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The Past and Future of Korean Pension System: A Proposal for a Coordinated Development of the Public-Private Pensions

By

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Abstract

Korean pension system is at a crossroads. National pension - introduced in 1988 and still young - is facing a question of long-term financial sustainability. It is projected to be depleted by around 2040 even with its recent parametric reform. On the other hand, special occupational pension schemes for civil servants, military personnel and private school teachers have long been in financially weak status. Korean public pension system carries a problem of unviable contribution-benefit imbalance built in its design giving too generous benefit to its first generation participants and leaving too much burden to its next generation. In this paper, a reform proposal is suggested and detailed for a coordinated integration of public-private pension schemes into a viable and modernized multi-pillar system, in which is included a programmed conversion of the current mandatory retirement allowance scheme into a corporate pension system.

Korea

I. Korean Public Pension System: Recent Reform Efforts and Results

1. Korean Pension System: Public and Private Pension Schemes

The National Pension System (NPS) was legislated and mandated in 1988 to be applicable to Korean residents aged 18-60. When first introduced its effective coverage was limited to employed workers at firms with more than 10 employees. Thereafter the coverage was extended to firms employing less than 10 workers (i.e., 5-9 workers in 1992). In 1995, the coverage was further extended to include farmers and fishermen as well as the self-employed in rural areas. In 1999, the self-employed in urban areas as well as workers at small (less than five employees) workplaces are included to the system, thereby establishing a nominally ‘universal’ coverage.

For special occupational groups of workers Korea has 3 independently funded and managed pension schemes: i.e., Special Occupational Pension (SOP) for (1) Public Employees; (2) Private School Teachers and Professors; (3) Military Personnel. For ordinary workers in private enterprises, there is Retirement Allowance Scheme mandated by Labor Standard Law, which could be regarded as a kind of unfunded Defined-Benefit type Corporate Pension (CP). The SOP scheme plays the role of National Pension + RAS in that those under SOP scheme are exempt from National Pension and RAS.

Retirement Allowance Scheme(RAS) is equivalent to corporate pension, which is mandated by Labor Standard Act that is applicable to all employed workers. Employers are obliged to pay RA that amounts to 1 month salary/wage for each year of tenure whenever their employee leaves – whether voluntarily or involuntarily - the firm.

Voluntary personal pension plan was first introduced and sold in 1994. In 2001 Government introduced EET tax treatment policy for personal pension plans being marketed. The table 1-1 below summarizes Korean pension system as of today.

<Table 1-1> Korean Pension System, 2003

<table>
<tr><td>Personal Pension</td><td colspan="3">Personal Pension: Introduced in 1994; Tax-treated (since 2001): E.E.T</td></tr>
<tr><td>Retirement Allowance Scheme</td><td>▪Mandatory(since 1961) for firms with >=5 workers;

▪Minimum 1 month salary per 1 year service (=8.3%)</td><td></td><td rowspan="2">▪Occupational Corporate Pension (1960 for G.E., 1975 for P. T)

▪Contribution Rate = 17% (8.5% = employee, 8.5% = Government / Corporate)

▪Target R.R. = 76% (for 33 year maximum contribution)</td></tr>
<tr><td>National Pension System</td><td colspan="2">▪National Pension Scheme (1988): Partial Funding DB system; Mandatory

▪Pension Benefit = Contribution-based, differentiated by income class (redistributive portion + earnings-related portion), starting at age 60

▪Contribution Rate=9.0%(4.5%=employer, 4.5% on employee)(6% for the Self-employed)

▪T.R.R. =60%(for 40 years contribution, average wage worker)</td></tr>
<tr><td>Pillar / Group</td><td>Employed Workers</td><td>Self-Employed

(including farmers)</td><td>Government Employees (+Military)/ Teachers</td></tr>
</table>

2. National Pension System: Its Reform History and Current State

A. National Pension Reform Board (1988) and Its Reform Proposal

In less than 10 years since the introduction of the national pension system in 1988, the National Pension Reform Board(NPRB) was convened to deal with the then-emerging but inherent issues mainly relating to the sustainability of the current national pension scheme(NPS) system. In particular, the board was commissioned to address such issues as long-term financial sustainability, potential problems associated with the then-planned extension of the coverage (to the urban self-employment sector), efficient management of the fast growing reserve fund, lack of linkages within the public pension schemes(i.e., between the NPS and Special Occupational Pension Schemes (for civil servants, private school teachers, military personnel) and recommend appropriate reform measures.

After more than a year's activity, the NPRB produced a detailed report that included three proposals for the reform of public pension system that the Government would have to review. The three proposals commonly recognized the imminent problem with the system's financial sustainability, which is mainly due to 'the overly generous Government promises'[1], as reflected in its benefit formula, over the initially mandated contribution rates. But they differed substantially in the depth and extent of the reform measures recommended.

- The first proposal advocated a parametric rather than system reform: scaling down of the existing benefit formula and a scheduled increase of contribution rates;
- The second proposal advocated a systemic reform: splitting the scheme into a basic pension and an earnings-related pension, in addition to downward adjustment of the programmed benefit level;
- The third proposal advocated a Chilean pension system in place of the current one: individual account-based Defined Contribution system.

The final recommendation of the majority advocated the second proposal. The core content of the 2nd proposal is as follows:

□ Proposed Changes to the Structure of the NPS

- Split the scheme into a basic pension and an earnings related pension, so that '1 pension per 1 person' and '1 (earnings-related) pension per 1 contributor' could be settled. The basic pension should be an old-age income safety-net scheme with universal coverage, financed by general budget or social security tax. The earnings-related pension should be a fully-funded defined benefit-type pension completely based on individual contribution.

□ Proposed Adjustment to Pension Benefit and Contribution Rates

- Along with the splitting of the system into two parts, pension benefit level should be adjusted. The target replacement level for the average wage worker with full contribution history(40 years) is to be reduced from 70% to 40% to keep the public pension system financially sound and viable, while preventing any

[1] World Bank(2000), "The Korean Pension System at a Crossroads", Report No. 20404-KO, pp. 15

excess increase in the required contribution rate.[2]

- Of the 40% of the total replacement rate, the basic pension will cover about 16%, the earnings-related portion will cover the rest(i.e., about 24%). The basic pension benefit was recommended to be differentiated according to the income level, providing higher replacement rate for the low-income class(ex, 53% for the 1st quintile, 7.1% for the fifth quintile).

- The contribution level is to be maintained at current level(i.e., total 9%) until 2010 and would be eventually raised to about 13% by 2025 for the financial stability to be maintained.

□ Proposed Interim Procedures for Reform

- For the extant participants, old scheme will be applied for the membership period until reform and new scheme will be applied thereafter.

- The cumulated funds are to be proportionally allocated to the basic pension and to the earnings-related pension by ratio (4:3)

B. The Reformed National Pension Scheme

The NPRB recommendations were not accepted. Instead, after public hearings, the Ministry of Health and Welfare submitted, on May, 1998, a new reform proposal, which resembled the much conservative minority view. The recently (2003.12) amended National Pension Act reflects following measures:[3]

▪ The coverage of the National Pension system was extended to the urban self-employed in October, 1998

▪ Gradual, parametric reform option adopted instead of systemic one
- Current unified benefit formula (redistribution + earnings-related portion) to be kept
- An increase in the retirement age from 60 to 61 in 2013 and then scheduled 1 year increase ever five years thereafter up to 65 in 2033.

- A new benefit formula which would generate a 55% replacement rate for an average wage worker for 40 years' contribution for the period 2004-2007, and then down to 50% since 2008 (※ but Government promises that pre-accrued benefit rates under old-formula will be guaranteed)

- A scheduled increase in the contribution rate to 15.90 by the year 2030 starting to increase by 1.38% every five-year

▪ The supervision and management of the pension reserves to be handed over to the Ministry of Health and Welfare from the Ministry of Finance and Economy

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[2] The minority opinion recommended a much higher replacement rate of 50-60% to be financed from higher contribution rates. Some accepted the split between the basic and earnings-related portions while others opted for the unified benefit.

[3] Proceedings of the National Pension Reform Board, 1998.

▪ Elimination of the lump-sum refund of the pension benefit accrued[4]

<Table 1-2> Replacement Rates Applied under Changing Benefit Formula of the NPS

Contribution Period	1988-1998	1999-2003	2004-2007	2008-
Replacement Rate Applied	70%	60%	55%	50%

Minor amendments that made their ways into the revised Act include: (a) minimum contribution period for pension benefit right reduced from 15 to 10years; (b)according partial pension right to the spouse when the couple get divorced after living together more than 5 years; (c) special provision introduced for those who could not participate due to childcare, military service, institutionalization, etc to join the NPS later by paying their deferred contributions.

