance given to the level of benefits will vary across individual workers. For workers in small-sized companies with short history, the security rather than the level of benefits will bear greater importance, and vice versa for workers in large-scaled corporations with longer history. Across-the-board policy suggestions are therefore inadequate to promote corporate pensions.

For employers, the introduction of corporate pension schemes is likely to yield additional burdens, as the reserves should now be managed externally. Employers often use the retirement insurance as collateral for loans and the in-house reserves as working capital for business operation. But these practices are not possible with corporate pensions. The merits of corporate pensions such as the favorable tax treatment given to them and their role as a means of attracting and retaining high-skilled workers are rather limited. As a result, employers tend to show no great appetite for corporate pension schemes.

The main reason why employees do not favor corporate pensions lies in the increased uncertainty faced by them. In a typical corporate pension program, employees have to wait a long period (say 20 years) to receive pensions when they retire early (say at 40). Given high uncertainties about the future, pension rights that accrue far into the future serve as a disincentive for employees to choose corporate pensions. The success of a corporate pension program therefore crucially depends on the certainty with which the benefit is guaranteed to the recipient. In the US, various mechanisms are at work to protect recipients from such uncertainties, including the Pension Benefit Guaranty Corporation. Korea lacks these kinds of security measures, and unless various institutional and legal underpinnings are set up to support corporate pensions, it will be very difficult to expect the employees to welcome such a scheme.

3. Personal Pension Schemes

Since 1994, financial institutions have been selling various kinds of personal pension plans. Because of the large tax favors given to them, after-tax rates of return on personal pensions are very high. Even when a person drops his/her plan after five years of contribution, he/she can get a higher return than on any other financial investment with similar risk characteristics. The market for personal pensions grew rapidly and there has been fierce competition between various financial institutions for market share. In general, personal pension plans provided by banks give loan options to the participants, while those provided by insurance companies have a combined

characteristic of pension and insurance, and those provided by investment trust corporations promise higher returns (of course with higher risks) than banks or insurance companies. For now, most of the plans can be terminated prematurely by participants in the middle of the contribution period. Many people do actually terminate their plans prematurely because they regard personal pensions as a profitable financial investment rather than as a means of securing their old-age income. The excessive tax favors and allowance for premature termination are fostering such an attitude. Without addressing these problems, we cannot expect personal pensions to fulfill their original goal of providing a secure source of income to individuals after retirement.

III. Tasks for the Old-Age Income Security System Reform

1. Restructuring Public Pension Schemes

A. National Pension Scheme

The financial vulnerability of the NPS, the administrative difficulties in assessing the incomes of the self-employed, and a large number of poor people left outside the system requires a more radical and structural – rather than parametric – reform of the NPS. To address the issue, the government established the National Pension Reform Board, consisting of more than thirty experts from both the public and private sectors, under the Social Security Council in June 1996. After quite a few rounds of debates, they proposed a comprehensive reform plan in June 1997.

According to the plan, the lump-sum part and the earnings-related part of the current scheme will be separated from each other and a two-layered system consisting of the basic pension (first layer) and the earnings-related pension (second layer) will be set up. Every Korean national over 18 years of age will be covered by the basic pension plan, leaving no one outside the National Pension Scheme. The amount of the basic pension benefit will be fixed across individuals regardless of one's earnings history and it will be just enough to cover the minimum cost of living. Part of, or the entire revenue for the basic pension, will come from general taxation, which will mitigate the problem of

false income reports.

The earnings-related pension will be managed separately from the basic pension in a fully funded system. This characteristic will help secure the financial stability of the scheme and will reduce the intergenerational transfer from the young to the old. In addition, it will allow those who have corporate pension plans with comparable benefit levels to opt out from the earnings-related pension, thereby promoting the private pension market. Moreover, when reunification finally arrives on the Korean peninsula, the basic pension plan may be quickly expanded to include North Koreans while the earnings-related part is expanded gradually.

**Box 2. Structural Reform Proposals by the National Pension Reform Board
(1997)**

A. The Basic Structure of the New Scheme

The existing scheme should be changed into a two-layered system consisting of a Basic Pension and an Earnings-Related Pension.

