

Privatization of the Pension SCHEME in Korea

**By**

JORGE CEVALLOS CARRERA

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**Professor Ju-Ho Lee**

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## ABBREVIATIONS AND ACRONYMS



<b>AFPs</b>	<b>Administradoras de Fondos de Pensiones (Pension Fund Administrator). A private pension fund manager in Chile.</b>
BI	Basic insurance
CPI	Consumer price index
ERP	Earnings-related pension
FF or FFS	Fully funded system
GNP	Gross national product
GDP	Gross domestic product
HPAEs	High-performance Asian Economies
IIs	Institutional investors
ILO	International Labour Organization
IMF	International Monetary Fund
KDI	Korea Development Institute
KIPF	Korea Institute of Public Finance
KSDA	Korea Securities Dealers' Association
MPB	Minimum pension benefit
NPC	National Pension Corporation
NPF	National Pension Fund
NPRB	National Pension Reform Board
NPS	National Pension Scheme
OECD	Organization for Economic Cooperation and Development
OPS	Occupational Pension Scheme
PAYG	Pay-as-you-go system
SAL I	Bank Structural Adjustment Loan I
STIC	Special Technical Insurance Committee

## INTRODUCTION

Pensions programs are one of the various branches of social security systems. Social insurance is built over the principles of solidarity, equity, unity and universality, which are supreme fundamentals of the human race. How could we define them?

Many concepts and synonyms can be obsolete to answer this question. Philosophers, sociologists and anthropologists have deliberated about a possible answer to this question; therefore, it is a complicated task. However, the issue here is how policymakers can achieve such a goal.

No one knows the magic formula; neither he/she has the ultimate criteria. So the critical point is not to give an answer to the question, but to search for the methods that will help to find in which direction to go. The chore of encountering a way Korea should go within the near future.

My intent then is to set some of the main considerations of a problematic system, looking forward to contribute for a change in Korean policies. The objective of this thesis is to depict the problem of the aging populations in the Republic of Korea, the diverse mechanisms of pension programs as well as positive aspects of implementing new systems. It tries to examine the Korean case and suggest some potential answers to overcome a progressive crisis.

The inadequate pension systems around the world and the rapid increase of the aging population threaten not only the elderly but their children and grandchildren as well. The World Bank has named this problem as the “Old Age Crisis”. Future generations will have to support the elderly directly or indirectly. Therefore, we shall consider seriously the importance of the issue because it presents a great danger to the development of the world economy, hampering growth in different ways.

As the world’s population ages, old age social security systems are in trouble worldwide. Due to the rapid demographic transitions caused by rising life expectancy and declining fertility, it is understandable the elderly population in the world is growing rapidly. “*Life expectancy in the developing HPAE’s increased from 56 years in 1960 to 71 years in 1990. (In other low-and middle-income economies, life expectancy also rose considerably, from 36 and 49 to 62 and 66 years, respectively.)*”<sup>1</sup>

In some parts of Asia and Africa, the elderly constitute a small part of the population. Their families normally take care of them (mainly food and shelter) and other informal kind of arrangements. Formal programs set specially by the government are considered to be rudimentary. The programs established in these developing countries are relatively new and poor in the quality of the services they offer. Even Latin America, which is another region that has a large number of developing countries, has had social security and pension systems for more than five decades.

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<sup>1</sup> World Bank, *The East Asian Miracle*, (Washington D.C.: Oxford University Press, World Bank, 1993), p. 4.

Nevertheless, some changes are required even though these are not easy to address. From my point of view this is an extremely difficult task and more when it is related to adopt some possible models for a policy reform. Transfer of economic models on diverse grounds has demonstrated serious difficulties and inefficiencies. Therefore, policymakers should be cautious in fulfilling the requirements of diligent analysis and a proper evaluation of the context and realities of the country attempting to do it.

It is *extremely important* to understand the point that could seem discouraging while trying to consider my proposal. It is that the present work does not focus its attention on the reforming efforts or external advising attempts tried so far by different organizations. On one hand, organizations try to provide a clear scope of the horizons after a change including simulation models to target. On the other hand, I try to give my contribution by allowing the reader to perform alone and develop his/her own ideas about the possible benefits of what should be a reformation attempt.

This thesis is organized as follows: Chapter I consists in a general overview of the current situation of the aging populations around the world, and also the consideration of some important facts about retirement. Chapter II provides a background of the different pension systems with some emphasis on a pay-as-you-go plan, degree of inefficiency and related characteristics. Chapter III depicts the Korean situation, its initial scheme, current problems, and some reformation efforts. Chapter IV determines the costs and benefits of privatization issues from an economic point of view, and some social considerations too. Chapter V discusses the introduction of a new plan, a formal proposal, and some of the

most important transitional issues. Finally, Chapter VI includes conclusions and recommendations.

## CHAPTER I

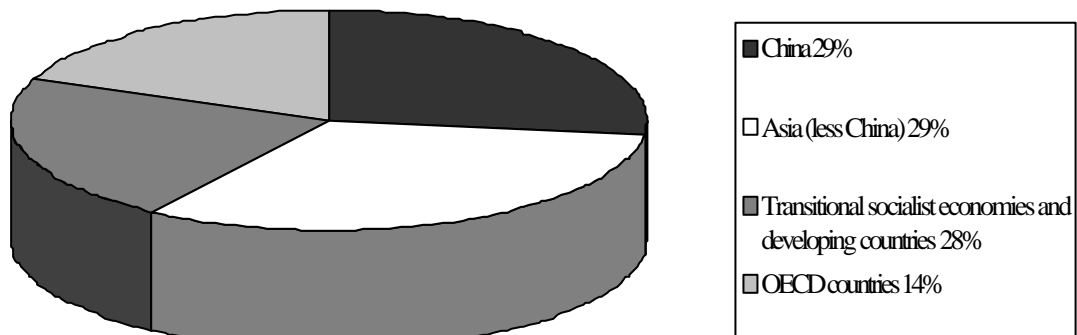
### OVERVIEW OF THE WORLD STATUS AND RETIREMENT

#### 1.1. Some general facts <sup>2</sup>

Many countries are trying to update, reform or change radically their pension schemes. The problems have been felt by the economies that have seen liberalization of markets and current advancements of technologies, as well as communication and transportation trends. So the adjustments in legal, structural, and other institutional changes are to come; but for the time being some facts are to be considered also. Therefore, I have set some relevant facts needed to better understand this thesis:

Figure 1.

**Percentage of Increase in World Population over 60 Years Old, by 2030**



Source: World Bank, 1994

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<sup>2</sup> This section is derived from World Bank, *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, The World Bank, 1994)

- In 1990 slightly more than 9 percent of the world's population were sixty years old. By 2030 the number is going to triple. Most of this growth will happen in developing countries, but half of it in Asia, excluding China.
- The declining fertility and increasing medical improvements make developing countries to age more rapidly than industrialized nations.
- The demand of health services increases as the country's population gets older. Health care as well as pensions become a large burden for the governments' budgets because services are concentrated on the elderly.
- High government spending on old age security crowds out other important public goods such as infrastructure and services. The amount of these expenditures as percentage of GDP is huge, and they also account for more than 35 percent of the government's public spending in some European countries.
- Publicly managed funds often disappear by poor management.
- High payroll taxes distort labor markets and reduce growth. (This point can be itself topic for big debates).
- Government pensions are not commonly indexed to inflation and workers find themselves poorly protected when they are old.
- Workers retiring in early years after the pension program have been implemented receive positive lifetime benefits, while after some years (three to four decades) workers retiring will have a negative balance.
- The systems have demonstrated that they are not efficient in redistributing income among the rich and the poor. Normally rich people live longer than poor people and receive higher pensions due to their contributions.

## 1.2. What is retirement?

As countries experience a higher level of industrialization, extended life expectancy is seen. People in earlier centuries had much lower life expectancy than they do now. Then, people that for this study are workers mainly, reach some point in their lives at which they have to withdraw from the labor force. Some people of working age are not working due to either leisure or unemployment.

Retirement seems not difficult to assess, but it has lots of implications for the individual and the society. In the one hand retirement in a wide sense is to drop out of the labor force, to stop working. In the other hand, work however can be defined broadly: “*..in terms of any activity contributing to a person’s standard of living then clearly this continues throughout life and no one ever retires.*”<sup>3</sup> After you stop working, you are supposed to receive a pension from the hands of the government (not considering private plans), you become eligible for a future fixed stream of money. For example, what happens with a housewife whose daily activity is still unchanged? Is she ever going to retire?

Then retirement can be treated as a single issue, although some clarifications need to be made to help the reader to identify its implications. Concerns about difficulties for retiring have to be seen from different perspectives, from the individual and the social perspective. This point of view poses psychological stress on the future retiree who will definitely have to face health and physical complications. From a social viewpoint this



group of people will absorb enormous amount of resources in the form of the provision of welfare benefits in the short and long-run.

The non-monetary (psychic) costs and monetary costs (income and returns from savings mainly) are to be considered in the decision to leave the work force. Implications prior taking the economic decision of retirement, undoubtedly depends on the valuation and preference that each individual puts for leisure on one hand and for security in the future on the other. The model shown by Mallier and Shafto (1992) is very illustrative for this purpose. It says that many pensioners return to work because the pension benefit they receive is not enough to fulfill their level of satisfaction. In other words their living standard has fallen sharply, so that they cannot attain what they were used to. This poses a threat on employment, because it distorts the market by reducing the entry of young workers. Some considerations are to be made.