□ The Pension Benefit Level Targeted

The benefit formula of the NPS has two parts: redistributive part(A) and earnings-related part(B). Given the required contribution rate based on workers' payroll or the declared income of the self-employed, the former redistributes pension income among income-level classes and the latter reflects the participant's earnings (contribution) history. Pension benefit is indexed to consumer price and special tax concessions are also provided.

The 'revised' benefit formula of the reformed NPS is as follows:

National Pension Benefit = Basic Pension * Adjustment Rate + Supplementary Pension
Basic Pension = [0.2(A+0.75B) * P1/P + 0.15(A+B) * P2/P] * (1+0.05 N)

A = Total Participants' 3-year average wage/income reported and taxed prior to benefit entitlements
B = Individual Participant's average wage/income over the entire contribution period
P1= Number of months of contribution for years: 1988-1998
P2= Number of months of contribution since 1999
P = Total number of months contributed to the NPS
N = (Years of Contribution – 20 Years)

Shown below is the target replacement rate according to the reformed NPS, which varies with contribution history(due to B) and income class(due to A)

4 For the participants who retire with less than 10 years' contribution, a lump-sum refund of the pension benefit accrued had been paid.

<Table 1-3> Target Replacement Rate by Contribution History and Income Class

(Unit: %)

Contribution Period -------------------- Income Class	20 years	30 years	40 years
0.25A	0.750	1.000	1.000
0.5A	0.450	0.675	0.900
1.0A (Average)	0.300	0.450	0.600
2.0A	0.225	0.338	0.450
3.0A	0.200	0.300	0.400

Note: Replacement rate = (BPA/Lifetime average income of participant) ×100,
A is average monthly income of all participants

□ Contribution Rates

The basis of contribution is the standard monthly income of the previous year which is determined by dividing the total yearly income declared and reported by 12 excluding any non-taxable income specified in the Income Tax Act. The standard monthly income is then classified into 45 income-class categories which run from the bottom category 1 (220,000 won) to the top category 45 (3,600,000 Won), which is applicable to both workers and the self-employed alike.[5]

The current contribution rate for the employed sector is set at 9% of the standard monthly wage of the participant. The contribution rate had grown gradually from 3% to 6%, then to the current level. The growth of the contribution rates for the employed workers and for the self-employed are shown in <Table 1-4> and <Table 1-5> respectively.

[5] To encourage rural farmers and fishermen to participate, one-thirds of their pension contribution (Won 2,200) is subsidized by the government budget during 1995 and 2004, and also part of administrative costs of National Pension Corporation are being supported by the budget.

<Table 1-4> Contribution Rates for Employed Workers by Period

Participant	Contributor	1988□92	1993□97	1998	1999□
Employed Workers	Total	3%	6%	9%	9%
	Employee	1.5%	2%	3%	4.5%
	Employer	1.5%	2%	3%	4.5%
	Converted from RAS		2%	3%	

<Table 1-5> Contribution Rates for the Self-employed by Period

Year	1995 □1999	1999 □2000	2000. □2001	2001 □2002	2002 □2003	2003 □2004	2004 □2005	2005□ 2009
Contribution Rate	3%	3%	4%	5%	6%	7%	8%	9%

Note: 1. Voluntary self-employed included

3. Current State of the NPS

□ The Coverage

As of the end of the year 2002, about 16.5 million persons, including 6.5 million employed workers and 10 million self-employed & non-employed participants, are participating in the National Pension Scheme. Out of the 10 million self- or non-employed, only about 60% declared and reported their income and made required contributions and the remaining 40% were exempted from contributions.[6] As a result, the number of persons effectively made contributions was only about 12 million persons (less than 70%).

[6] Participants who report 0 income get exempted from contribution to the system and no credit is accorded to their non-contribution period, which keeps the effective coverage rate of the NPS much lower, especially among the self-employed, than initially expected.

〈Table 1-6〉 Number of the National Pension Participants (2002)

(Unit: 1000 persons)

Total	Employed Workers	Self-Employed			Voluntary Participants
		Total	Participants: Income Reported	Participants Exempt from Contribution	
16,498	6,288	10,004	5,765	4,239	206

Source: National Pension Corporation Report (2003)

As of 2002, the number of National Pension beneficiaries is 945(thousand), about 78% of whom received Old-age Pension benefits and the rest received survivor's pension or disability pension. Since the implementation of National Pension Scheme, a total of 7,261,000 persons have received a lump sum refund.

〈Table 1-7〉 Number of National Pension Beneficiaries (2002)

(Unit: 1000 persons)

Total	Old Age Pension	Disability Pension	Survivors' Pension
945	743	32	170

Source: National Pension Corporation Report (2003)

□ The State of the NPS Fund

The total inflow to the National Pension Fund since its inception in 1988, amounted to about 109 trillion Won (as of December 2002): 78 trillion from contribution and 31 trillion from operational profits. The total outflow from the fund amounted to 16.7 trillion Won: 15.9 trillion for benefit payments and 0.8 trillion for administration costs.

<Table 1-8> Income and Expenditure Record of the NPS Fund (Accumulated)

(Unit: 100 million)

Year / Category		‘92	‘95	‘97	‘00	‘2002
Revenues	Total	52,019	181,597	331,906	736,620	1,09,456
	Contributions	41,770	141,085	247,278	523,133	782,003
	Returns from Investment	10,185	40,449	84,543	213,358	313.276
	Others	64	63	85	129	177
Expendit ures	Total	4,516	22,044	49,082	130,468	167,709
	Benefits	3,760	19,836	46,012	125,056	159,901
	Others	756	2,208	3,070	5,412	7,809

Data: National Pension Corporation, National Pension Statistics Annual Report, Each Year, Ministry of Health and Welfare

Management and Investment

As of late 2002, about 62 trillion won (57%) was invested into finance sector while 30 trillion won (28%) to public sector and 526 billion won (0.5%) was allocated to welfare sector. The rest was paid as pension benefit.

<Table 1-9> Investment Portfolio of the NPS Fund: 1988-2000

(Unit: 100M Won, %)

		‘88	‘92	‘96	‘98	‘99	2000	2002
Sector Invested	Total	5,279 (100)	47,503 (100)	216,709 (100)	374,647 (100)	469,922 (100)	606,152 (100)	1,095,455 (100)
	Public Sector	2,880 (54.6)	21,278 (44.8)	146,752 (67.7)	267,951 (71.5)	318,573 (67.8)	345,114 (56.9)	301,988 (27.5)
	Welfare Sector	0 (0.0)	2,400 (5.0)	6,945 (3.2)	14,385 (3.8)	9,899 (2.1)	7,165 (1.2)	5,269 (0.5)
	Finance Sector	2,399 (45.4)	23,825 (50.2)	63,012 (29.1)	92,310 (24.6)	141,450 (30.1)	253,873 (41.9)	620,488 (56.6) 167,708 (15.4) (Benefit)

Data: National Pension Corporation, National Pension Statistics Annual Report, Each Year, Ministry of Health and Welfare

□. Pending Issues with the NPS

(1) Long-term financial instability is still lingering even with the reformed system

- If the current contribution rate 9% is kept unchanged, the NPS is projected to run deficit from 2030 and be depleted by 2047
- The NPS contribution rate shall be ultimately raised above16-18% by 2030
- The expected rapid transition to an aged society will be an another threatening factor to the NPS' future

<Table 1-10> Timing of Transition to an Aging and to an Aged Society by Selected Countries

	Japan	U.S.	U.K.	France	Germany(w)	Sweden	Korea
Aging Society (A)	1970	1945	1930	1865	1930	1890	1999
Aged Society (B)	1996	2020	1975	1980	1975	1975	2022
Years between (A) and (B)	26	75	45	115	45	85	22

<Table 1-11> Population Projections of Korea and NPS Participants: 2000-2070

Population Projections of Korea (1,000 P, %)

Year	Population				NPS		
	Total	>=65(A)	18-64(B)	Depend (A/B)	Participant (C)	Benefit (D)	Depend (D/C)
2002	47,640	3,772	32,164	11.7	16,205	734	4.5
2010	49,594	5,302	33,639	15.8	17,623	2,345	13.3
2020	50,650	7,667	34,358	22.3	17,444	3,971	22.8
2030	50,296	11,604	31,116	37.3	15,663	6,566	41.9
2040	48,204	14,533	26,917	54.0	13,403	9,053	67.5
2050	44,337	15,271	23,355	65.4	11,596	10,268	88.5
2060	39,599	14,330	20,277	70.7	9,748	10,044	103.0
2070	34,961	13,056	17,356	75.2	8,434	9,117	108.1

(2) Inter-Generational Inequity in Contribution and Benefit

- The NPS' gloomy future in its financial status should turn into an excessive burden on the future generation, which in turn would negatively affect the national economy

- The required increase in contribution and reduction in pension benefit, as projected, should be begetting a 'unfair' inter-generational transfer of financial resources

(3) Intra-Generational Inequity due to Imbalance in Contribution between Sectors

- For the NPS containing a re-distributive element in the benefit formula, transparency in income assessment and report is a must for a fair share of the cost and benefit among participants

- The extended coverage of the NPS incorporated more than 10 million new potential participants from the urban self-employed sector. But only about 60% of them are found to be actively participating and contributing to the NPS. The rest of them are all classified as 'exempt' for contribution (due to unemployment, working but no income, economically inactive, etc.)