- Basic Pension (BP): Every citizen aged between 18 and 60 should be covered by the BP and provided with a defined benefit covering the minimum cost of living. The amount of benefit may depend on the length of contribution. The participant unit may be either individuals or households.
- Earnings-Related Pension (ERP): Only the income-earners will be covered by the ERP. The ERP contributions and benefits will be kept actuarially balanced at all times.

B. Income Redistribution in the New Scheme

The Basic Pension as a definite benefit scheme will contribute to income redistribution. The degree of income redistribution in the current NPS is considered too high and should be reduced to an appropriate level in the new scheme.

C. Revenue Sources

- BP: Part of or the entire premium should be generated from general taxation to overcome the difficulties in income assessment. The current partial funding system should be maintained. The government may set aside a fixed portion of the national tax revenue for the Scheme, or raise the VAT rate and transfer the extra revenue to the Scheme.
- ERP: The current system of earnings-related proportional contribution should be maintained. ERP should be fully funded and actuarially balanced. The management of ERP Fund shall be based on the principle of profitability.

These recommendations by the National Pension Reform Board were not properly

reflected in the amendment in 1998 due to the opposition by the Ministry of Health and Welfare. It is obvious, however, that the more pensioners there are, the greater will be the resistance from vested interests and the less likely will be the reform to succeed. Based on the recommendations of the Board, a reform at a relatively early stage of the scheme is strongly called for.

B. Reform of Public Occupational Pension Schemes

For a radical restructuring of occupational pensions, the increase of contribution rates and reduction of pension benefits is inevitable. To reduce pension benefits, we can resort to various methods, for example by introducing the minimum pensionable age, strengthening the earnings test, or adjusting the benefit formula.

1) Raising Contribution Rates

Raising the contribution rates can help restore the financial health of occupational pensions to a large degree. However, unless accompanied by other measures, raising the contribution rate cannot be a practical solution by itself because the contribution rate would need to rise from the current level of 15 percent to more than 30 percent for civil servants and private school teachers and to 50 percent for military personnel (Moon, 1995). Thus we should focus on reducing benefit levels rather than raising the contribution rates.

2) Introducing the Minimum Pensionable Age

Under the current system of no restriction on the pensionable age, the earlier a person retires, the smaller he/she contributes to the scheme and the more he/she receives from it as pension benefits. For example, the average retirement age for military personnel is 45. Their short contribution period along with their long benefit period of about 30 years is in fact a major cause of the financial instability of the scheme. Most civil servants also retire at a relatively young age of 55 and more than 80 percent of current pensioners are under 60 years of age. In order to reduce the inequity between early and

late retirees and to mitigate the financial pressure, the minimum pensionable age of the occupational pensions should be gradually raised to 60 years, in line with that of the NPS.

3) Strengthening the Means Test

All public pension schemes have a payment suspension system. In this system, pension benefits are reduced or put off when a retiree has a gainful job, for example by being re-employed. Its objective lies in reducing unnecessary financial burdens of pension payments while satisfying the basic needs for old-age income security. In current occupational pensions, the pension payments are reduced by 50 percent for those retirees who get re-employed in the public sector. But if they are re-employed in the private sector or become self-employed, the pension is fully paid. This is not only inequitable but it also hampers the financial sustainability of the scheme. Therefore, it is necessary to extend the payment suspension system to include those who are re-employed in the private sector or those who are self-employed.

4) Adjusting Benefit Formulas

In occupational pensions, the amount of pension benefits depends on the final monthly wage prior to one's retirement and not on an average of lifetime wages as is the case in the NPS. So far as the final wage is larger than the lifetime average wage, this arrangement increases the financial burden of occupational pensions. In addition, the marginal linkage between contributions and benefits is much weaker in this arrangement since lifetime contributions are more accurately reflected in the average wage than in the final wage. Therefore, it is strongly recommended that the benefit formula of the public occupational pension schemes be changed to use the lifetime average wage as the base for benefits.

The method of indexation to protect the real value of pension benefits should be changed as well. While the NPS employs the consumer price index (CPI) for benefit indexation, all occupational pension schemes rely on wage growth for indexation. In

the latter case, pension benefits are influenced more by the changes in labor market conditions or in the wage system, and less by the changes in actual purchasing power. For example, the rapid wage increase for government employees in the late 1980s entailed a rapid increase in pension benefits for those who had already retired, aggravating the financial instability of occupational pensions. As the fundamental objective of indexation lies in preserving the purchasing power of pension payments, indexation should be based on CPI. Such changes will also prevent pension benefits from being adversely affected by, for example, wage moderation due to budget cuts.