- a) Persons return to work when the level of satisfaction after retirement is lower than before. The indifference curve lies in a lower line that could not provide the same utility level. (See Figure 2)
- b) Leisure is more valuable for some individuals than for others.
- c) If you have some additional stream of earnings you will not go back to work or try to find a new job.
- d) *“Unless retired people have very rare and marketable talent, they are unlikely able to earn a wage higher than the one they received as members of the full-time workforce.”<sup>4</sup>*

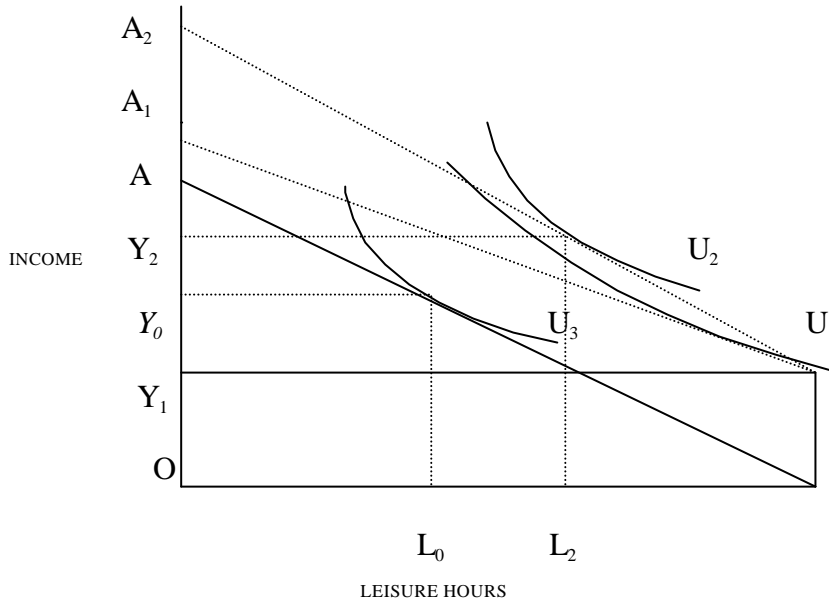
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<sup>3</sup> A. T. Mallier and T.A.C. Shafto, *The Economics of Flexible Retirement*, (London: Academic Press Limited, 1992), p. 12.

<sup>4</sup> A.T. Mallier and T.A.C. Shafto, op.cit, p. 42.

**Figure 2.**

**Retirement vs. income-leisure preference**



\* Retirement and the income-leisure preference 'A'. The worker who retires on a full two- third pension and who was on a level of utility U<sub>0</sub> may enjoy increased satisfaction at utility U<sub>1</sub> with full retirement and no work. A wage rate above that required producing potential earnings A<sub>1</sub>Z would maintain pre-retirement wage rates would be needed to entice the worker back to the labour force. The ability to maintain pre-retirement wage rates would increase the utility to U<sub>2</sub>, income to OY at leisure level OL<sub>2</sub>. (Miller and Shafto, 1992)

The figure and the explanation given by the authors are a clear-cut of why decisions are being made in a rational and practical way.

## CHAPTER II

### A CONCEPTUAL FRAMEWORK OF PENSION SYSTEMS

#### 2.1. Different plans to finance old age security

Over time different alternatives of insurance for the elderly had been tried. There are three, which are most common plans or basic schemes. They are public pay-as-you-go programs, employer-sponsored plans, and personal saving and annuity plans.

Publicly supported pension and early retirement plans exist in all industrialized countries.<sup>5</sup> *“They were implemented to improve the well-being of the elderly and to open job opportunities for younger workers. They are also an important factor in the huge reductions in elderly poverty rates and in the decreased labor participation of older men found in most countries.”*<sup>6</sup>

##### 2.1.1. Public Pension systems

###### *Pay-as-you-go plans (PAYG)*

These programs have become by far the most common programs in industrialized countries to support the elderly. Publicly managed pension schemes and pay-as-you-go are usually financed by a *payroll tax*. Under this system benefits received by current retirees determine the amount of taxes workers have to pay. *“A pay-as-you-go system is said to be financially balanced when pension payments are exactly matched by workers*

*contributions.*"<sup>7</sup> This intergenerational social contract of mandatory savings are between workers and pensioners endorsed by implicit government debt or promise to contributing worker cohorts that will benefit them from future worker contributions once they retire.

The replacement rate<sup>8</sup> is around 50 percent in middle-income countries and 10 to 20 percent in lower-income countries (World Bank, 1994). In Korea it is 80 to 90 percent (including pension benefit and severance pay), for a 40 year of participation. However, there are many variations for these programs. These programs are structured depending on either *a means-tested or means-related program*.

Pure pay-as-you-go systems rarely exist. It usually happen that most of these public systems accumulate a current cash surplus in earlier years; but as the systems matures and populations become older, the accumulated reserves get exhausted or even come to a deficit. This situation has been seen in the Korean case, which is supposed to use up its National Pension Fund reserves by the year of 2033 as projections made by Moon and other experts at the Korean Development Institute (KDI).

It is said that only when the PAYG system is mature, population growth is constant, and the system is financially balanced, pensioners are paid on average a real rate of return on their contributions equal to the real rate of growth of the wage bill or the economy.

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<sup>5</sup> This section is derived from Rebecca Blank, citing M. Rebik's, 1994, "Does Larger Social Safety Net Mean Less Economic Flexibility?," chap. 5 in *Working Under Different Rules*, (New York: Russel Sage Foundation, 1994), p.180.

<sup>6</sup> Blank, Rebecca, "Does a Larger Social Safety Net Mean Less Economic Flexibility?," Ibid.

<sup>7</sup> Giancarlo Corsetti and Klaus Schmidt-Hebbel, "Pension reform and growth," chap. 5 in *The Economics of Pensions*, edited by Valdez-Prieto, Salvador, (New York: Cambridge University Press, 1997), p. 131-132.

There are two reasons why the return on their contributions differs from real market interest rate:

First, the growth rate of the wage bill is typically lower than the real rate of return on capital – a feature of dynamically efficient economies a la Diamond (1965). Second, although the growth rate of the return obtained by each individual worker is different from the average pensioner's return. The reason is that pay-as-you-go pensions often include a component (unrelated contributions) that distributes income within cohorts. This distributional component favors (often only in theory) low-income workers or (often in practice) powerful worker groups who are able to secure generous pensions from the political establishment. Hence, a pay-as-you-go scheme is in general actuarially unfair from the point of view of individual workers.<sup>9</sup>

The problem with this plans is that policy-makers often find themselves in trouble when they have to maintain the actuarial balance, either by: a) Reducing dependency ratio by raising the minimum retirement age or tightening eligibility conditions. b) Reduce the replacement ratio, by modifying the formula to calculate benefits, lengthening the contributory period, applying sanctions to those who remain in the labor force, among others. All of this make it difficult to increase government revenues and budget administrators have to meet their obligations with limited resources, not achievable by increased taxation (that is said to be counterproductive). “*System adjustment of this sort have come to be called ‘parametric reforms’ because they shift the actuarial levers of the system while leaving its structure the same*”<sup>10</sup>

### **2.1.2.Private Systems**

#### ***Occupational plans***

As its name tells us, these are pensions privately managed by occupation generally offered by employers to their employees. That is why they are also denominated

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<sup>8</sup> Replacement rate = pension benefit / average lifetime income.

<sup>9</sup> Giancarlo Corsetti and Klaus Schmidt-Hebbel, “Pension reform and growth,” op.cit. p. 130.

“employer-sponsored plans”. In the past, governments used to cover its military and civilian employees using these kinds of systems. Nowadays, these have been adopted increasingly by most of the Organization for Economic Cooperation and Development Countries (OECD). More than 40 percent of workers are covered by this kind of system in Germany, Japan, The Netherlands, Switzerland, United Kingdom, and the United States (World Bank, 1994). This is not new because not only pensions systems but also health care systems were used in Latin America since 1960s. *“Most employer plans, other than those of the older agricultural states, have either come into being or been rapidly enlarged in recent years, as have all but a handful of the community and cooperative schemes now operating”*.<sup>11</sup>

These programs have been the result of the ability of collective bargaining by labor unions or simply as a mean from employers to retain or attract workers. Their coverage is uneven and it varies between one employer and another. They are mainly invested in equity, stocks or trust funds, but they carry the negative characteristic of not being transportable.

### ***Personal saving and annuity plans***

Generally speaking, personal saving is mainly a way to overcome unexpected difficulties in the future. For this study saving shall be understood as the accumulation of assets by the workers to support themselves when they are old. The plan is to have enough savings for the future, either on an individual basis or by depositing savings in annuity plans

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<sup>10</sup> F. Landis Mackellar, and William P. McGreevey, *The Growth and Containment of Social Security Systems*, Development Policy Review, vol. 17. 3 (1999): p. 22

(your savings being, either publicly managed by the government or by private providers such as private management fund companies). In this case the individual has to bear the investment risk of its savings. Voluntary savings is found in almost every country, often encouraged by tax or other kind of incentives placed by the governments, and in other parts of the world such as Malaysia and Singapore this form of saving have been made mandatory.

East Asian economies have a high private savings rate, a diverging pattern seen in other developing countries such as the ones in the Latin American. As said before, there had been incentives to save encouraged by the state, such as the case of “postal saving system”, which worked very well in Korea and in other countries like Japan, Malaysia, and Singapore.

Savings have contributed enormously to the economic development of many countries. Some part of these savings have adopted the form of contributions to pension schemes, managed privately by firms such as the *Administradoras de Fondos de Pensiones (AFPs)* (pension fund administrator) in Chile. Other countries in South America like Colombia, Argentina and Peru have emulated the model, after observing the remarkable success of it.

### **CHAPTER III**

#### **DEPICTING THE KOREAN PENSION SCHEME <sup>12</sup>**

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<sup>11</sup> World Bank, *Financing Health Services in Developing Countries* (Washington D.C.: Oxford University Press, World Bank, 1987), p. 34.

<sup>12</sup> Big portion of this section is derived from the lecture given by Dr. Hyung-Pyo Moon at the School of Public Policy and Global Management, KDI, August 2, 1999. The lecturer is a research fellow at the Korean Development Institute being one of the leading scholars in the field of pensions, and had work in various reformation committees.

There are several arguments to explain the growth of social security systems in middle-income economies and the faster growth in upper-middle-income economies qualified like that by the World Bank (Korea is included in the last category). One argument from the supply-side considered by the professors' Mackellar and McGreevey presents a very interesting point. This reasoning hypothesizes that PAYG systems are widespread accepted because these give the illusion that benefits are proportional to workers' contributions. When a country is poor, the state's ability to engage in social security expenditure is constrained because it has a limited ability to impose payroll taxes (contributions) as well as other income taxes. However, when the economy grows and goes through middle stages of development, then fiscal targets are more ambitious and seem easier to accomplish. *"Thus, countries pass through a stage during which social security spending expands rapidly along the demand curve as the fiscal supply constraint is loosened."*<sup>13</sup> Korea shares some of the most common features of problematic public pension systems. Its scheme has various characteristics in referral to its pension funds, which will deplete its reserves in the near future. Lets look briefly at the general structure of it and determine some considerations that should be observed carefully.