- If the problem of system avoidance, income underreport or no report is not to be much improved in the near future, this between-sector imbalance problem will be turned into a 'unfair' intra-generational inequity between the employed(where income exposure and report is almost 100%) and the self-employed sector[7]

<Table 1-12> The Proportion of the Urban Self-Employed by Income Report and Contribution Status

(unit, 1000 persons, %)

	Participants	(%)	Income Reported	(%)	Contribution Exempt	(%)
4/1999	8,839	100	4,025	45.4	4,813	54.5
12/1999	8,739	100	3,914	44.8	4,825	55.2
12/2000	8,581	100	4,538	54.1	3,843	45.9
12/2001	8,132	100	4,355	53.6	3,777	46.4
12/2002	10,051	100	5,812	57.6	4,239	42.2

(4) A Low Effective Participation Rate and Large Proportion Eventually Out of the System

- A large proportion of the self-employed, workers at small firms, and women are not actively participating nor contributing to the NPS
- A considerable proportion of the active participants would fail to satisfy the minimum contribution period(10 years) given the relatively large number of workers self-employed and working in the SME sector
- There are large differences in participation rate and contribution level between adult men and women: a large proportion of the eligible women would end up with a very poor pension benefit when they get old
- A rough estimation hints us that no less than 35% of the old-aged Koreans in year 2008 will be out of the NPS benefit

[7] As of December, 1999, the average reported income of the self-employed participants was about 1 million Won as compared to about 1.7 million Won reported by the employed participants

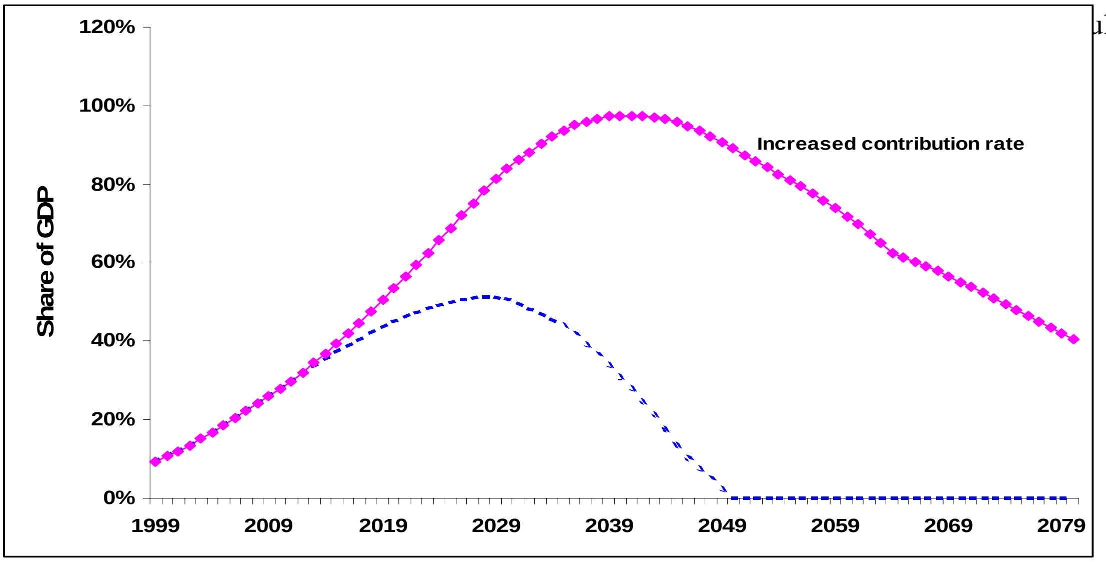
(5) A Large Gap between the Target and Effective Level of Pension Benefit

- The target income replacement rate of the NPS for the average wage workers is 60% for 40 year's continuous contribution
- Contribution to the NPS occurs only when the participants are working with income
- There are numerous negative factors within Korean economy and industry that work against the participants' good contribution history and good pension benefits accrued: (a) relatively late entry into the labor market with full-time work (at age 27-30 for men who should spend 1-3 years in mandatory service in army), (b) large number of involuntary early retirement (at age 45-55), and (c) high turn-over rate and short average tenure especially in the SME sector which takes up more than 90% of the total employment
- Only a very small proportion of the participants would be lucky enough to be continuously working with a job for 40 years; most of them would be end up working less than 30 years

(6) A Large Size of the NPS fund Being Accumulated and Its Management Issue

- The NPS is being operated as a partially funded system. The fund will keep growing for 20-30 years from now
- It is projected that the NPS reserves would grow as large as 50%-100% - a figure unprecedented in the international history of the public pension fund – depending on the rate of contribution increases
- The sheer size of the cumulating fund is threatening, whether it is invested in SOC or in equity market or public bond
- This would obviously raise important questions about the role of the NPS in the capital market, corporate governance and potential conflicts of interest for the Government in its role as institutional investor and the regulator of industry and financial markets (World Bank, 2000, p.20)

<Figure 1-1> Projected Accumulation of NPS Reserves, 1999-2080



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Notes: Bank staff calculations assuming gradual increase in contribution rate to 17.25 by 2033. Rate of return on investments of NPS reserves assumed equal to GDP growth. Cited from World Bank (2000)

<Table 1-13> Projections for NPS Fund : 2002-2050 (unit: billon won)

Year	Fund Cumulated	Revenue	Expenditure	Balance	Saved (%)
2002	92,798	19,513	2,210	17,303	34.2
2005	160,396	29,687	4,219	25,468	32.0
2010	328,694	50,080	11,094	38,986	26.1
2015	571,775	74,678	19,091	55,587	27.0
2020	908,028	109,073	35,010	74,064	23.8
2025	1,256,246	135,186	64,936	70,250	18.3
2030	1,581,638	170,648	111,103	59,544	13.7
2035	1,715,359	186,032	181,177	4,855	9.4
2036	1,702,972	189,069	201,456	-12,387	8.5
2040	1,447,808	191,224	289,188	-97,964	5.3
2045	526,472	164,768	414,321	-249,553	1.9
2047	-96,159	139,326	473,542	-334,216	0.5
2050	-	154,610	561,966	-407,356	-

4. Special Occupational Pension Schemes

A. History

The Special Occupational Pension (SOP) Scheme refers to the public pension scheme for three special occupational groups: (a)Government Employees (+ Public School Teachers), (b)Military Personnel, (c)Private School Teachers. These SOPs are introduced far ahead of the NPS.

The Government Employees' Pension was established in January 1960 as the first public pension scheme in Korea by the Government Employee's Pension Act. The number of civil servants covered by the act quadrupled from 237,500 in 1960 to 913,900 in late 1999. The public pension scheme for military personnel was launched at the same time with the Government Employees' Pension but its administration has been entrusted to the Ministry of National Defense since 1963. The number of participants covered by the Military Personnel Pension has increased from 117,000 in 1963 to 154,000 in 1998. The occupational pension scheme for private school teachers was launched in 1975 and now covers about 207,700 members.

These SOP schemes are all defined benefit schemes that guarantee a maximum 76% of the final 3-year average salary (for minimum, 20-year, maximum 33-year contribution). For the government employees, a special retirement allowance that amounts to variable percentage (10%-60%) of the monthly salary, depending on the length of service, is accrued for each year of service, payable in lump-sum at the time of retirement.

The contribution rates for the SOP schemes for Government employees are currently set at 17%: 8.5% by the employee, 8.5% by the Government. The contribution rate for the SOP for private school teachers is also 17%: 8.5% by the employee, 5% by the corporate, 3.5% by the Government.

<Table 1-14> History of the Contribution Rates for Government Employee's Pension

	1960	1970	1996	1999	2001
Employee	2.3%	5.5%	6.5%	7.5%	8.5%
Government	2.3%	5.5%	6.5%	7.5%	8.5%

<Table 1-15> History of the Contribution Rates for the Private School Teacher's Pension

	1975-1995	1996-1998	1999-2000	2001-
Employee	5.5%	6.5%	7.5%	8.5%
Corporate	3.5%	4.0%	4.5%	5.0%
Government	2.0%	2.5%	3.0%	3.5%

B. Current Financial Status of the SOPs

The SOP schemes are all suffering from serious under-funding. The Government employee's scheme has already turned deficit (contribution income < pension benefit paid) as of 1998 and is financially depleted in 2001.[8] The size of the under-funding is projected to be rapidly increasing from 6 trillion by 2010 to 31 trillion by 2020 to 91 trillion by 2030. The SOP for the military personnel is worse: the fund was depleted way ago in 1977 and has been subsidized by the Government budget. The state of the SOP for the private school teachers is a little better than the other two, but it is also projected to run deficit in 2012 and be depleted in 2018 if the current scheme continues.