5) Linkages among Public Pension Schemes

Government employees and schoolteachers can carry their pension rights when they quit one occupational plan and enter another. But there are no such linkages between the NPS and occupational pensions. For example, when a person moves from the public sector to the private sector, he/she needs to terminate his/her occupational pension plan and start a new NPS plan. The lack of portability of pension rights puts those relatively mobile workers at a disadvantage and discourages translocation between the public and the private sectors. It is therefore important to set up an appropriate linkage between the NPS and occupational pensions. In the short run, we may change the rules so that contribution periods in different schemes over an individual's work history be added up to yield one's total contribution period. He/she may then receive pension benefits based on his/her total contribution period. In the long run, however, there will be a need for a more comprehensive measure. For example, occupational pensions may be changed to have two-layered systems in line with the NPS. Then the basic parts of all schemes may be combined into one universal basic pension plan covering both the public and the private sectors. As for the earnings-related part, occupational pensions may be regarded as "opt-out" schemes.

2. Promoting Corporate Pensions and Linking them to the National Pension

A. Alternative Models

As part of the three-pillar income security system incorporating the state, corporations, and individuals, corporate pensions should be actively promoted. The current lump-sum retirement allowance should be converted into corporate pensions and effectively linked to the NPS. There are three alternative ways to link corporate pensions to the NPS. First, corporate pensions may be introduced independently from the NPS and tax favors provided to corporate pensions. This may be called a *mutually independent model*. An example can be found in the US. Second, a ‘contracting out’ or ‘opting out’ from the earnings-related part of the NPS may be allowed for qualified corporate pensions. This may be called a *partial replacement model*, as can be found in the UK and Japan. Last, public pensions may be totally privatized as with the *complete replacement model*, which has been adopted by Chile, Argentina and other Latin American countries.

1) Independent Corporate Pensions

Independent corporate pensions have no direct linkage to public pensions. In this case, tax favors are given to those qualified corporate pension plans if they satisfy a given set of conditions. The qualification conditions may include the external management of funds, benefits over a certain minimum level, financial stability, and the guarantee for payment. The tax favors may be given at various stages. At the contribution stage, the entire contribution by employers as well as a part of the contribution by employees may be exempted from taxation. At the investment stage, the investment returns on pension assets may also be exempted from taxation. On the other hand, pension benefits may be taxed at the payment stage. But the tax should not be greater than the current tax on the retirement allowance.

Introducing independent corporate pensions is the easiest way to convert existing lump-sum payment schemes into corporate pensions. But it also has weaknesses. First, the

already high rates of income replacement may rise to an even higher level with the introduction of independent corporate pensions. The contribution rates of employers may also rise. The current combined contribution rate of employers starts at 12.8 percent (4.5 percent for the NPS and 8.3 percent for the mandatory retirement allowance scheme) and is expected to rise up to around 20 percent in the future. Additional burden due to corporate pensions is clearly undesirable.

Second, tax favors may not be enough to induce employers to convert existing retirement allowance schemes into corporate pensions. Very few employers save the entire amount of reserves for retirement allowances outside their own companies.⁸ In fact, the reserves are often used as working capital, and even when the reserves are saved outside the company, they are usually used as collateral for loans. With the introduction of corporate pensions, it is impossible to continue these practices. Tax favors, however large they may be, would not make up for the loss of working capital or collateral in most cases.

2) Opt-out

In the partial replacement model, firms with qualified corporate pension plans are allowed to opt out from the earnings-related part of the NPS. In the case of defined benefit plans, qualified corporate pensions refer to those plans that provide similar benefits or require similar contributions to the earnings-related part of the NPS. The opt-out system has been adopted in some countries including Japan and the UK (see Table 13).

⁸ According to a survey conducted in 1992, the average reserve for retirement allowances amounted to only 88% of the accumulated amount of mandatory contributions. And only 8% of these companies saved the total reserves externally.