The Republic of Korea has a *partially funded system*<sup>14</sup> consisting of two big schemes. The National Pension Scheme (NPS) and the Occupational Pension Schemes (OPS). As it

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<sup>13</sup> Mackellar, F. Landis and William P. McGreevey, *The Growth and Containment of Social Security Systems*, op.cit. p. 24

<sup>14</sup> "Under defined-benefit pension schemes, beneficiaries receive a pension with reference not to how much money they contributed, but to some other criterion, such as final salary. The most common way of financing defined-benefit schemes is 'Pay As You Go' (PAYG) ... A defined-benefit pension system may, if desired, accumulate a capital reserve by collecting contributions in excess of benefits paid out, in which case it is said to be 'partially funded' ". (MacKellar and McGreevey, op.cit. p. 6). For Korea the reserves at the end of 1998 were about eight percent of GDP and expected to grow, from a system installed in 1988. (Aid-Memory by the Pension Mission of the World Bank, 1998).



names describes, is an occupational government program for civil servants, military personnel, and private teachers<sup>15</sup>. Some reforming efforts have been pursued and modifications have been introduced from the original scheme established in 1988.

The OPS covers Civil Servants (1960), Military Personnel (1963), and Private Teachers (1975).<sup>16</sup> The NPS includes all other kind of professionals that are not part of the OPS and operates under the supervision of the Ministry of Health and Welfare. Some important differences arise from these two basic schemes:

**Table 1.**

**Structure of the Korean Public Pension Scheme**

(ths. person, billion won)

Type of System	Contributors	Beneficiaries	Reserves by 1998
NPS(' 98)	7,126	674	37,465
Civil Servants(' 98)	952	89	4,784
Military(' 97)	155(app.)	52(app.)	Deficit: 0.7 trillion won
Teachers(' 98)	206	6	3,448

Source: Moon (lecture notes, 1999)

Anyhow their structure is similar in many aspects and the contribution rate also. But there are another distinctive aspects that have to be mentioned:

***National Pension Scheme (NPS)***

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<sup>15</sup> In Korea the law gives practically the same status to private and public teachers, with slight differences, that is why they are considered inside the Occupational Pension Scheme as civil servants.

<sup>16</sup> The majority of public service pension schemes appear to be financed on unfunded pay-as-you-go principle, where current receipts finance current demands for pension payments.

- a) Benefits: they include Old Age, Survivor, Disability Pensions, and Lump Sum Refund.
- b) Structure: has a redistributive function based on an income-proportional system.
- c) The amount taxed is close to the total wage.
- d) The replacement rate is 30 percent for 20 years of contribution, 45 percent for 30 years of contribution, and 60 percent for 40 years of contribution of the average of lifetime wage. (This replacement rate was 35, 53 and 70 percent respectively before the reforms of 1998)
- e) The contribution rate is 9 percent of the salary.
- f) The age at which you can be eligible for the benefit is 60 years (age that is going to be increased gradually up to 65 years by 2033.)
- g) This scheme is subject to indexation based on the consumer price index (CPI).

Each of the benefits is self explanatory except for the Lump-Sum Refund, which is a little more complicated to understand. It works as an insurance payment for the first generations close to retire who do not qualify for the benefits or do not meet the basic quota. This refund is just temporary and a proposal for its elimination is one of the main reforms to help financing the funds.

### ***Occupational Pension Scheme (OPS)***

- a) Benefits: Retirement, Survivor Pension and Lump-sum Compensation.
- b) Structure: its income is proportional (percentage of income)
- c) The contribution base is about 80 percent of total wage.

- d) The contribution rate is 15 percent since 1999.
- e) There is no restriction in age to qualify for the benefits.
- f) This is indexed to wage sliding (the problem here is that wages normally increase faster than CPI, so level of pension can increase as wage increases.)

As it will be seen, even if you use any of the systems mentioned before, this would lead us to conclude that the benefits are notably generous. Low contributions and high benefits will end in a big deficit and later depleting completely the reserve funds. Also considering that Korea has a seniority wage system, the total replacement rate comes up with something in between 80 to 90 percent of average lifetime income compared with an average of 50 percent in other upper middle-income economies.

### **3.1. Some historical facts and relevant issues**

At the beginning the NPS was first established in 1988 for companies who had more than 10 employees, and it developed as the number of employees grew. However, over time this changed and some enterprises which had only four employees or the ones who were self-employed also had coverage.

Nevertheless, the self-employed are one of the most problematic issues in Korea. They account for approximately 40 percent (Moon, 1999) of what Moon called the “*blind spot problem*”. The self-employed report around 60 percent of the income of the average workers. Regardless of the self-employed that account for such a big number, other workers also underreport their earnings. This group of people normally earns lower

incomes, and thus is not entitled for the pension scheme; however, they are the ones who need this plan the most.

Before the 1998 reforms, the NPS offered a 35 percent of replacement rate on average with 20 years of contribution, 52.5 percent for 30 years of contribution, and 70 percent for 40 years of contribution. The contribution rate has increased progressively since 1988 from a 3 percent to a 9 percent in 1998. Then, the replacement rate is high compared to other OECD countries (an average of 50 percent). People can even recognize that the elderly in Korea are even better off than in Japan. For instance, a labor law stipulates a mandatory severance pay, which is a financial responsibility of the employer. In the case of 40 years of service, the employee has the right to obtain 40 months of his/her final salary. So if you add the severance pay to the 70 percent (now 60 percent) of replacement rate in Korea, this will clearly be far above the international levels by 25 to 30 percent of the ones set by the International Labor Organization (ILO). This generosity and the prone social security payments create serious imbalances.

The following data reflects the entire picture of the future situation before the reforms:

**Table 2.**

**Pre-reform predictions of deficits**

	NPS	OPS		
		Civil Servants	Private Teachers	Military Personnel
Deficit	2023	1998	2015	1975

Depletion	2033	2001	2022	1977
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Source: Moon (lecture notes, 1999)

Table 2 shows that Civil Servants' fund has already entered in a process of deficit and will be exhausted by the year of 2001. Therefore this should be a serious concern and motivation for the government to react. Furthermore, we can observe the Military Personnel scheme has already been drained in 1977, which means that the government is supporting all retirees for more than 22 years.

### 3.2. Problems and Solutions

#### 3.2.1. A first set of problems: The factors that cause the financial insolvency

a) *The Aging:* This is a serious problem not only in Korea, but also in many other Asian countries. Increased life expectancy and medical improvements show impressive growth and new trends of elderly population for the coming decades. The elderly are not being able to support themselves in several countries, even though the purpose of pension benefits should be to allow the aging to live as independently and safe as possible. Nevertheless, policy-makers don't seem to have an answer to why big benefits are being given away and why small contributions are being collected in an era of shrinking resources and a higher number of elderly populations.

In other words, forecasts of the budgetary effects are always complicated. It is frequently said that demographic transitions will be more pronounced in East-Asian

economies. Many experts observe that there is high elasticity of spending on medical care related to GDP, and the coverage of pension systems is enhanced to provide minimal pension benefits to elderly persons who are not covered.

As a result of all the problems of aging populations fiscal difficulties will come: “ *..net pressures on the budget in the East Asian tigers will become significant only after 2010. By 2025, the increased elderly dependency rate will exert pressure on pension budgets. Demands for health outlays will also manifest themselves, but these will offset by reduced need for education outlays. A net increase in fiscal social outlays of about 3 percent of GDP can be envisaged by 2025, with further increases thereafter.*”<sup>17</sup>

- b) *Structural imbalance:*** The serious imbalance brought by the misleading actuarial projections tells us many things. One of those things is that to support the current benefit level, the fair rate should be 25 percent (current 9 percent). The present value of payroll tax has to be higher than the present value of benefit ( $pvt > pvb$ ) to brace the pensioners.
- c) *The inefficient management of Pension Funds Reserve:*** Again Korea shares one of the problems mentioned before. According to Moon government now monopolizes the fund and invests in low yield assets. Two thirds or more have been invested into the public sector (Moon, 1999) in different forms (ex. loans for government finance) accounting for approximately 65 percent, and strictly in the welfare sector (ex.

purchasing national housing fund bonds) for around 5 percent. The remaining 30 percent have been channeled to the banking sector (ex. purchasing public bonds). Indeed these are investments whose payoffs are smaller than the ones seen in the market. Therefore, there is a big distortion in this investing activity and the supporting evidence is shown by the following data:

**Table 3.**

**Investment of the National Pension Fund: End of 1998**

(billion won)			
Total	Public Sector	Welfare Sector	Banking Sector
37,465 (100.0%)	26,795 (71.5%)	1,439 (3.8%)	9,231 (24.7%)

Source: National Pension Corporation

Table 3 depicts a biased investment; about a 75.3 percent, goes towards the public and welfare sectors while the banking sector has only the remaining 24.7 percent. “Only” because if a private scheme is introduced, private management pensions companies invest in capital markets eliminating this deformity. (Capital and financial markets will be described extensively later).

**3.2.2. A second set of problems: Social and political obstacles**

Besides all the problems we have consider up to this point, there are still other difficulties that need to be addressed.

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<sup>17</sup> Peter S. Heller, *Aging in the Asian Tiger Economies*, Finance & Development, Washington, June, 1998, [Online] ProQuest, Order 105364995 (08/12/99), p. 4.

- a) ***The discrepancy among scholars, economists and welfare supporters:*** The scholars look for efficiency and actuarial-balanced benefits, while the welfare supporters insist on the grounds of generosity. In reference to this, showing my personal respect for the latter group, I believe social policies have to balance both values and principles with economic results to notably increase welfare.
- b) ***The attitude of government officials:*** The “representatives of the community” do not see enough incentives for a radical change. This is due to the short-sighted authorities that will only give the importance it deserves in 20 or 30 years from now when a visible crisis cannot escape from the hands of any government. It is well known that sometimes government officials respond to groups that can influence them to act, but in this case we have a weak group called the elderly. This is not because they do not want changes or better benefits, but because they are old people with scarce resources (wealthy elder do not engage in this kind of activities), and their ability to lobby is diminished. Many of these elderly groups of people never thought they were going to have to suffer economically in their future. However, now they are having difficulties negotiating and motivating their peers, ending with high transaction costs for their goals.
- c) ***Strong opposition of pensioners:*** In relation with the topic just mentioned, this poses a real problem because it reduces the level of benefits. Pensioners and people that will become retirees soon oppose drastic measures for sure.