This severe financing problem common to all 3 SOP schemes is simply due to initially an actuarially poor design and failure to reform the system at the right time thereafter. It is projected that, to meet the current pension promises, the contribution rate should be raised eventually up to 30-35% , which would entail an excessive financial burden to be imposed on the future generation and an increasing government subsidy.

C. Recent Reform Efforts

To improve the financial status of the 3 SOPs, three related Acts - Government Employees Pension Act, Private School Teachers Pension Act, and Military Personnel Pension Act, were amended in December 2000 as follows.

- The contribution rate is raised from 15% to 17%;
- The benefit entitlement rule is reinforced from entitlement based minimum (20) years of contribution to that based on minimum retirement age (currently 50, shall be raised by 1 year in every other year) plus minimum years of contribution.[9]
- The pension benefits will be price-indexed instead of wage-indexed.

5. The Public-Private Pension Reform Task Force (1999)

In the midst of the financial crisis and in the context of Structural Adjustment Loans(SALI, II), the World Bank and the Korean government agreed to take a critical look at the public and private pension system and to draft a white paper on pension reform. In accordance, the Government established a new Pension Reform Task Force at the end of 1998. In the White Paper, the Task Force was commissioned to outline an integrated pension reform strategy, which could serve as the reference for new legislation. The major issues to be addressed included:

▪ Appropriate level of pension benefit and required but affordable contribution rates
▪ An efficient and viable division of role between public and private pension for old-age income security

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[8] The required amount that the Government should be making up for the SOP scheme is estimated to exceed 5 percent of the total budget earmarked for wages for the next five years and to reach the region of 8% thereafter (Choi, 2001).

[9] But, the Government workers employed prior to 1995 will be exempt from these changes in the benefit entitlement rule.

- A reform strategy for existing retirement allowance scheme: especially conversion to funded pension system
- Integration of the occupational schemes with the NPS
- A reform strategy for the SOP: especially long-term financing

The Task Force prepared and issued a White Paper at the end of 2000. In the White Paper, issues relating to the public pensions and their long-term financing were addressed in some depth but without any detailed, practical reform measures. Three macro-level reform models for the public-private pension scheme were suggested. But the basic ideas and reform options suggested did not show much improvement beyond and above those by the NPRB in 2 years ago. The paper also failed to deliver any detailed reform strategies for the retirement allowance scheme, even though it was critical for the first and the most important issue (i.e., the division of role between the public-private pension for old-age income security) to be addressed in due manner.

The major points and recommendations for reform made by the Task Force can be summarized as follows:

First, the Task force considered what would be the appropriate contribution rate for the National Pension Scheme that ensures its long term financial sustainability and that is affordable, at the same time, for participants. The majority of members considered that 15% would be the maximum contribution rate, although the minority view was that the contribution rate should be capped at 10% and any further financial burden should be borne by the Government.

Second, the Task Force deliberated the division of role to be played by public and private pension schemes for old age income security. Majority view was that private pensions should weigh in and play a larger role to make the public pension less loaded and more sustainable, while the minority view maintained that the current system with the public pension playing a leading role desirable. But the Task force was unanimous in viewing that the target benefit level of the NPS should be adjusted downward and the resulting gap in old-age income should be met by private pensions such as corporate pension scheme.

Third, the task force unanimously recommended that the existing retirement allowance system should be converted to corporate pension to constitute a multi-pillar system with the NPS and personal pension.

Fourth, the issue of portability between public pensions (the NPS and Special Occupational Pensions) was seriously considered by the Task Force, whose majority view was that unconstrained portability between public pensions should be definitely arranged in an appropriate way. One solution recommended was to incorporate part of the occupational pensions into the NPS and to convert the remaining part into a system like corporate pension.

The reform models proposed by the Task Force can be described as follows:

(1) Reform Option A: Partial Parametric Reform

The basic idea of the reform option A is to keep the original framework of the current system and instead to undertake parametric reforms to improve the public pension's financial status. Under this option, the level of pension benefit will be adjusted downward and the contribution rate will be adjusted upward.

<Table 1-16> Public-Private Pension Model (Reform Option A)

<table>
<tr><td>Personal Pension</td><td rowspan="3">Personal Pension</td><td colspan="2">Personal Pension</td></tr>
<tr><td>Supplementary CP (15%)</td><td>Supplementary SOP (20%)</td><td>Supplementary SOP (20%)</td></tr>
<tr><td>Corporate Pension(20%)</td><td rowspan="2">Government Employees' Pension (80%)</td><td rowspan="2">Private School Teachers Pension (80%)</td></tr>
<tr><td colspan="2">National Pension Scheme (60%)</td></tr>
<tr><td>Employees</td><td>Self-employed</td><td colspan="2">Participants in the SOP</td></tr>
</table>

Reform Measures for National Pension Scheme

- The income distribution functions will be maintained;
- The pensionable age will be automatically adjusted to life expectancy increases
- Contribution credit will be granted to the unemployed, poor, students, and soldiers to facilitate their pension rights
- The upward adjustment of contribution rate on gradual basis to 15.24% (then financial deficit will not occur until 2080 and the size of reserve fund will be 6.4 times of the expected expenditures).

Reform Measures for Special Occupational Pensions

- The SOPs will continue as separate pension schemes, independent from the NPS
- The pension benefit should be based on the average lifetime income instead of the final salary
- The current contribution rate of 17% should be gradually increased to 20% by 2005, of which 8% should be paid by the participant and the rest by the Government

(2) Reform Option B: NPS as a basic pension and the CP/new SOP as the second pillar

The basic idea of the reform option B is to reform and integrate part of the SOP into the reduced NPS as a base pension for all pension groups. The remaining part of the SOP will be reformed into a new SOP similar to the corporate pension which is proposed to take place of the RAS.

<Table 1-17> Public-Private Pension Model (Reform Option B)

<table>
<tr><td>Personal Pensions</td><td rowspan="2">Personal Pension</td><td>Personal Pension</td></tr>
<tr><td>Supplementary CP</td><td>Supplementary SOP</td></tr>
<tr><td>Mandatory Corporate Pension (20 –25%)</td><td>Individual Retirement Account (IRA) Pension</td><td>New SOP (20 –25%)</td></tr>
<tr><td colspan="3">National Pension Scheme (single 45%, Couple 50%)</td></tr>
<tr><td>Employees</td><td>Self-employed</td><td>Participants in SOP</td></tr>
</table>

Note: Replacement rates for 40 years service in bracket.

Reform Measure for National Pension Scheme

▪ The current replacement rate of 60% of NPS will be adjusted downward to 45% for single and 50% for couple by gradually reducing the rate between 2006 and 2030

▪ The total replaced rate by the NPS and the to-be mandatory corporate pension combined will be about 70%

▪ The contribution credit will be granted to those unemployed, low income earners, and those in military service, men in maternal leave for child birth and care

▪ The contribution rate should be gradually raised from 9% to 15.24% between 2010-2030 to secure a long-term financial stability

Reform Measures for the Special Occupational Pensions

▪ The SOP scheme should be split into two parts; one part to be converted to the NPS (first pillar) and the remaining part to be reformed into a new SOP (second pillar)

▪ The new SOP shall be operated as a notional defined contribution (NDC) scheme

▪ The Government will be solely responsible to contribute 6% to the new SOP and its replacement rate will be at the similar level with the corporate pension scheme

(3) Reform Option C: Conversion to a Two-Tiered NPS

The basic idea of the reform option C is to split the NPS into two tiers: a Basic Pension and an Earnings-related Pension, which will be financed separately. The first tier basic pension shall be a universal, minimum pension covering literally all population groups, thereby achieving “one pension for one person”. The second-tier earnings-related pension shall be a fully-funded, DB scheme and the pension benefit will be 100% contribution-based. The SOP scheme should also be reformed so that the participants of the SOP scheme could join the first tier basic pension and that new SOP scheme could be set-up as a reduced earnings-related DB scheme. Corporate pension will be introduced but remain as a voluntary system for a while, which means that conversion of the RAS into corporate pension should be left to the discretion of the company concerned.

<Table 1-18> Public-Private Pension Model (Option C)

<table>
<tr><td>Personal Pension</td><td rowspan="2">Personal Pension</td><td>Personal Pension</td></tr>
<tr><td>Earnings related NPS (20%)</td><td>Special Occupational Pensions</td></tr>
<tr><td colspan="3">Basic NPS (Single 20%, Couple 40%)</td></tr>
<tr><td>Employees</td><td>Self-employed</td><td>Participants in the SOP</td></tr>
</table>

Reform of National Pension System

▪ The basic NPS will be operated as a tax-based PAYG scheme with the target replacement rate set at 20% of the average income of all participants
▪ The earnings-related NPS will be operated as a fully funded DB scheme with the target replacement rate set at of 20% of the participant's average lifetime income
▪ The contribution rate for the basic pension should be around 1.9% in 2001, 2.7% in 2020, 8.4% in 2040 and 10.5% in 2080
▪ The contribution rate for the earnings-related pension will be around 6%

Reform of Public Occupational Pension

▪ The SOP schemes will be split into two: a basic NPS and a new SOP
▪ Contribution rate will be adjusted upward to 21%
▪ Pension benefit will be paid as a defined benefit based on the average life-time income indexed to price

□ Another reform option (D), which intends to consolidate the 3 options into one, was proposed, but is not presented here because its basic structure is not much different from the option B.