Table 13. Opt-out Systems in Other Countries

	Japan	UK
Background	<ul style="list-style-type: none"> - In 1965, the Welfare Pension Insurance Act was amended to increase the benefit level (by 40%), resulting in higher insurance premium to be paid by both employers and employees. - In order to reduce the burden of those firms which have corporate pensions, the ‘Welfare Pension Fund’ was introduced in 1986 and these firms were allowed to opt out from the earnings-related part of the Old Age Welfare Pension. 	<ul style="list-style-type: none"> - The opt-out system was introduced to reduce the duplication of the State Earnings-Related Pension Scheme (SERPS) and the corporate pensions. - In 1959, the opt-out was first allowed to those defined benefit plans which provided larger benefits than SERPS. - By the amendment of Social Security Act in 1986, it was expanded to the defined contribution plans as well as to personal pension plans.
Current System	<ul style="list-style-type: none"> - Firms are exempted from the contribution to the Old Age Welfare Pension when their corporate pensions satisfy the following conditions: <ul style="list-style-type: none"> . The corporate pension should be established upon agreement between the employer and the employees and its benefit level should surpass that of the Old Age Welfare Pension; . The firm concerned should have 500 or more employees. . The pension asset should be managed by a life insurance company or a trust bank. . The pension should be fully funded and saved outside the firm. 	<ul style="list-style-type: none"> - Opting out with private pension plans is very popular in the UK. <ul style="list-style-type: none"> . Private pensions cover 75% of workers (corporate pensions 50%, personal pensions 25%), and the SERPS covers only 17%. - To be qualified for opt-out, defined benefit plans should provide larger benefits than SERP, and defined contribution plans should require larger contributions than SERP. - The contribution rates to SERP are reduced for those with qualified plans. <ul style="list-style-type: none"> . For corporate pensions, employers’ rates are reduced by 3% and employees’ by 1.6%. For personal pensions, employers’ rates are reduced by 1.5% and employees’ by 1.6%. * The contribution rates of SERPS range between 2% and 10% for employees and between 3% and 10% for employers.

The opt-out system looks like a better choice than the independent corporate pension scheme in many aspects. The duplication of similar plans (the earnings-related part of the NPS and the corporate pension) can be minimized, with lower replacement rates for retirees and smaller burdens on employers. Employers will also have a greater incentive to introduce corporate pensions, since obligation to contribute to the earnings-related part of the NPS will be negated. The contribution to corporate pensions can be simply diverted from the contribution to retirement allowance reserves.

3) Privatization

The development of the private pension market can be promoted significantly by privatizing the public pension schemes, as is the case in several Latin American countries including Chile and Argentina. In these countries, the whole responsibilities for premium collection, asset management, and benefit payment were handed over from the government to the private sector. The government only concerns itself with enforcing relevant legislation. Privatized corporate pensions are similar to personal pensions in that, in both cases, pension savings accounts (PSAs) are managed by individuals. The only difference lies in the legal enforcement of PSAs in the case of privatized corporate pensions.

The privatization of public pensions began in Chile in 1981, followed by Peru (1993), Columbia (1994), Argentina (1994), Uruguay (1996), Mexico (1997), and Bolivia (1997). Other countries, including the US, the UK, China, Australia, and New Zealand, are also considering the privatization of public pension schemes. In all countries, privatized pensions are financially sustainable because they are run as a fully-funded, defined contribution system. They also contribute to the development of financial markets and to the growth of private savings.

Nonetheless, there are several constraints Korea faces in immediately privatizing public pensions. First, the instability of financial markets can limit the benefit of private management of pension assets. In an extreme case, a person can find upon retirement that his/her PSA has no sizable assets due to the downturn of the market coupled with his/her own mismanagement. In theory, the government has no obligation to guarantee pension benefits, but in reality it is never free from political responsibility for old-age income security. At present, it does not appear that the Korean financial market is stable and transparent enough to support privatized pension schemes.

Second, by restoring the actuarial balance of the scheme, privatization will necessarily entail benefit levels substantially lower than what is currently promised. The political resistance to such changes will not be easy to overcome. Political resistance can also

show up in dealing with the implicit pension debts currently accumulated in the NPS. Without privatization, these debts are to be borne by contributors, while with privatization, they should be borne by taxpayers. The burden in the form of tax is much more transparent than in the form of contribution. Privatization will provoke debate on how and on whom the burden should be imposed.