*d) Political Populism:* This is a persistent pattern that does not diverge from the explanations given so far. Politicians are always reluctant to reduce current generations' benefits or increase contributions via taxes as part of their unreachable promises because they are looking for future votes. What happens is an increased fiscal drain of taxpayers (especially young workers and employers), an intergenerational transfer of the promises (intergenerational theft), ending with a big incentive to resist to social security spending. Then, under these circumstances the only way to accumulate funds seems to be by raising payroll taxes that create large wedge and conduces unavoidably to deadweight loss.

### **3.2.3. Solutions: some reform efforts**

In 1998 many experts in the field of pensions got together to try to reach a reforming effort meeting and ended up forming the National Pension Reform Board (NPRB). The following three alternatives were discussed:

*1<sup>st</sup> Proposal:* This focus on the scaling back of the existing formula of benefit. Its objective was to:

- Maintain the current system, including some changes.
- Reduce the replacement rate from 70 percent to 55 percent. This reformation effort (1998) partially failed when it was presented to the Parliament, because they only approved an amendment of just the 60 percent in 1998.
- Gradually increase the retirement age from 60 to 65 years in 2033.
- Over time transform it into a fully funded from a pay-as-you-go system.

As explained before the Korean Pension Scheme is a partly funded system, (a variation of the doctrinaire “complete” fully funded as pay-as-you-go system.) Currently the plan allows people that have contributed for 20 years to retire.

**2<sup>nd</sup> Proposal:** This second tier system objective is to provide a basic lump sum or minimum pension (MP), or basic insurance (BI), and an earnings-related pension (ERP).

It proposes to:

- Give BI to everybody and ERP to all the earners.
- The replacement rate is reduced to 40 percent, divided into 10 percent for the BI and the remaining 30 percent for the ERP.
- Gradual increase in the retirement age from 60 to 65 in 2033.
- Gradual increase in the contribution rate from 9 percent to 14 percent, until it can reach a fully funded system (FFS).

This second view can be perceived as a gradual process towards privatization. It is seen as a partial answer to the “blind spot problem” and that it can also be tax financed rather than premium financed, which is favorable.

**3<sup>rd</sup> Proposal:** A private system that is fully funded, relying on the individual’s free choice by contribution accounts. This idea was not emphasized at the time (then not well planned). Anyhow it has been considered by some scholars as a possible point for the new agenda in this field. It is characterized by:

- Having earnings-related deposited into individual or group private accounts.

- Has a defined contribution, having the advantage of being fully funded from the beginning.
- The contribution rate will be equal to 9 percent. This point is derived from the theoretical idea of perfect competition among different providers in order to achieve this premium. Or even as low as 8.33 percent as concluded by the Pension Mission of the World Bank (1998), as costs tends to be minimized.

This is the radical way to move into the new generation of pension schemes which have been proved in several Latin American countries, a pioneering model developed in Chile and followed by other South American countries. For example in Chile the pension reform involved an overall reduction of the social security contribution from 29.3 percent to 17 percent. The contribution to the fully funded system is just 10 percent (one percent higher than the above mentioned nine percent in Korea). However, if the NPS to be reformed monopolizes the funds, it will have to raise the contribution rate up to 17.25 percent by the year 2032 to overcome the crisis and attain sustainability (Palacios and Sin, World Bank, 1999). Hence, there is a clear advantage when a close relationship between earnings and pension benefits can be seen, but this beneficial aspect is absent under a PAYG system.

Restructuring recommendations have been proposed by the NPRB to the government during the last two years, having a partial acceptance or a benign neglect from the authorities. Reform measures for a fund management have also been set and put into consideration of public officials. The process is moving slowly, but the problem is that these measures have to be installed quickly, because the funds will be exhausted soon.

This negative situation has a hidden shadow because it may not have an effect right now but it will surely have one 20 to 30 years from now.

All the efforts are in the line of thinking of the first proposal made; at least government officials have adopted that direction. Moon and some other leading scholars believe that the reform efforts under the second tier system is a mean to conquer the private system. It is noteworthy at this point to remember that this is the closest approximation to what my expectation of change would be; nevertheless is not completely developed and it could vary in some aspects. It is not the objective of this thesis to compile and criticize the possible results under other strategies of reform and transition made before. These motives are the ones that led me to have another point of view which will be explained shortly.

For this purpose the Chilean case is taken as a model. This country underwent a radical change; a pension reform that substituted PAYG for a privately managed and non-distributive fully funded scheme (FFS). This was complemented by a small state-run redistributive means-tested minimum pension transfer (a BI, already thought by reformists in Korea) financed by general taxation.

Before breaking into the next theme, which is privatization, a remarkable commentary that was made by the Pension Mission of the World Bank for Korea should be pointed out. It emphasizes the idea that the fundamental weaknesses of the reformation efforts are that they target how to avoid depletion of the funds for several decades; thus, do not solve the problem after that. Although the second plan reform is better than the first one,

it still has the deficiency of being exhausted at some point in the future. Only if it would be implemented as a transition procedure, it could justify its presence. That seems to be the reason why Moon looks carefully to it as a transitional scheme to achieve the third proposal of the NPRB.

Another weakness of the reformation efforts is that it only deals with the NPS and does not take in account the OPS, which are already in deficit (military personnel) and have not even being presented in the official consolidated government budget.

## **CHAPTER IV**

### **COSTS AND BENEFITS OF PRIVATIZATION**

“People must see that there is a problem first in order to solve something by privatization”<sup>18</sup> There has been a rising tide of discontent in many activities developed under the responsibility of the government as well as skepticism about public enterprises. People lost confidence in their representatives and authorities and often argued that government is becoming increasingly ineffective, inefficient and incompetent to manage public duties. With this discontent comes together the search of alternatives that conduce to increasing privatization trends over different areas traditionally administered by public officials.

#### **4.1. Benefits**

##### **4.1.1. Insulation of pensions from political risk**

Politicians often use pension programs as a device to obtain votes. Insulation from politicians reduces the risks created in response to fiscal difficulties.

The FFS provides the big advantage of moving the pension funds away from the government budget. Public officials normally dispose in an abusive way from pension funds. Even if they are not used for other destiny related to the fiscal budget, they could still use them to pay pension benefits for people retiring or to complement its welfare redistributive policies discouraging people to contribute to the system. In Chile the use of savings plan has not been used to improve redistribution, even though there was a lot of

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<sup>18</sup> Poole, 1985, cited by Joseph Murphy, *The Privatization of Schooling: Problems and Possibilities*. (California: Corwin Press, 1996), p. 67.

interest and pressure by coal mine workers (one of the top industries and biggest labor unions in the country.)<sup>19</sup>

When the government is in trouble, as funds do not go through its budget there is less chance that these assets can be used for other purposes.<sup>20</sup> The government might adjust expenditures proportionately, cutting for example defense and also retirement pensions too. Here we have a big political issue, the defense program. In Korea the government keeps high defense expenditures because there seems to be no clear solutions for unification. This is a frontier that can be considered seriously, so possible cuts in defense will have direct incidence in a very delicate issue.

All the reasons presented show the good turn of the FFS considering political risks. Thus there are still some other motivations because there is still a chance that some legislative actions can be taken, and this has marginal risks (either bearing them all or sharing them) for FFS. When we talk about legislative actions, we're thinking about a narrow definition "taxation". As PAYG are financed by earmark taxes, this requires periodic revisions of the norms and rules and constant upgrading of taxes to meet contributions with the level of benefits. At this point, negative lobbying or "under-the-table negotiations" can proceed, hampering good initiatives by some groups. Lobbying is *inefficient* from the economics point of view because it creates a misallocation of the resources (money and time spent in lobbying). If for the good sake of some, a dogmatic reform is made that will favor the

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<sup>19</sup> Peter Diamond, "Insulation of pensions from political risk", chap. 2 in *The Economics of Pensions*, edited by Valdez-Prieto, Salvador, op.cit. p.34.

<sup>20</sup> It does not mean they cannot be taxed, because the government has the authority to do so. But, taxation takes time, until a law can be passed in the Congress. In the mean time individuals will take some measures to adjust to the future changes in advance. Is to be considered also, that taxation is limited in the sense that countries' constitutional rules prohibit confiscatory taxes.

pensioners the effects of the law can be delayed. Therefore the effects are *not visible*, even though the law was enforced (many government institutions or budget assignments are set, but difficult to see instantly). Policymakers have to think that when new and high benefits are to be given, the inflationary processes overcome the increase of the pension level. Again, if lobbying occurs and the legislature seems to be hardly influenced, poor outcomes can be seen.

Among other problems there is the one related to government's failure to pay its debt with the institution that is responsible for managing the funds. For example, in Ecuador the government has signed several agreements to repay the huge debt that has accumulated through out time, which is approximately \$6.3 billion dollars.<sup>21</sup>

Finally, with the individual accounts that FFS works these can be insulated from state intervention, as a consideration of the right of "private property." These could also be well developed by national constitutions, international declarations, and organizations that support them. The advantage with this approach is that as they become private property, they receive the same treatment as other assets that are far from government officials' hands. This is definitely a big concern which countries such as Canada, Ireland, Japan, Norway, and the United States search constantly for new initiatives to insulate funds and improve returns (World Bank, 1999).

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<sup>21</sup> *La estrategia del nuevo IESS para eliminar el saldo rojo*, Semanario LIDERES, late ed., [Quito], May 1999,p. 3.



#### 4.1.2. There are positive effects on quantitative on long run output and welfare effects of mandatory pension systems and reforms

A study presented by Cifuentes and Valdez-Prieto shows some realistic figures that can be obtained for *representative economies* (including Korea, *others* refer to the United States), including a big group of myopic and credit-constrained individuals.

**Table 4.**

#### Effects of Substituting PAYG by FFS in Representative Economies

<i>Steady State Effects of Substituting PAYG by FFS in Representative Economies</i>		
	Output Change	Welfare Change
<i>With Credit Constraints</i>		
<i>75% Debt, 25% Tax-financed Transition Deficit</i>	+7%	+3.4%
<i>Full Tax-Financed Transition Deficit</i>	+21.8%	+16.3%

Source: Table 5.1.D, Valdez-Prieto, p. 134, 1997.

Even when debt financing is large relative to tax financing (75 percent and 25percent respectively), four study reports a significant long-term output gain of 7 percent. When the transition deficit is fully tax financed, the long-term output gain rises to 21.8. The latter figure is quite large, a result due in part to two assumptions: FF savings exemption from income taxation and low stationary GDP growth (1 percent). However, the main driving force of the reported 21.8 percent is the presence of a large group of myopes.<sup>22</sup>

Yet further studies by some other authors show that in the absence of myopes<sup>23</sup>, long-term output gains of a tax-financed pension reform when credit-constraints are present decrease to a single-digit figure.