II. Korean Retirement Allowance Scheme: Its Past and Future Tasks

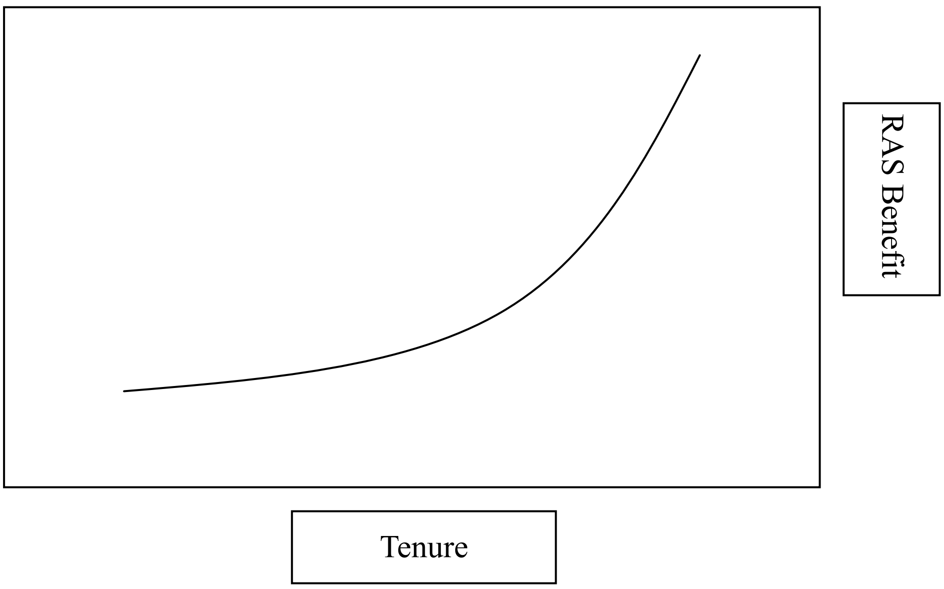
1. The Retirement Allowance Scheme

Retirement allowance scheme(RAS) is one of the oldest income security measures in Korea. It is based on the Labor Standard law, which mandates employers to specify retirement allowance plan either in employment contract or in collective agreement and to pay retirement allowance which amounts to minimum one-month salary(wage) per 1 year tenure (about 8.3% of the payroll) when the worker leaves or is laid off from the firm. Being stipulated as one of the articles that pertain to labor standards, the RAS has been regulated and supervised very loosely for a long period of time and largely unfunded as the majority of the plans are on book reserve state. No formal government intervention occurred until public concerns for the high risk of default imbedded in the largely unfunded scheme was heightened with the advent of the economic crisis and large scale bankruptcies as a consequence.

As such, the first and foremost reform measure to be taken for the RAS should be converting the scheme into an externally funded system, which should be further developed into corporate pensions.

The RAS benefit, as it is stipulated in the Labor Standards, is subject to individual wage growth inside the firm until termination of employment contract, which should compete interest/return rate outside the firm. Even though most of the RAS at Korean firms are unfunded or under-funded so far, workers, under the current RAS act (i.e., Labor Standard Act), have been effectively benefited from high wage growth last couple of decades (more than 10%) as long as their retirement allowances are concerned.

<Figure 2-1> Tenure-RAS Benefit



Accelerating rates of growth of wage and RAS benefit over tenure period especially in large firms under age-and tenure-based wage system have been exerting a threatening effect on employers as it keeps raising the cost of keeping old long-tenured employees. That cost factor explains, as it is well observed, much of the recent labor market phenomenon of massive dismissal of old-aged workers from large firms in Korea. That is, RAS benefit, while it is very generous, has affected employment stability of old-aged workers very negatively.

2. Task of Converting Retirement Allowances into Corporate Pensions

The World Banks' White Paper on Korean pension reform(World bank, 2000) recommended a gradual transition to a funded scheme by amortizing past accrued liabilities of the firms concerned following the U.S. case in the mid-1970s after the ERISA passed. Obviously, the transition process should be coordinated with setting up regulation rules. Especially, when the corporate pension is designed to be a DB scheme, then, the above mentioned amortization arrangements should be specified in line with the funding rules to be set-up. The World Bank also recommended that, in addition to defined benefit(DB) regulations, step two of the reform should be setting the rules for a defined contribution(DC) scheme in a way that fulfills the existing mandate of the RAS.

During 2000-2001, in the midst of heightened public interest and attention on corporate pension as a more 'desirable and efficient' alternative to the RAS for workers' old-age income security, the KLI launched a long-term research project and formed a expert's forum, funded by the Ministry of Labor, to take a critical look at the current state of the RAS and to come up with policy recommendations for the RAS reform to be implemented.

In the first year, the research project was focused on appropriate ways and procedures for transition to corporate pension scheme that minimizes the transition costs. Main concerns and considerations were on how to protect the vested interests of workers in the existing system, what would be the type of corporate pension that would be acceptable to employers while fulfilling the Labor Standard's mandates, what would be the right form of corporate pension what would run smooth in the financial and institutional context of the Korean economy and industrial relations.

In the second year, the research project was focused on specifying, in more detail, the type and content of the corporate pension that could meet the concerns and considerations laid out in the first year's project and that could be successfully implemented after 2-3 years' preparation. The second year's report also included a chapter that drafts tentative corporate pension law to be legislated.

3. Reform Options for the Korean Retirement Allowance System

The results of the 1st year's research project can be summarized in 3 alternative procedures and models for transition from the RAS to corporate pension. Here below, I describe those 3 transition models.

The first option is a (1)System Conversion Model through which voluntary corporate pension plans are introduced as a supplement to the current retirement allowance system, and mandating it by law afterwards. The second is an (2)Inter-generational Transition Model under which current system is maintained for currently employed workers, while introducing a corporate pension system for new entrants. The third is a more fundamental and long-term reform model that seeks to build a (3)Multi-Pillar System for old-age income security by linking the earnings-related part of the NPS to the corporate pension to be instituted.[10] In order for any of the transition models to be effectively implemented, conversion of the unfunded RAS to a funded scheme is a prerequisite.

(1) Transition Model I : System Transition Model: Retirement Allowance Scheme → voluntary corporate pension plan → mandatory corporate pension plans

〈Table 2-1〉 System Transition Model : RAS □ Corporate Pension

<table>
<tr><td rowspan="2">Retirement allowance system □</td><td>Retirement allowance system</td><td>Retirement allowance system</td><td rowspan="2">□ Corporate Pension</td></tr>
<tr><td>Voluntary corporate pension</td><td>Qualified corporate pension</td></tr>
</table>

In order to switch to the corporate pension system via the system transition model, a qualified pension plan is recommended as a stepping stone (see the US and Japanese experience for reference). In other words, discriminatory tax treatments are applied to voluntary corporate pension plans, and only qualified ones would receive tax benefits. This would facilitate the transition to a mandatory pension plan, so that ultimately it could replace the retirement allowance system.

The plan could be either a defined benefit or a defined contribution plan. On the condition that the plan guarantees about the same level of benefit by the current retirement allowance scheme, the new plan should be recognized as one that can substitute the retirement allowance system. This way, employees will have a broader choice of plan options (e.g. ESOPs, stock options).

(2) Transition Model II : Introduction of Mandatory Corporate Pension through Inter-generational Transition Model

Transition Model II-A aims to replace current retirement allowance system with corporate pension scheme at one point in time, which will be compulsorily applied to new members of the labor market. But for the existing workers, the same RAS will be applied, even though they would be allowed to switch to the new system.

[10] The three transition models, while mutually exclusive, can be pursued simultaneously. For instance, the first model serves as a basis for the introduction of the following two, and the third model can be implemented in conjunction with the other models. However, I will explicate each of the models on the assumption that each will be pursued separately and independently of one another.