B. Proposals to Link Corporate Pensions to the National Pension

As mentioned above, the opt-out system may be the most suitable way to introduce corporate pension schemes in Korea and also to link them to the existing national pension.

Both in the UK and Japan, the opt-out systems have been introduced to contain benefits and contributions at appropriate levels (Table 13). The UK can provide a good benchmark for Korea with its long history of corporate pension schemes and its sophisticated institutional mechanism to protect pensioners' rights. Japan may also be considered a good reference point as it has converted the retirement allowance scheme into corporate pension schemes as is foreseen to take place in Korea.

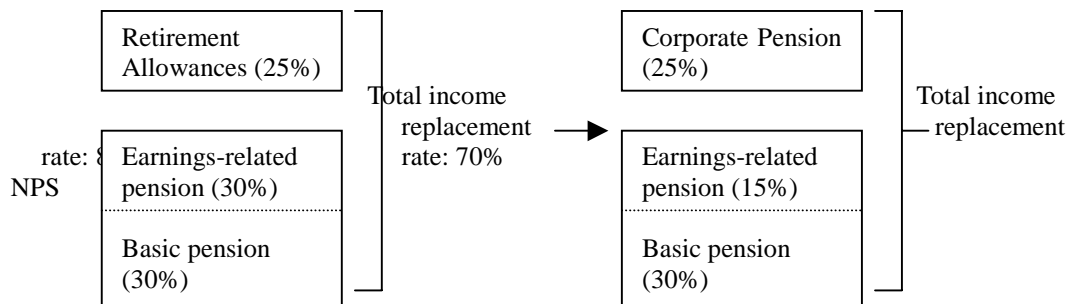
One of the key issues in introducing the opt-out system is to what extent corporate pensions should be allowed to substitute for the earnings-related part of the NPS. The appropriate degree of substitution depends on the particular situation facing each nation. Here, the discussion will assume that the existing NPS will be maintained and that the benefit level of corporate pensions to be introduced will be based on the current contribution level of retirement allowances.

Before determining the degree of substitution, we should first determine the appropriate level of old-age income. Of course, there can be no objective and absolute criteria for the level of income replacement. Nevertheless, the required income for the elderly is generally thought to be smaller than the required income for younger people. This is due to the lower tax burden, savings and expenses of the elderly. In addition, public or corporate pensions need not secure 100 percent of the required income since most

people have personal pensions or other savings.

The appropriate post-retirement income is estimated to be 55-70 percent of pre-retirement income (Schmitt, 1985). But the actual replacement rate for those who have worked at least 40 years is approximately 85 percent, incorporating 60 percent from the NPS and 25 percent from retirement allowances.⁹ Hence, the income replacement rate needs to be reduced by at least 15 percent. Now if we cut the earnings-related pension of the NPS in half, the replacement rate of the NPS declines from 60 percent (30 percent from the earnings-related pension and 30 percent from the basic pension) to 45 percent (15 percent from the earnings-related pension and 30 percent from the basic pension), and the total replacement rate declines from 85 percent to 70 percent. This replacement rate level lies in the upper range of 55-70 percent and is appropriate as suggested above. Therefore, if corporate pensions were to be introduced in place of retirement allowances, it would be desirable to allow corporate pensions to substitute for half of the earnings-related part of the NPS.

Figure 1. Corporate Pensions' Opt-out Case (40 years of contribution)



The contribution rates of the NPS should be reduced for those who opt out (partially) from the earnings-related part of the NPS. If the NPS were actuarially balanced at the contribution rate of 9 percent, then we can simply reduce the rate by one fourth to 6.75 percent. Unfortunately, the current NPS is suffering from a serious imbalance. Restoring the balance requires the contribution rate to be raised gradually to around 20

⁹ These estimates were made under the assumption that mandatory retirement allowances are converted into monthly contribution (8.3% of monthly wage) to the NPS.

percent. Assuming that such an increase is possible and that the NPS will eventually achieve actuarial balance, we suggest that the contribution rate for those who opt out from the NPS be reduced by one fourth.