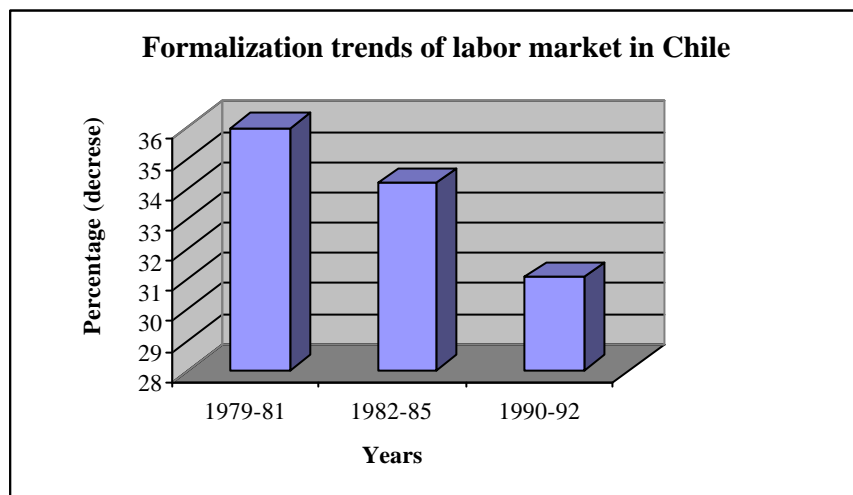
#### 4.1.3. Formalization of the work force

Some findings demonstrate a change in patterns, passing from informal to formal labor force in Chile' s case, in which the share of independent workers in the labor force (who

<sup>22</sup> Giancarlo Corsetti and Klaus Schimdt-Hebbel Klaus, "Pension reform and growth," chap 5 in *The Economics of Pensions*, edited by Valdez-Prieto, Salvador, op.cit. 136.

are not required to contribute to mandatory pension scheme) has declined from 26 percent to an average of 24.5 percent. More direct evidence can be seen from the following trend.

**Figure 3.**



(\*Data for 1986 to 1989 not available)- Source: Table 5.3 Valdez-Prieto, p. 147, 1997.

Figure 3 shows that the share of informal labor force dropped from 36 percent in 1980 to 31.1 percent in 1990-1992. A reduction of the 4.9 percent, this is a contrasting trend from the one seen in other Latin American countries such as Argentina or Colombia, whose direction is going in an opposite way with increases in the informal activities.

Formalizing the labor market will increase government revenues by collecting taxes (this sector is regulated, hence taxed). At the same time, this taxes can be employed for redistributive policies for the poor; thus reducing income inequality and improving welfare. It will reduce the rate of evasion, a problem that increased rapidly after the

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<sup>23</sup> Here myopes stands for those people who are shortsighted, considered as the inability to take what

Financial Crisis of 1997, when almost one out of ten workers laid-off due to the conditions requested by the International Monetary Fund (IMF) as part of the bail-out program passed to the informal sector. This cadre of self-employed owning “small business”, or similar lucrative activities are difficult to tax. They “shall be” an important source of revenues for the government. Their income is around 60 percent of the average wage of a salaried worker. This group of the labor force is specially shirking the value-added tax, difficulty that pushed the Korean government to look for a tax reform. This standpoint was the conclusion obtained by Hyun (1999), who said: “*The different levels of compliance between wage earners and self-employed led to unequal tax burdens. ...The special treatment of small businesses in the VAT system has been criticized as a systemic source of tax evasion. Although the special treatment was designed to help small businesses, an unexpected consequence is the high level of tax evasion.*”<sup>24</sup>

This is beneficial for the Korean case because as we saw, it reduces the informal sector, made up by the self-employed. Still, many workers do not care or simply underreport their earnings, and then they have the implicit guarantee from the government to be entitled to a basic insurance with almost no contribution at all. So, it could seem positive for other countries but not for Korea. That is not true because as long as the people start to realize that they receive large benefits from the private funds, they would hire workers and push their employers to legalize their situation looking forward for a secure and stable life when they retire.

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society thinks will be the proper measures for the future due to any kind of social limitations.

<sup>24</sup> Jin-Kwon Hyun, *Tax reform in Korea: Government proposal an evaluation and the future*, The Korea Herald, 26 Aug.1999, A2.

#### **4.1.4. Reduced labor costs**

There are efficiency gains in the labor markets with FFS through the changes in labor supply and resource allocation decision, in response to new incentives in the factor and product markets. PAYG tends to raise gross labor costs. The costs of the former scheme can be avoided by shifting to less labor-intensive technologies or informal markets as well. Undoubtedly, FFS can have a positive effect because in the event of crises, unemployment is less likely to occur unlike what happened in 1997 and 1998.

A counter argument for this proposition can arise. There is transfer of the costs (half of the employers' contribution to the pension scheme) to the workers. They will then receive higher wages, but at the end decreasing the contribution will take them back to the same level they were before. This is a simple criticism that sounds quite convincing, but the issue here is not only that they will have to pay, but that they will be free to choose the provider they prefer (freedom and choice will be discussed latter). For the sake of the argument, even though the workers will have to pay for their social security, they can choose freely from the different providers in the market. Certainly they will be better off if they receive better and more efficient pension benefit (yields that come from investment in the capital markets). Like additional services and other advantages that compared to the ones the government is providing, it will definitely be much more satisfactory. Currently in Chile most workers see their contributions as “deferred compensation” rather than as a tax burden.

#### **4.1.5. Increasing saving and capital stock**

Despite the high savings rate in Asian economies, it has independently been proven to increase with private pension system. Consequently, as far as savings could keep increasing the capital stock, much more investment will be seen. Probably someone can argue that we should not pay much attention to the Asian economies because they have a strong tendency to save traditionally. Then my question is that conditions in the world markets are changing very rapidly, can anyone guarantee that patterns of savings of future generations would be the same? Is there any sure projection of a certain behavior of new comers? *“There is tremendous variation and little predictability in how much care people will actually require for how long a period. To save for long-term care is therefore inefficient: some people will save too much, others too little.”*<sup>25</sup> The objective here is not to invoke controversy but to leave everyone the task to think about it. Recall the basic of economics that if there is more saving, the economy can achieve higher levels of investment. FFS raises savings and eliminates market distortions, thereby increasing long-term growth and welfare levels.

FFS appears as a suitable way to manage saving because pure “private insurance” (referred to international insurance companies) remains too costly for most people who need long-term care. Also putting your savings under your mattress does not sound rational.

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<sup>25</sup> Judith Feder, *Improving Public Financing for Long-Term Care: The Political Challenge*, Journal of Aging & Social Policy, vol. 10.3 (1999): p. 2.

In addition to what was mentioned, it is interesting to share the main results of a particular study conducted at the KIPF by Chun (1998). He found out that “*not even in the presence of tax incentives under the current pension system in Korea (NPS only), it can increase saving, it would only be a change of savings into other kind of financial assets*”.<sup>26</sup>

#### **4.1.6. Efficiency gains obtained in capital markets**

Gains come in the form of different financial instruments and products by the liberalization and suppression of financial repression. Again, it seems to be a sound measure used frequently to accomplish the reformist targets under the Bank Structural Adjustment Loan I (SAL I) of the World Bank, and conditions imposed by the IMF to Korea trying to achieve corporate governance. It will unavoidably contribute fulfilling main goals of economic restructuring agreed by international analysts and government’s advisors.

Private pension schemes fuel the capital markets by the interaction of different investors, especially institutional investors (IIs), these are mainly pension fund management companies, life insurance companies, and investment trusts.

*“This is a two way street, minimum IIs and capital market development is required to support viable funded pension system while the development of the latter is key for adding depth, liquidity and innovation to the capital market, for further IIs, and for*

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<sup>26</sup> Young-Jun Chun, *The personal income tax and some features of taxation in pensions*, Public Finance lectures, School of Public Policy and Global Management, KDI, Seoul, 27 Sept. 1999.

*improving corporate governance.*<sup>27</sup> This will provide transparency to the capital markets and assist enterprises on their efforts of restructuring.

Even though Korea's economy is one of the largest in the world, it presents peculiar features. A remarkable one is related to the way of investing private savings. In other countries like the United States, United Kingdom, or Chile these funds are predominantly invested in securities market instruments like bonds or shares. In Korea they have been mostly invested in assets, which are not traded in the securities market. This deficiency accompanied with other bureaucracy traps do not conduce Korea to a policy that can built up capital and further financial market development.

If the new pension system is implemented, a different variety of gains can be seen throughout the achievement of beneficial aspects in different parts of the financial market.

**a) Pension Funds:** The main goal will be the reduction of an excess bureaucracy in which you have a series of diverse stages and instances to take decisions and of course this implies a big number of workers devoted to this kind of activities. To show this excess burden can be eliminated, it is convenient to describe how complex (inefficient) is the operative mechanism of the current National Pension Fund. This conclusion is driven partially from the exorbitant number of institutions and people involved in it. This can be better understood when examining the following picture:

The fund is regulated and supervised by the Committee of National Pension Fund Operation (CNPF). The Minister of Finance and Economy is the Chairman of the CNPF and the Minister of Health and Welfare is the Vice-Chairman. The compulsory members of the CNPF are the ministers of agriculture and forestry, industry, and labor; other members include two representatives of the employers through the heads of the employers' organizations, two representatives of employees through the respective

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<sup>27</sup> World Bank, *Aid-Memoire by the Pension Mission of the World Bank*, Annex 2, (Washington D.C. July 5, 1998) p. 45.

chairman of a trade and industrial union associations, three representatives of farmers and fishermen, the president of the National Pension Corporation (NPC) as the representative of the pensioners, and two experts in public pensions. The Ministry of Health and Welfare (MOHW), based on the regulations issued by the CNPF, establishes the fund operation scheme and supervise the NPC. Finally, the Minister of Health and Welfare to operate the NPF entrusts the NPC. However, since the enactment of the Pension Fund Management Law in 1993, the power of the CNPF has been weakened.