〈Table 2-2〉 Inter-generational Transition Model II-A

Retirement Allowance system (Current Working Generation)	
	Mandatory Corporate Pension Plans (New Working Generation)

(B) Transition Model II-B

Unlike the drastic transition Model II-A, Model II-B suggests a long-term gradual transition from the RAS to corporate pension through contribution conversion. Under the plan, a gradually increasing portion of the legally required retirement allowances will be transferred into corporate pension. Korea can refer to the case of Australia (Superannuation introduced in 1991). At the first stage, even though the marginal operational cost of private pension system should be taken into account in setting the initial conversion rate, it can start with 2-3.0%, and then be periodically raised (ex: 1st stage: 2.0-3.0% =>2nd stage: 4.0% => 3rd stage: 6.0% => 4th stage: 8.0%)

<Table 2-3〉 Gradual Transition Model II-B through Contribution Conversion

Retirement Allowance	Retirement Allowance	Retirement Allowance	Corporate Pension (DB,DC)
Contribution to Corporate Pension (DB, DC)	Contribution to Corporate Pension (DB, DC)	Contribution to Corporate Pension (DB, DC)	
2.0% (by 2003)	4.0% (by 2005)	6.0% (by 2007)	8.0% (by 2009)

(3) Transition Model III : Transition Model through Contract-Out of Public Pension

This model aims to reduce the burden of the NPS on a gradual basis while increasing the role of corporate pension, which is a worldwide trend in pension reform. This model is also in line with the structural reform plan proposed in the World Bank's white paper on Korean Pension Reform.

〈Table 2-4〉 Transition Model Linking Public Pension to Private Pension

<table>
<tr><td colspan="2" rowspan="2">Private Pension</td><td rowspan="4">□
□</td><td>Private Pension</td></tr>
<tr><td rowspan="2">Partial Advance Withdrawal
(allowed?)</td></tr>
<tr><td colspan="2" rowspan="2">Legally-set Retirement Allowance</td></tr>
<tr><td>Corporate Pension
(from Retirement Allowance)</td></tr>
<tr><td rowspan="2">Nati-
onal
Pens-
ion</td><td>Earnings –related Component</td><td rowspan="2"></td><td>Corporate Pension
(Contracted Out)</td></tr>
<tr><td>Basic Protection (redistributive) Component</td><td>Basic Pension</td></tr>
</table>

4. Korean ERISA(e Employee Retirement Income Security Act) Drafted

- Based on KLI reports(Phang et al., 2001, 2002, 2003), Korean Ministry of Labor could draft an act, ‘Employee Retirement Income Security Act’, adopting the title of the U.S.A.’s act, ERISA. Korean EISA will be submitted to the General Assembly this fall, 2004.

- Adopting the transition model A(System Transition Model) recommended by the KLI committee, MOL wants to introduce new Corporate Pension(CP) plans with which employers could replace current RAS on a voluntary basis. The type of CP plan could be either Defined Benefit plan or Defined Contribution plan, which means that employers hereafter could choose between RAS and CP(DB or DC plan). In addition, for employers with less than 30 employees are allowed to set up IRA(Individual Retirement Account) plan in place of RAS if they find setting up and managing DB/DC plan costly. It is required that when employers make a decision on choice of retirement plan, they should consult the representative body of their employees (i.e., labor union) and secure their consent.

- It is also stipulated that, regardless of the type of retirement plan adopted, the final benefit level accorded or promised should be no less than that of the current RAS (= average monthly wage before termination)*(number of tenure months/12).

A. Defined Benefit Retirement Plan

(1)The DB plan, as it is described in the draft act, is not like the classical DB plan as it is known, but a pseudo-DB plan in that it is actually a revised RAS Insurance plan (introduced in 1999), a kind of outside deposit vehicle for unfunded RAS liabilities.

(2)So, the minimum level of funding is not stipulated by the law but allowed to be negotiated between employer and employees ‘taking the company’s business condition into account’.

(3)Under the DB plan, clear statement of benefit entitlements should be included in the plan contract including the type and method of benefit payments.

(4) The level of benefit promised under the plan should be actuarially equivalent to or no less than the final RA payment under current mandatory RAS (- which makes conventional design of DB plan very difficult)

(5) Benefits could be disbursed at the end of contract either in lump-sum or in annuity (* plan holders with more than 10 years' participation and aged 55 are recommended to buy annuity and get tax-treatment)

B. Defined Contribution Retirement Plan

(1)Employers who install DC plan instead of RAS should contribute no less than 8.3%(1/12) of the payroll to its retirement plan

(2)The DC plan should be funded and managed under either Insurance or Trust Contract (to protect workers' benefit rights in case of bankruptcy of the employer or the financial institution)

(3)Under DC plan, one of the investment options to employees should be GIC (Guaranteed Income Contract)

(4)The final DC pension benefit could be variable, unlike under DB plan. Payment could be made by lump-sum or in annuity.

C. IRA (Individual Retirement (Savings) Account)

(1) IRA is a kind of transitional or terminal savings account for job movers who could deposit their lump-sum payments from their last employer's RAS, DB or DC plan until normal retirement age(>=55)

(2) IRA will be contracted and regulated as DC plan: The difference is that IRA is an individual savings account detached from any specific employer's plan

(3) Rules and regulations against mis-selling and for safety of individual account holders (including provision of information and education) will be arranged

D. Coverage

(1) So far the mandatory RAS is applicable to (regular and irregular) workers employed at firms with more than five employees. But, with the introduction of CP, the coverage will be extended to all firms with less than five employees

(2) Firms with less than 30 employees could set up IRA plan in place of RAS for their employees' retirement benefit

(3) Considering the financial burden on the small employers due to new ERISA, implementation of the extended application will be deferred until 2007 and mandatory contribution rate will be set at 1/24 (for 2007-2008), 1/20(for 2009-2010), 1/16(for 2011-2012) instead of 1/12 under current RAS

E. Plan Contractors and Fund Managers

- will be restricted to financial institutions which could guarantee secure and sound pension plan contracts and fund management: currently insurance companies and banks are two of strong candidates

III. An Alternative Reform Model for the Korean Pension System

1. A Critical Review of the Reform Models Recommended in the Past

The basic ideas and reform models suggested by the NPRB(1998) and the Task Force(1999) can be summarized and reviewed as follows:

A. Issues Derived from the System Itself: Long-term Sustainability and Intergenerational Inequity

The most common and serious issue raised with the current NPS relates to its long-term financial sustainability. And to deal with this issue, reform measures recommended were either parametric or systemic: the former recommending a parametric adjustment of the NPS scheme and the latter, a systemic reform of the whole scheme.

(1) Parametric Reform Model

Advocates of the parametric reform suggested that, while keeping the structure of the current system intact, parameters (contribution and benefit levels) of the system needs to be adjusted to improve long-term financial sustainability. That is, they recommended that (a)contribution rates should be gradually raised upward (up to 18%), and (b)the target benefit level should be adjusted downward and/or (c)retirement age should be gradually raised up to 65 in the long-term. These reform measures, though in a much softer version than recommended, were incorporated into the amended National Pension Act in 1999.

These parametric reform measures, however, are criticized as a partial/incomplete reform measures leaving more fundamental issues not addressed. That is, even though the parametric reform measures might improve the system's financial sustainability to some extent that could happen only at the sacrifice of the next generation, i.e., an 'unfair' transfer of excess financial burden from the current to the future generation (Issue of Inter-generational Inequity). The parametric reform measures also leave unsolved the current situation of wide system avoidance and income underreport, which is much prevalent and serious among the self-employed and in small-sized workplaces, – another reason why those measures are criticized as incomplete.

(2) Systemic Reform Model

The systemic reform model suggests that the current NPS should be separated into two independent parts: a basic pension and an earnings-related pension, which means a systemic change in the financing method. This systemic reform follows closely with the basic direction of the reform recommended by the NPRB(1998) and also with what the OECD(2000) suggested. The OECD suggested that the current NPS be split into a basic pension financed by tax and an earnings-related pension of fully funded DB-type. For a multi-pillar system to be instituted, the OECD suggests that the current RAS should be converted into a corporate pension scheme based on defined contribution.

<Table 3-1> The Multi-Pillar Pension Model recommended by the OECD(2000)

3rd Pillar		Personal Pension	Voluntary Privately Managed
2nd Pillar		Corporate Pension	Mandatory Converted from the RAS Based on Firms
1st Pillar	2nd-Tier	Earnings-related Pension	State-run Mandatory Fully Funded DB Target R.R.=20%
	1st-Tier	Basic Pension	State-run Mandatory Tax-based Target R.R.=20%

B. Issues derived from the Application of the NPS in Korean context

Issues derived from the application of the system relates to the problems arising from the relatively large self-employed sector, where small shops and workplaces with only a small number of workers are heavily populated, and the characteristic low participation and high exemption rates among those pertaining to the sector. In a system where uniform benefit formula applies to both workers in the self-employed and those in the employed sector, high rate of hide and avoidance, systematic underreport of income, and thus low contribution among the former[11] would eventually result in an intra-generational inequity in the NPS. This imbalance between the self-employed and the employed sector in participation and contribution could be aggravated when contribution rate is raised in the future.