3. Private Management of the Pension Reserve Fund

The total volume of public pension funds including the National Pension reached 55 trillion won as of 2000. The amount is to skyrocket in the near future; to around 500 trillion won in 2010, 1000 trillion in 2020, and 2000 trillion in 2040 (at 1995 constant prices). The success of public pension schemes will depend on the sound management of this huge reserve, which will also contribute to the development of Korea's financial market as well as the stable growth of the national economy.

Currently, more than two-thirds of the NPS reserve is being used by the government for various government programs. The rest is managed by the National Pension Corporation and is invested in bonds and stocks. But unprofessional management practices partly contributed to the spreading public distrust of the NPS itself. The current government monopoly in the management of NPS reserves will be neither desirable nor possible in the future. Administrative inefficiency caused by lack of expertise and political meddling with the funds would do harm not only to the fund itself but also to the financial market and the national economy. The World Bank points out that no country could successfully manage the pension fund under a government monopoly (World Bank, 1994).

The best alternative would be the contracting-out system with decentralized management of pension reserve by the private sector. Such decentralized management would stimulate competition between private management agencies and contribute to the development of the financial market.

The government has recently acknowledged the need for external fund management and embarked on a pilot project in 2000.¹⁰ The government commissioned four private

¹⁰ Ministry of Health and Welfare, *Pilot Project for External Management of the National Pension*

agencies and entrusted them with 50 billion won each for a period of one year. An External Fund Manager Selection Committee was formed to guarantee the transparency of the selection process, and the Committee then set a rule of diversification as well as investment guidelines for the commissioned agencies.

This pilot project appears to be an important step toward a full-blown external management of the NPS reserves. For the success of the project, however, the amount of reserves entrusted to private agencies should be substantially increased in the future. In addition, the pension reserve should be separately managed from other assets in the management agencies. More importantly, any unnecessary interference in the asset management by the government and the National Pension Corporation should be minimized. Their role should be confined to monitoring the external fund managers' compliance with the rules, evaluating their investment performance, and collecting and analyzing relevant information.

IV. Conclusion

Experts in academia have often criticized the structural weakness and financial vulnerability of public pension schemes as well as the inefficient fund management. Nevertheless, necessary reform measures were not implemented because various parties with differing interests could not reach an agreement. If these problems remain unresolved, they will surely impose great economic and social burdens in the future. This paper has examined the current state and problems of Korea's public pension schemes and also reviewed reform proposals. The main points are summarized below.

First, the current NPS has three basic problems: financial instability stemming from the imbalance between benefits and contributions; lack of coverage for the majority of poor people; and difficulty of assessing the incomes of the self-employed. To solve these problems, a radical restructuring is called for. The two-layered system proposed by the National Pension Reform Board in 1997, but not accepted by the authorities, must be given serious reconsideration. The tax-based basic pension, the first layer of the

Reserve (Draft), 1999.12.

proposed scheme, would solve the second and third problems indicated above. Meanwhile, the fully funded earnings-related pension (the second layer) would improve the financial viability of the NPS and solve the first problem. In moving toward the new scheme, the combined income replacement rate of the NPS and the retirement allowance scheme should be adjusted downward as its current level is deemed too high.

Second, public occupational pension schemes, which are already on the verge of financial crisis, must be restructured radically. If not, these schemes will impose a huge burden on government finances in the future. To make both ends meet, simply increasing the contribution rate would not be sufficient. Rather, measures to lower the benefit level, including the introduction of a minimum pensionable age and the adjustment of the benefit formula, should be implemented. Also, methods to link the NPS and public occupational pension schemes to insure the portability of pension entitlement should be searched for.

Lastly, as part of the multi-pillar income security system comprised of the state, corporations, and individuals, corporate pension schemes should be actively promoted. For this purpose, more incentives to convert the current retirement allowances into corporate pensions should be provided. At the same time, an effective linkage between the NPS and corporate pensions should be set up to avoid the duplication of benefits and reduce labor costs. Allowing firms to opt out from the earnings-related part of the NPS with their own pension plans may be useful in this regard, as experienced in the UK and Japan. While the combined income replacement rate can be kept at an appropriate level in this opt-out system, firms will also have more incentives to convert current retirement allowances into corporate pensions as their burden declines in the opt-out system.

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