In order to finalize the fund operation scheme, the MOHW consults with the CNPF, the Minister of Finance and Economy, the State Council, and requests approval from the President. By April of every year, in agreement with the approved fund operation scheme, the MOHW has to present guidelines of the NPF operation for the coming year to the CNPF, which has to approve it by the end-May. The early guidelines are then sent to the NPC. The guidelines, among other matters, define the investment policy, including the distribution by sectors (public, financial, welfare) and by products (e.g. equity, bonds). In turn, the NPC produces the monthly fund operation plan, operates the fund with the monthly approval from the Minister of Health and Welfare, and reports the results to the CNPF quarterly. At the end of the year, the NPC also conducts an audit of the statement of the accounts of the fund with certified public accountant (CPA), and reports it to the Ministers of the MOHW and MOFE, the Board of Audit and Inspection, and the National Assembly. Then, the Minister of Health and Welfare inform about the results to at least one daily economic newspapers with main office located in Seoul.<sup>28</sup>

By avoiding the excessive bureaucracy and dysfunctional agencies and institutions, it is possible to have a NPC that will focus on its main functions for which it was created. The NPC will guide prudential investment, hedging against long-term pension liabilities of the global pension fund in order to guarantee the elderly security and become more efficient in its administrative duties.

***b) Investment Trust Companies:*** At this level we would encounter the positive aspect. In other words, if the system is implemented this will ensure the complete segregation of the managed funds from the managing company. This advantage does not prevail today, where confusion is seen between the assets of the account holders and the funds of the management companies (Investment Trust Companies). This means that the system will have to adopt a mechanism of assets according to the market prices. Also this will be completely favorable for the development of the mutual fund industry, which was already in the agenda of the government' s by July of 1998.

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<sup>28</sup> World Bank, *Aid-Memoire by the Pension Mission of the World Bank*, op.cit. p. 51



**c) Life Insurance:** The premiums that insurance companies charge to the customers are extremely high. In 1998 they made revenues of more than 48.8 trillion won, accounting for almost 11.7 percent of GDP. How can this be possible after a year of crisis to end up with such figures? It is not right. So why are these companies performing as banks, or providing loans when this is not their statutory objective.

The other problem is the one related to the former issue that made these companies slide into insolvency difficulties since 1994. This is said to be another of the paternalist activities of the government to support *chaebols* as well as the government itself.

**d) The bond market:** The bond market will accomplish important progresses after the reform. It will gain liquidity and will standardize its term maturities for bonds, giving the secondary market the possibility to develop more efficiently.

An introduction of efficient rating agencies will play a predominant role by the assessment of credit risk replacing the common Korean banking guarantees provided by relying on the name of the borrower, and at the same time increasing viable monitoring mechanisms. Some multinational foreign credit rating agencies for sure will establish subsidiaries for this purpose.

**e) Equity Market:** This market will be enhanced by the private pension systems as they allow the players to set the rules of the game themselves. Self-regulatory efforts are even pushed by the Korea Securities Dealers' Association (KSDA), who currently is officially recognizing its own regulatory organizations as it happens around the globe. Nevertheless,

the government has some constraints for self-regulatory organizations because it does not bestow the KSDA enough authority to regulate and supervise its members.

This is a difficult task because it is renowned that in Korea the board of directors of financial institutions usually interferes with the management of enterprises. Corporate governance will be fostered by the changes coming from the targets that the new system tries to attain.

Finally, I will like to attribute the recommendation made by the Pension Mission in order for markets to achieve desirable targets, implying the following:

..in the short run, pension funds should load their portfolio primarily with market-based government backed securities, private sector asset backed securities, Korean corporate bonds issued in foreign markets, while allocating a small fraction of their portfolios in investment-grade private papers in the Korean capital markets. In the medium-term, as uncertainties from restructuring of corporate and financial intermediaries start to be dissipated, financial innovation is introduced, and regulations and supervision of financial intermediaries strengthened, pension funds should find it more attractive to start investing a larger proportion of their portfolios in private securities. This shift would also be induced because the supply of new public debt would be slowing down; hence the yield differential would increase in favor of private papers. In the long-run investment in foreign securities would also be available, and pension funds should take advantage of this opportunity to diversify risks of their portfolio by investing in markets whose returns have relatively low or negative correlation with the Korean capital markets return.<sup>29</sup>

## **4.2. Other social considerations**

This section will be devoted to describe some of the most important problems in the process of new private schemes and the relations with the Korean situation.

### **4.2.1. The optimum amount of pension benefit**

This is a problem that has always been there. Pensions were created to replace wages, as people get older. Pensions are calculated as a percentage of gross earnings and in other

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<sup>29</sup> World Bank, *Aid-Memoire by the Pension Mission of the World Bank*, op.cit.. P.46.

cases, as net earnings after contributions. The problem in Korea is that the components of the salary are too disperse, so it is difficult to have a precise idea of how much can be obtained from the employees' salaries. For example, the replacement rate is fixed to 60 percent for 40 years of contributions. Moreover, households differ in terms of needs, targets, and preferences. Consequently, some people will be satisfied with 60 percent, but others will not be pleased even with a 100 percent. If they have the chance to invest privately their funds, they can be able to ask for pensions that pay over an established percentage according to their past income.

#### **4.2.2. The impact of financing on saving for a first group of pensioners**

Younger generations are the ones to support the elderly. They have to pay in a form of payroll tax the money that older people receive in the form of benefits; thus, reducing capital younger people can save.

As it was mentioned before, first generations receive higher pensions than the latter ones. Younger generations receive generous benefits and especially the so-called "baby boomers" (people between 30 to 50 years of age), who make their own cost-benefit analysis that determines high returns for them. *"Most Koreans who were old when their system was established in 1988 will have died by the time the system pays out its first full benefits. In such cases the scheme accumulates a partial reserve in its early years, with the largest benefits likely to be received by people who are 30 to 50 years old when the scheme was introduced-the founding generations. They pay contributions for only part of their working live but collect generous pensions for many years."*<sup>30</sup> They see that the

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<sup>30</sup> World Bank, *Averting the Old Age Crisis*, op.cit. p. 325.

amount received when the system is implemented is higher than the contributions they made. For that reason, this could cause that savings rate can fall because they would like to borrow against their future income stream that is definitely better. *“If they anticipate this transfer, they might try to borrow against their future pensions to consume more when they are young, further reducing national saving. If the country has deliberately chosen to improve the income of these groups, national welfare improves, but the price is lower saving and growth for future generations.”*<sup>31</sup>

One of the main issues here is that this saving is reduced, whether this is true or not, some empirical studies have shown low impact on savings for Canada, France, Japan, Germany, among others. Still public saving is indeed hampered.

Normally the government borrows against this public managed pension fund at lower interest rates than the market is doing it. In addition to this, generally these kinds of funds are forced by law to be invested in public bonds, which yield low or even negative real returns. It's necessary then to let people decide whether to choose where to invest as an alternative of inefficient and badly planned government investments. The difference between public and private systems is the possibility to isolate them from government intervention and properly channel those funds into long-term investments in capital markets.

#### **4.2.3. Administrative costs**

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<sup>31</sup> World Bank, *Averting the Old Age Crisis*, op.cit. p. 307.

In other words this reminds us of the classic rule of *higher costs, lower benefits*. Private managers are by definition profit-seekers, this means minimizing the costs or maximizing the profits. This is an observable advantage of the private pension plans if compared to public plans. Government requires an extremely well trained and prepared bureaucracy to deal with this problem, a thing that is rarely seen in developing countries.

It looks simple if we consider this point, but we have to be careful when supporting the idea. A one-sided position is not fair, as some counter arguments can conclude. When the government through its respective agency is in charge of administrating pensions, it subsidizes the institution in various ways. For example telephone bills, zero rent payment, and many other services can also become a comparative advantage for state-owned pension provider. At the same time, it should be taken into account that bureaucracy is not prepared to take advantage of these resources and there are no incentives for managers to be efficient. Additionally, it is seen that public systems try to charge extra premiums for longevity, which offsets all the saved costs and will be passed implicitly to society. Eventually another problem is that they keep investing in low yield financial products. In contrast, private companies try to accumulate reserves and diversify their portfolio. The idea that prevails in private insurance is the *efficient allocation of capital*.

Disregarding the above-referred advantage of efficiency over subsidies, many opponents have other arguments that are adamant about change in the name of redistributinal grounds. Others concentrate in the effectiveness of minimization of costs arguing in what seems to be very convincing. Are there really reduced costs in private scheme? What will

happen with all the money invested in marketing and sales? They make up a large part of companies' budget and represent an important percentage of total administrative costs.

This story is in part true as some figures have been calculated and experienced as well. For example for the same Chilean case, initially “*..administrative costs were extremely high. In 1984 it accounted for 9 percent of the wages, or 90 percent of the contributions to the retirement system! By 1994, however, costs had declined significantly, amounting of 1 percent of wages or 10 percent of the retirement system*”<sup>32</sup>. Edwards also cite some other calculations made by distinguished scholars showing convincing findings, with the natural problems and variations from year to year. For example Bustos (1995) found that the total costs of the new regime are 42 percent lower than the average costs of the old PAYG system. Another supporting evidence in terms of accumulated assets by Margozzini (1995) who encountered that administrative costs have declined from almost 15 percent in 1983 to 1.8 percent in 1993, including sales costs.

Although we can see the aforementioned evidence, still some other academics such as Diamond (1993) argue that the Chilean system still receive low marks for its high administrative cost compared the “inefficient” system that was replaced. He found that the cost per person in the Chilean is far above the one reported by the U.S. Social Security Administration for the case of define benefit system. For Diamond some of the advantages shown by the state-run pension system lies upon different elements. The main ones are the economies of scale a well-administered program can attain, the large expenses that private firms employ in advertising and marketing the products, and a

market demand less sensitive to variations on price, that can be seen in competitive markets. He also attributes to part of these high costs the weakness of individual investors to obtain discounts compared to employers (collective investors choosing an AFP for all their workers). Yet employers are not natural organizers and also are likely to comprise with a specific AFP, thus ending up with corruptive activities. Nevertheless, Diamond himself considers that: “*Countries can do worse than imitating Chile (and many have). I have argued that countries choosing to privatize can do better by recognizing that the private market is an expensive institution ...*”<sup>33</sup>

#### **4.2.4. Taxes and evasion problem**

This is a problem that can be discussed in a whole thesis itself, thus, a summary of the most important issues follows.

Governments around the world usually have problems raising taxes and more when countries are facing crisis. This limited power of taxation, the inefficient civil servants, plus the different ways of evasion pose a serious difficulty to raise funds for pensions.

We should not forget that it is predicted that payroll taxes (includes income tax and social security contributions) raise costs of employing labor above the wage paid. Also income taxes and employees’ social security contributions reduce the return to workers. A rise of social security payments will reduce the aggregate demand for labor “*An increase in social security contributions can also result in unemployment when workers resist*

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<sup>32</sup> Sebastian Edwards, *The Chilean Pension Reform: A pioneering program*, Working Paper 5811, National Bureau of Economic Research (Cambridge: November 1996), p. 17.