To sum, the NPS is afflicted with both inter-generational and intra-generational inequity in contribution and benefit. The inter-generational inequity comes mainly from the actuarially insensible structure (design) of the system: low contribution and high benefit,[12] which would get worse with the rapid aging of the Korean population in 20-30 years. The intra-generational inequity comes mainly from the context of the system application: the observed high rates of system avoidance, low rate of effective participation, and income underreport when participating reluctantly, etc. among the self-employed sector.

The actuarially insensible design of the NPS is well witnessed when the system was first reformed in 1998, less than 10 years since first implemented, when the promised benefit was considerably (more than 10%) cut down and the contribution rate was projected to be rapidly raised over time. This implies that built in the NPS is a pension promise that could not be kept as scribed without incurring an excessive financial burden on future generation ('a promise not to be kept').

The peculiarity of the Korean NPS is that there is only a limited link between the contribution (financing) stage and the (benefit) distribution stage: that is, pension benefit is split into two components (redistributive + earnings-related) while contribution is unified ('an inefficient financing method'). It is well observed in the past 10 years of the NPS history that the financing method of the system is not an efficient one given the Korean context: that is, an industrial structure with a relatively large self-employed sector, and a less developed infrastructure for enforcement and collection, that is, low rate of income declaration and high rate of income underreport. In such a context, the cost of system management should also run excessively high.

These observations in sum hint us what would be the right direction of the pension reform. That is, the public pension promise should be rewritten so that the excessive inter-generational inequity be corrected and that the long-term sustainability be secured to avoid the 'well-trodden road' (World Bank, 2000) of our forerunners. At the same time, the financing method of the NPS should be redesigned so that the system could be more efficiently managed and the intra-generational inequity be improved.

In this viewpoint the past reform models suggested so far should be regarded as only partial and incomplete. The parametric reform models are both incomplete in that their reform recipes depend on the transfer of

[11] Now more than two years has passed since the NPS coverage was extended to the urban self-employed sector. But only about 50% of the self-employed are actively participating (i.e., contributing) in the NPS.

[12] With regard to this issue, it should be reminded that the Korean NPS is run not as a pay-as-you-go but a (partially) funded system.

pension burden to the future generation and that such reform measures as taken in 1999 (reduction of the pension benefit and raise of contribution rate) could be repeated in the future.

That is, in coming future, the State, as the manager of the NPS, should be keep juggling between [raise of contribution rate] and [reduction of benefit level] for the NPS' financial stability. And it is very likely that the latter option will be taken more often out of the political motive and interest at the time point. In that case, the initial pension promise scribed in the NPS would eventually be nullified ('unkept promise'). Then, the right direction of the pension reform should be a 'rewriting of the pension promise and redesigning of the pension structure' at this stage when the full benefit is yet to start in 2008.

The systemic reform models are also limited in that practical procedures for the transition from the current to the reformed system are not specified. Say, how to move from the current one-tier system to the two-tier (basic pension + earnings-related pension) system? How to allocate the cumulated fund into each tier when moving to the two-tier system?, etc. With these questions unanswered, the feasibility of the reform models should be low.

One notable limitation common to the reform models is that they leave the financing source and method of the current system untouched while they intend to improve the financial status of the NPS. But, as the OECD points out, change to the financing method is a key to an effective reform of the Korean pension system for a better financial sustainability and a more efficient system management. Another issue that should be properly addressed in the systemic reform models relates to transitional accounting, i.e., the allocation of the cumulated fund into the proposed two tiers, which would be subject to the conflicts of vested interests.

2. Summary Evaluation of the Korean Pension System

(1) Even after the first reform measures, the NPS will continue to be suffering from long-term financial sustainability. Otherwise, contribution rates would have to be continuously raised up and/or promised pension benefits to be cut down.

(2) The NPS is far limited in the aspect of 'effective' universal coverage, a critical element for a 'national' pension, and less likely to provide a minimum protection of old-age income (Lack of Universality).

- The economically low class, whose employment history is irregular and low paid, are much more likely to be out of the system or to retire with a very poor pension benefit accrued, even though they are the ones that most need social protection

(3) The NPS (benefit) system is designed to be 'inter-generationally unfair', that is, too generous to the current generation and too expensive to the future generation, which constitutes a structural factor that weakens its long-term financial sustainability (Low Financial Sustainability and Inter-generational Inequity).

(4) The NPS is inefficiently managed and 'intra-generationally unfair'. That is, there are wide discrepancies between employment sectors in terms of effective participation, contribution level, and expected pension benefit (Intra-generational Inequity)

- Workers in the self-employed sector or SME are less likely to contribute and more likely to retire with only a limited pension benefit accrued

- The well-observed, considerably low rate of income transparency/declaration among the self-employed would result in 'intra-generational' inequity in pension contribution and benefit to the disadvantage of the employed workers

- These 'intra-generational inequity' tend to be aggravated by the inadequate financing and distribution method embedded in the NPS with one-channeled financing for two channeled distribution into (a)redistributive benefit and (b)earnings-related benefit (Inadequate and Inefficient Financing Method in Korean Context)

(5) Being operated as a (partially) funded system, the NPS reserve fund would grow into an 'internationally unprecedented' size for the next 20-30 years and would soon become a dominating single entity in the capital market, and/or corporate governance, too big to be efficiently managed by the Government's agency (National Pension Corporation)

(6) Korean public pension system is very loosely structured one with limited transportability between the relevant schemes (Lack of Portability between Public Schemes)

- This limiting factor is particularly problematic when labor mobility between (public-private) sectors is increasing in 21st century

- Links between public schemes should be properly arranged

(7) The mandatory Retirement Allowance Scheme financed by the employer remains one of the most inefficient and unproductive element as an private old-age income provision

- The RAS is largely unfunded and needs to and could be productively converted into a modern corporate pension for a multi-pillar pension system needed to be established for a rapidly aging society

3. Alternative Reform Model for Korean Pension System

(1) Basic Directions for Pension Reform

In accordance to the critical review of the Korean pension system and derived reform needs, following issues and concerns should be properly addressed and be taken care of in the alternative reform model.

▪ The improvement of the NPS' long-term sustainability, while at the same time, lessening inter-generational inequity in pension cost and benefit

▪ Better performance of the NPS as a social security program (Minimum Old-age Income Guarantee, Universal Coverage) – a 1st-tier Basic Pension needed

▪ Better performance of the NPS as a savings vehicle for an adequate old-income security (Adequate Old-age Income Secured) – a 2nd-tier Earnings-related Pension needed

▪ Reform of the financing method of the NPS for a more efficient and equitable system application and management

▪ Improvement in the active participation and effective coverage of the NPS

▪ Arrangement of proper portability mechanism between public pension schemes

▪ More close link between contribution (financing) and benefit (distribution) to be incorporated into the NPS

▪ Protection of the vested rights and avoidance of the conflicts of interests when reforming the NPS

▪ As an outcome, establishment of a better NPS, more efficient and more sustainable

While in the past reform models, these issues and concerns were addressed only selectively or not addressed at all, in the alternative reform model all of these issues and concerns should be properly addressed and taken care of.

(2) Systemic Reform Measures and Procedures

□ The current NPS shall be split into a Basic Pension and an Earnings-Related Pension (i.e., two-tier system)

▪ Basic Pension:

- a universal minimum old-age income guarantee, financed by tax, could be means-tested, should be started immediately after reform (1 pension per person)
- target benefit level = about 20% of the average wage/income

▪ Earnings-Related Pension:

- a fully-funded Defined Benefit scheme, financed by participants' contributions (required contribution rate at around 6%), benefits strictly based on contribution history (1 pension per 1 active participants)
- target replacement rate = about 20% of the participant's average wage/income
- Government employees, private school teachers should also participate in the basic pension.
- See <Table S-1>, <Table S-2>, <Table S-3> for supporting data

□ The Special Occupational Pension (SOP) should also be split into a basic NPS and a new SOP, reduced earnings-related pension

- Part of the SOP contribution will be converted to the basic NPS

- The contribution rate for the new SOP should be appropriately reduced by 2-3% (to be determined) from the current 17% to 14-15% for a reduced target replacement rate, that is, 55%, which is equivalent to the current replacement rate (75%), minus the replacement rate of the basic NPS (20%)[13]

□ The current RAS shall be converted into a corporate pension

- the corporate pension shall be a fully-funded Defined Contribution scheme, managed in the private sector
- transition to corporate pension could be through either Model I (voluntary) or Model II (mandatory), which could be determined in the Tripartite (Government-Management-Labor) commission
- the contribution rate that could effectively meet the RAS mandate should be negotiated and determined in an actuarially fair way
- would be equivalent to about 20% replacement rate of the average wage

□ For the self-employed, IRA(Individual Retirement Account) with appropriate tax treatment shall be introduced (for supplementary earnings-related pension) as a voluntary system

□ The NPS reserve fund, cumulated contributions of each participants, shall be converted to the reserve fund for the earnings-related NPS

- for the continuing participants, the earning-related NPS benefit shall be determined both by the old formula (for the old contribution period) and by the new formula (for the new contribution period)
- the implicit pension debt incurred by the old system shall be taken care of by the Government (or by the existing participants' contribution (<0.5%) during transition period

□ Supplemented by the corporate pension (T.T.R.=20%), the total target replacement rate shall be set at around 70% (In the case of the SOP, 20% by the basic pension plus 55% by its own earnings-related pension will add up to 75%)

□ These reform measures shall become effective immediately

[13] The SOP for the Government employees and for the private school teachers are, even without reform, destined to be subsidized from the General budget due to their ever-aggravating deficit problem.