*offsetting wage cuts*".<sup>34</sup> This is true when we have rigid labor markets; because in the case of flexible ones, getting the right clearing market wage level can offset any increase in the tax wedge.

It is proposed theoretically that increases in social security payments add extra burden for the poor by raising the global tax wedge. On the other hand, this does not have much effect to people with higher incomes because you can observe ceilings for contributions. Visible negative effects from wrong levels of taxation are being seen. Empirical studies show that social security contributions for some European countries like France, Sweden, Italy, or Spain are 25 percent higher, contributing to put upward pressures for higher wages, increasing labor cost, hence reducing employment (OECD Jobs Study, 1994). Many conclusions about the current topic are part of a big discussion yet. I consider very crucial the following extract completely, to illustrate this point:

The increases in employers' contributions that have taken place in several countries will have increased labour costs in those countries where labour markets are relatively inflexible. Consideration might be given to inclusion of non-labour income in the contribution base for employer's contributions. But it is not just the levels of employers' payroll contributions, which sometimes seem counterproductive; the structure of such contributions should also be re-examined. By typically levying contributions on the first unit of income earned and reducing the rate of contributions above certain income level, the result is an in-built bias towards employment of high-income workers and use of overtime rather than employing low-skilled workers. Such contributions ceilings are often justified as reflecting benefit entitlement.<sup>35</sup>

Along with the point of taxation we come with the idea of evasion. If benefits are not closely linked to contributions, people frequently evade mandatory pension schemes. If the government imposes a tax and it does not reflect an adequate benefit level, you are likely tempted to shirk legal obligations. The incentives to evade are greater when social

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<sup>33</sup> Peter Diamond, *Privatization of Social Security: Lessons from Chile*, Working Paper 5811, National Bureau of Economic Research (Cambridge: November 1993), p.26.

<sup>34</sup> Organization for Economic Co-operation and Development, OECD, *OECD Jobs Study: Facts, Analysis and Strategies*, (Paris: OECD 1994.), p. 240



security contributions add extra burden to employers or employees, plus there is a lower probability of being caught. In other words, it is merely the opportunity cost of the heavy weight that a new tax imposes and the offsetting benefit attained by the inherent (low) punishment that the evader can be subject off. A World Bank study (World Bank, 1994) found that because of the increased evasion a 1 percent point raise in contribution rate led to a 2 percent point drop in total receipts. There are several ways to evade, the most remarkable ones are underreporting, delaying contribution payments, and even simply refusing to comply.

*a) Underreporting earnings:* This is not computing the total amount of benefits a person is receiving as part of the salary. There are many *fringe benefits*, extra income streams not in the form of cash. For example vehicles provided by the company, or free housing, among others. These hidden earnings can reduce abruptly the amount of receipts. In allusion to this point, this is broadly surveyed in Korea, where the composition of the salary is not precisely determined, so evasion is possible. In this category of evasion we have the self-employed, lawyers, doctors, taxi drivers, and many others that keep much of their earnings out of sight.

Another proof of this evasive tendency was evidenced as well with direct implications in the pensions issue that can be read in an article published by the Korea Times, April 21, 1999. The paper mentions that according to the Representative of the opposition Grand National Party, Hong-Shin Kim: “*The actual payment of pension is expected to be lower than the government-promised sum, as more than 70 percent of the new subscribers this*

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<sup>35</sup> OECD, op.cit. p. 274 - 275

*year made false reports of their incomes ...”* Kim’s argument was based on the discrepancy of the Health-Welfare Ministry’s original estimate of the average income level at 1.27 million won earned each month and the actual figure now set at 1.09 million (Korea International Labour Foundation –KOILAF-, Korea Labor News, 1999).

***b) Delaying the contribution:*** This is perceived as the idea that one dollar today will not be a dollar tomorrow and especially when more countries go through inflationary crisis. Employers delay their obligations and even present legal actions to engage in judicial processes that will last for long time, hiring corrupt lawyers to do the work. This is serious if in addition the country has a poor judicial system that cannot address procedures rapidly, and that at the end can only charge low interests that does not overcome the imbalance created early.

***c) Simply refusing to comply:*** It is just not paying because you have insignificant penalties or lack law enforcement.

All of these kinds of evasion or delayed payments leave the government with no liquidity to finance their budget and again this can be to some extent the cause for budget deficits.

#### **4.2.5. Early retirement**

One of the main ironies in this case is that people in poor countries are allowed to retire early (even life expectancy has increased). Women are also able to retire earlier than men, even though they normally live longer than men do.

It is not necessary to be good in mathematics to realize that if you know many workers retire before the average retirement age receiving top benefits, the pension's reserves will decline. There should be a necessary balance between eligibility to retire (years of contributions and minimum age) and benefits to get. Early retirement in terms of actuarial calculus is a serious figure to consider.

Public pension plans and retirement patterns differ among countries. For example in the United States, workers are eligible for social security at the age of 65 and early retirement at 62 with reduced benefits. The same age (65) is applicable for full public pension plans for older workers in Sweden. The Japanese case is a little bit different because workers qualify for the benefits at the age of 60.<sup>36</sup>

In this instance more than in other areas, social policies are subject to political promises. We see that politicians find easy to promise early retirements and high benefits. It is very attractive to be offered those kinds of things. Nevertheless when people are not able to collect what they were promised, government will have to bear with the inquiries of an irritated society. In Korea for instance “*..less than 5 percent of the old are eligible for public pensions,*”<sup>37</sup>

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<sup>36</sup> Section reference Blank.

Even if the retirement age would be adjusted, there has to be an optimum point that will not disrupt the labor market. At this point the elderly should step out of the labor force and allow new generations to get in. This issue is a very difficult one to manage is because in many developing countries working populations are not covered by pension schemes or are defectively covered. Thus they keep working to support themselves. For example in the Ecuadorian case the replacement rate for pensioners is less than 20 percent.

A common problem worldwide is that early retirement also have undesirable consequences for distribution of GDP because the main beneficiaries are civil servants and other privileged groups, and this is observed in the Republic of Korea. Workers in upper income-level brackets collect the benefits for longer periods, but this is not true for people with lower incomes because they live longer than their compatriots do.

#### **4.2.6. Intergenerational redistribution**

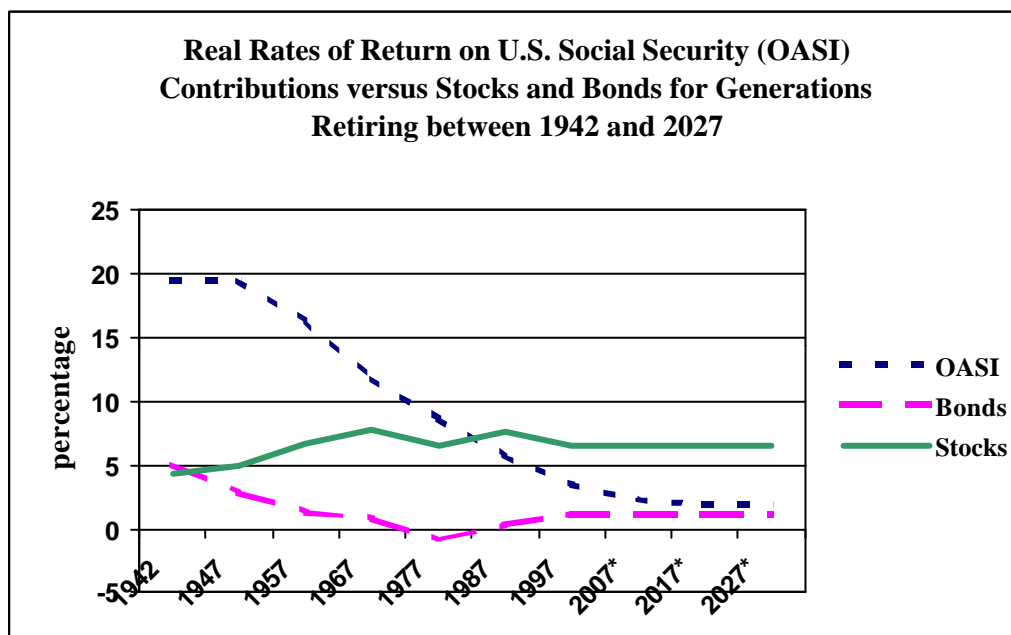
Intergenerational transfer is the income received by one generation at the expense of another. We should be careful that this does not turn into a heavy burden for future generations to carry. Therefore, it should not be at the expense of each other. Lets look at the principles such as equity and sustainability, because most of the plans are justified around these supreme fundamentals. The distribution of income across generations has helped realize that the ability to support themselves has weakened with at age. Factors beyond their expectations such as inflation, economic recessions, wars, natural disasters, have definitely affected their abilities.

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<sup>37</sup> World Bank, op.cit. p. 323

This kind of situations can be seen with pay-as-you-go systems, where earlier generations are better off, but latter generations are worse-off. Some studies from the United States' social security have found that more than 15 percent of workers who retired between the 1950s and 1960s have received higher incomes than with any other investment like the stock or bond market (World Bank, 1994). Then members of what is called “founding generations” or people who died before the full pension benefit is paid, receive even four times more than the amount they have contributed through out life. Figure 4 gives a clear-cut of the referred trend, as follows:

**Figure 4.**



Source: World Bank, *Averting Old Age Crisis*, 1994, p. 326

## CHAPTER V

### BREAKING INTO NEW PLANS

In this chapter I will explain why Korea should adopt a brand new private system. Some challenging ideas of this theoretical approach are set for a clear scope of a new pension model. From my point of view, there is room for the new system applied with relative success in other countries. It is a basic theoretical framework that could inspire a fresh wave of thinking. A feasible “way to go” that works over the keystone of privately managed pensions with operational transportability. For this proposal I have considered the possibility to establish a very similar model to the one used in Chile, taking in consideration the differences that should apply for diverse cultures and levels of economic development.

### **5.1. The criteria for a policy choice**

Experts in the economics field have made some technical suggestions to facilitate the transition process towards assimilation of privately managed systems. As you remember these are fully funded, so the conditions for implementation must be stable. Korea seems to have some clear advantages in terms of economic fundamentals. Even though experts from the World Bank refer to this fundamentals as necessary for low-income countries (Korea is not included in this category), it is important to discuss about these and present some arguments to support the feasibility of the program. For this study some aspects of the nature of the past financial crisis must be disregarded, while working upon the basis of a recovering an economy that millions of Koreans hope to have.