<Table 3-2> The Reformed Pension System: Two-Tier NPS plus Corporate Pension System

<table>
<tr><td colspan="2">3rd Pillar</td><td colspan="3">Personal Pension: Voluntary</td></tr>
<tr><td colspan="2">2nd Pillar</td><td>Corporate Pension (Fully-funded DC): T.R.R.=20%</td><td>IRA (Voluntary) T.R.R.=20%</td><td rowspan="2">Special Occupational Pension: Earnings-Related, DB; T.R.R.= 55%</td></tr>
<tr><td rowspan="2">1st Pillar</td><td>2nd-Tier NPS</td><td colspan="2">Earnings-Related Pension (Fully-funded DB); T.R.R.=20%</td></tr>
<tr><td>1st-Tier NPS</td><td colspan="3">Basic Pension (Means-Tested)
Tax-based; T.R.R.=20%</td></tr>
<tr><td colspan="2">Population Group</td><td>Employed Workers</td><td>Self-Employed (including farmers)</td><td>Government Employees/ Teachers</td></tr>
</table>

□ Advantages and Limits of the Alternative Reform Model

1. Advantages

- The alternative model is better in many aspects: coverage and basic protection, adequacy, equity, sustainability, public acceptability

▪ The 1st-tier basic pension will be applied universally to all population groups, guaranteeing a minimum old-age income (coverage and basic protection)

▪ The 2nd-tier earnings related pension will be based on the individual contribution records and fully funded DB or NDC, supplementing the basic pension to secure a adequate level of old-age income (adequacy)

▪ The two-tiered reformed NPS is better than the current system in term of inter- and intra-generational equity and system efficiency

- The reformed system will be much more sustainable with the small-sized basic pension and the fully-funded earnings-related 2nd-tier pension (the total contribution rate could be managed within 9-12%)

- The alternative reform model is much more feasible than the past reform models.

▪ With the past reform models, it would normally take 20-30 years for the reform measures to be effectively implemented. And in the long-term process, politics, industrial relations, vested interests, etc all could be a potential stumbling bloc that could turn, unexpectedly, the original reform agenda upside down. On the other hand, the alternative model could avoid the potential problem of unpredictability in the long-term reform process by replacing the old scheme with the new scheme at one point in time (feasibility).

- The alternative reform model would be much more acceptable to the existing participants than the old ones because their vested rights are fully protected, and also to the future participants because their financial burdens would be much lessened (acceptability)

- The alternative reform model is closely in line with those suggested by the international organizations (i.e., OECD, ILO, and World Bank) and, above all, is very similar, in its core idea, to the best model that the NPRB (1998) had recommended to the Government

- With the alternative reform model, the most critical issues raised against the current NPS by those international organizations and experts (such as financial sustainability (World Bank), inefficient financing method (OECD), basic protection with universal coverage (ILO) could be resolved to a considerable extent

- With the alternative mode, we could also avoid the problem of a rapidly cumulating public pension fund, assuming that the basic pension is financed by tax and that the earnings-related pension is fully-funded and managed in the private sector

2. Limits

- The basic pension could be exerting extra financial stress on Government budget (but, the Government could save budget on the National Basic Livelihood Guarantee for the old people when it is integrated into the Basic NPS)

- The pension benefit status of the self-employed and low-income, irregular workers in SME would not be much improved (minimum income could be protected, but still short of adequate level of old-age income)

- The task of transparent income assessment and contribution to the earnings-related NPS for the self-employed still remains, even though much lessened with the reformed model. But at least intra-generational inequity problem would be much improved

[Supplementary Tables]

<Table S-1> Expected Contribution Rate for the Earnings-related NPS Proposed

	Wage Growth	Interest	CPI	Contribution Rate	Benefit Rate	Return Rate
1	0.05	0.07	0.03	0.06	0.20	1.34421
2	0.05	0.06	0.03	0.06	0.20	1.01307
3	0.05	0.05	0.03	0.06	0.20	0.75883

<Table S-2> Financial Projections for the Earnings-related NPS Proposed: 2005-2077

(Unit: 100 Million won,1000 Person,%, Times)

Year	Fund Cumulated	Total Income	Total Expenditure	Reserve	Members	Beneficiaries	Maturation	Surplus Rate	Contribution Rate
2005	1,162,10	204,122	37,641	166,481	17,470	1,123	6.4%	30.9	6.00%
2010	1,987,36	304,038	65,026	239,011	18,199	1,892	10.4%	30.6	6.00%
2015	2,955,26	379,798	99,552	280,246	18,141	2,594	14.3%	29.7	6.00%
2020	4,038,04	478,521	152,330	326,191	17,674	3,942	22.3%	26.5	6.00%
2030	5,788,96	600,502	299,118	301,384	16,318	6,754	41.4%	19.4	6.00%
2040	6,848,30	686,984	441,640	245,343	14,891	8,387	56.3%	15.5	6.00%
2050	7,313,79	780,717	575,050	205,668	14,092	8,545	60.6%	12.7	6.00%
2057	7,411,61	835,646	652,901	182,745	13,409	8,210	61.2%	11.4	6.00%
2060	7,379,11	857,103	694,618	162,485	13,094	8,098	61.8%	10.6	6.00%
2070	6,742,92	916,112	850,800	65,312	12,189	7,648	62.7%	7.9	6.00%
2077	5,811,67	947,204	957,621	-10,417	11,720	7,265	62.0%	6.1	6.00%
2080	5,300,38	958,430	1,002,47	-44,041	11,544	7,081	61.3%	5.3	6.00%

<Table S-3> Financial Projection for the Basic Pension Scheme Propose: 2005-2080

(Unit: 100 Million won,1000 Person,%, Time)

Year	Members	Beneficiaries (A)			Total Benefit paid (B)			Buffer Fund	B/GDP
		total	Old-age	Survivor	Total	Old-age	Survivor		
2005	32,570	4,862	4,253	609	61,910	46,226	15,684	3,095	0.9
2010	33,381	6,164	5,032	1,132	83,219	51,559	31,660	4,161	1.1
2015	34,221	7,414	5,846	1,568	116,325	69,007	47,318	5,816	1.3
2020	34,479	8,793	6,899	1,894	176,946	115,781	61,166	8,847	1.7
2030	32,385	12,140	10,165	1,976	436,245	363,718	72,527	21,812	3.1
2040	29,519	13,861	12,107	1,754	851,966	777,127	74,839	42,598	4.5
2050	27,483	13,486	11,927	1,559	1,256,214	1,170,370	85,844	53,778	5.0
2060	26,061	12,259	10,762	1,498	1,515,027	1,409,218	105,809	75,751	5.0
2070	24,069	11,637	10,309	1,328	1,845,006	1,724,542	120,464	92,250	5.2
2080	22,570	10,814	9,597	1,218	2,177,541	2,036,546	140,994	108,877	5.3

References

ILO (2000). Social Security Pensions: Development and Reform. (eds. by) C. Gillion, J. Turner, C. bailey, and D. Latulippe, ILO.

KIHSA and World Bank(2000), *Proceedings for International Conference on Options for Reforming the Pension System in Korea*. KIHASA and World Bank.

MOFE, FSS, World Bank (2001), *Proceedings for International Workshop on Korean Pension Reform in Transition*, March, 2001, Hong Kong, China.

NPC(2000, 2001), Annual Report on National Pension. NPC (Korean).

NPRB (1998), *Reform Measures for the National Pension System*, KIHSA (Korean).

OECD (2001), OECD Economic Surveys: Korea. OECD.

Phang, H. et al. (2000), Policy Initiatives for the Introduction of Corporate Pension in Korea I (in Korean), Korea Labor Institute.

Phang, H. and K. Shin, et al(2001), Policy Initiatives for the Introduction of Corporate Pension in Korea II (in Korean), Korea Labor Institute.

Korea

The Public-Private Pension Reform Task Force(1999), *White Paper on Public-Private Pension Reform*, KIHSA (Korean).

World Bank (2000), *The Korean Pension System at a Crossroads*, Report No. 20404-KO.

World Bank (1994), Averting the Old-Age Crisis: Policies to Protect the Old and Promote Growth, World Bank.

Yoon, S.M. et al. (1999). Policy Recommendations for a Balanced Development for the Public-Private Pension System in Korea (Korean). KIHSA.