#### **5.1.1. Keeping inflation down**

This is not a serious problem for Korea, because in the last three decades the country has demonstrated that it can manage to control this situation. In general, East Asian

Economies have kept the price level relatively low and that is why so many investors spur funds into these emerging markets. *“During the past thirty years, annual inflation averaged approximately 9 percent in these economies, compared with the 18 percent in other low-and-middle income economies. Because inflation was both moderate and predictable, real interest rates were far more stable than in low-and-middle income economies”*<sup>38</sup>

### **5.1.2. Avoiding interest rates and exchange rate controls**

This is not a problem at all either by desirable considerations of liberalizing capital account transactions as a measure of openness, or by the conditions imposed by the IMF last year, the capital market has not many restrictions left.

### **5.1.3. Establishing reliable savings institutions that are accessible to people in rural as well as urban areas**

In this case we see no difficulty either. Savings rate and reliable savings institutions are one of the main pillars of the economic pinnacles of Asian economies. Just take a look of the “postal saving systems”, this is just enough proof of competence in this structural feature. In addition, savings are not only seen in the household sphere, but also in the private firms, which is quite peculiar nowadays.

Voluntary saving is not a difficult concept for most East Asian Economies, which are well known by the high private savings rate. This is a big difference compared to other developing countries such as the ones in the Latin America.

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<sup>38</sup> The World Bank, *The East Asian Miracle*, op.cit. p. 12.

#### **5.1.4. Developing a regulatory framework that gives people confidence in banks, insurance companies, and other financial institutions**

Several Korean economists disagree that there is a competent, stable and secure financial system. Conditions are and have to change because lessons were learned after the crisis. It is difficult to fall in the same mistakes that shook thousands of people in 1997 and 1998. The high rate of unemployment due to the massive layoffs will not be tolerated again. Therefore, the adjustments need to be made to continue acquiring a sound financial system combined with evident corporate governance.

Korea has the financial capability to overcome a crisis and its showing it right now. Another significant thing that we cannot omit is that regulation normally comes after problems are observed in the market. The regulatory process tries to always follow the pace of new financial products and institutions that derive from the new requirements and initiatives of financial brains. I do not think we should worry much, because the time will come. We just have to analyze about the Korean economic structure at the end of the 20<sup>th</sup> century, which is far above the one Chile had on 1981, and that of other less developed countries that are trying to experiment with this new model. For that reason it is not true that the Korean financial market is underdeveloped.

#### **5.1.5. Instituting an effective tax policy and tax administration system**



In my opinion this is the most difficult task. Anyhow, effective tax administration is not required for this particular case; it is needed for any country to achieve economic growth and productivity increase.

With FFS you can achieve formalization of the labor force. Passing from an informal (unregulated and untaxed) to a formal sector (that can be regulated and taxed); thus, the government can raise its revenues. Accordingly, we will have to forget of much of the concerns of evasion. This difficulty is a major concern in developing economies and has been a seriously acknowledged worldwide.

#### **5.1.6. Building the human capital is essential for the effective management of financial and regulatory systems**

This statement is self-explanatory because the investment in human and physical capital is also one of the fundamentals of East Asian Economies. Many economists can disagree in different aspects of East Asian Miracle, but non-of them refute the importance of this factor in terms of their economic development. Krugman, Rodrik, Sachs, and other figures have a convergence of thoughts in this point. *“In the 1960s, levels of human capital were already higher in the HPAEs than in other low-and middle-income economies. Governments built on this base by focusing education spending on the lower grades; first by providing universal primary education, later by increasing the availability of secondary education”*<sup>39</sup>

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<sup>39</sup> The World Bank, *The East Asian Miracle*, op.cit. 15.

At this point, I would like to emphasize a point that will complement the strengths of the Korean economy. This is the noted lower income inequality compared to other middle-income economies. To start the process of privatization, the problem encountered by domestic policymakers are the disparities, even in Chile which has achieved good results, the starting point was totally different. Thus, this is a crucial thing some theorists forgot. That is also why from my point of view, Korea is a good candidate for privately managed pension scheme.

## **5.2. The pension proposal for Korea**

So far we have discussed the insights of pensions topics with a remark on the virtues of a private pension model giving room also for some counter arguments. I strongly support the private view. The transition and implementation has to be accompanied by contemplation of consensus for change. The proposal goes more in the line of the third proposal of the NPRB, which looks at the possibility of individual accounts managed by private providers of social insurance.

This proposition can be considered in a general perspective described here. *A mandatory saving managed-pension, mixed-scheme with individual transportable accounts over the basis of a defined-contribution<sup>40</sup>. This personal accounts are to be managed by private pension management companies - such as Administradoras de Fondos de Pensiones -*

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<sup>40</sup> Defined-contribution is different from defined-benefit. The former pays a benefit upon what he/she has contributed, plus accumulated capital returns, either as a lump-sum, or more commonly, in the form of annuity. The latter pays a benefit with reference not of how much money the individual has contributed, but other criterion, such as final salary, the average of the three final years, or the average of the best three best paid years.

*(AFPs) in Chile - in the case the individual choose a private pension provider or by the competitive government institution designated for the task. The system should provide a basic insurance or minimum pension benefit (for low-income individuals financed by current taxes (as part of a communal welfare program), considering transparent means-tested program.*

After setting the model, a clear description will follow in order to clarify related aspects of the plan and conducting to a tentative framework of it.

- When referring to “mix” means two different things:
  - a) The government can also compete with the providers of the services under the same conditions trying to attract savings. A non-exclusive market for a government in need to capture part of the idea of equal right of competition.
  - b) The government playing the role of a supreme democratic authority ready to provide a minimum pension to low-income elderly.
  
- The accounts can be moved freely from the government investing institution to the private management companies and vice versa. But a minimum pension benefit (MPB) or basic insurance (BI) should be provided to people who do not qualify for the private plans, over the base of mean-tested programs. At this time a brief parenthesis needs to be made to explain the merits and demerits of MPB and BI. One the one hand, MPB is based on a means-tested program which has the characteristic of being selective (of course a to implement a good means-tested program is a difficult task). With selective and determined individuals as part of the program, low

administrative costs can be achieved for the NPC. The con of it is that a *moral hazard* situation can pose a big social cost for those who rely on the program in an irresponsible way. On the other hand, BI has the advantage of avoiding segregation and the selective process of means-tested. The problem with this one is that it is more expensive to administer and impose a big burden into the fiscal budget because it is given to a larger number of people than under means-tested MPB.

- It will work over a two-pillar system, if in the first pillar we will pay universal BI or MPB to all workers that qualify according to the number of years of contributions and the retirement age. The second pillar will be responsible to pay pension benefits that will include disability and survivors. This will be done by individual accounts capitalizing the funds and administered by pension fund management companies and/or by a special technical investing committee (STIC) conformed for that purpose and an autonomous “Office of the Actuary”. The last one should be independent from all the government agencies and will report directly to the President and the Parliament. The last one is an idea given by the Mission of the World Bank that I think is excellent. Furthermore, this office could monitor the rest of the pension fund management companies, insurance companies, and all the other types of private providers that are working in the market.
- The BI or MPB is to be financed by general taxation. The fund will be administered by the STIC as part of the initiative to make this government institution capable of investing in financial market products to obtain higher yields.

- At the initial stage, clear norms should be imposed constraint the freedom of STIC in order to guarantee the minimal market yields. It should invest in authorized financial assets under the optimal prudential regulations to diversify their portfolio.
- The establishment of mutual funds should be constituted as the way to canalize the contributions deposited in the individual accounts; thus, insulating them from political risk so that the concept of individual property prevails. Then, the registrants of the program and independent will own the assets from the one own by their administrators. This is a complete segregation of funds from the management company' s hands.
- The pension benefits should be indexed to inflation to maintain the real value of the benefits received at the current time. No ceilings or tops should be set in order to create a competitive market offering better returns to investment of the elderly.
- The main characteristic of this system then is the universalization of social security and the efficient work of the financial markets. Here, everyone is covered by at least the BI or MPB. The individuals that have salaries above the threshold needed to contribute to the second pillar (individual accounts) will raise incentives to private companies to fuel economy. Being part of the first pillar (under the threshold) does not mean impossibility to obtain benefits that the second pillar pays. This is because the system uses a complementary financial tool that allows the people covered by the first pillar to opt for the second by contributing with half of their earnings. This will

have positive effects on the returns they can obtain without losing the BI or MPB that they have the right to get.

The creation of this STIC will release the National Pension Corporation (NPC) from a lot of responsibilities and inadequate functions. The NPC will concentrate and strengthen upon its basic administrative and procedural functions, such as collecting activity, updating of workers' records, and all kinds of activities that can generate accurate information currently lacking in many areas.

Certainly, with this two-pillar system you integrate a universal social insurance that will be paying benefits to low-income people and also generating competitive long-term saving markets, that at the end will contribute to enhance both the government SITC and the financial market. The final outcome will be the complementation of the two pillars, raising national savings (having enough resources to pay BI or MPB) and creating transparency, a basic concept pursued in the process of Korean corporate restructuring.

### **5.3. Conditions to implement a new scheme**

#### **5.3.1. Outlook of the portability problem**

Doherty (1989) defines portable pension plan as: “ *..a pension scheme in which an employee may transfer credits accrued with one employer to another.*”<sup>41</sup> These kinds of programs were mainly agreements arranged by a group of employers from the same or different industries. Currently the few individual pension accounts are being held in

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<sup>41</sup> Doherty, Robert E., *Industrial and Labor Relations Terms: A Glossary* (Ithaca: ILR Press, 1989), p. 26.

banks, investment trust funds, and insurance companies. Moreover, they are treated as another kind of investment income if the account is held for a minimum of 10 years, if not it is part of the current taxable income. For that reason, this is something that has to change because the system proposed works independently to this forms of taxable liability giving freedom, mobility, and access to the another new market, *the mutual fund industry*.

The responsibility to contribute to the plan gives the employee a guarantee to obtain their benefits by the time he/she retires without being afraid to lose them when they have moved from one job to another. Portability is plausible under a mandatory scheme between the different individual accounts that are administered by the central government institution, the trusts, a diverse variety of investment funds used by insurance companies, or more specifically the private pension management companies.

### **5.3.2. Financing transition**

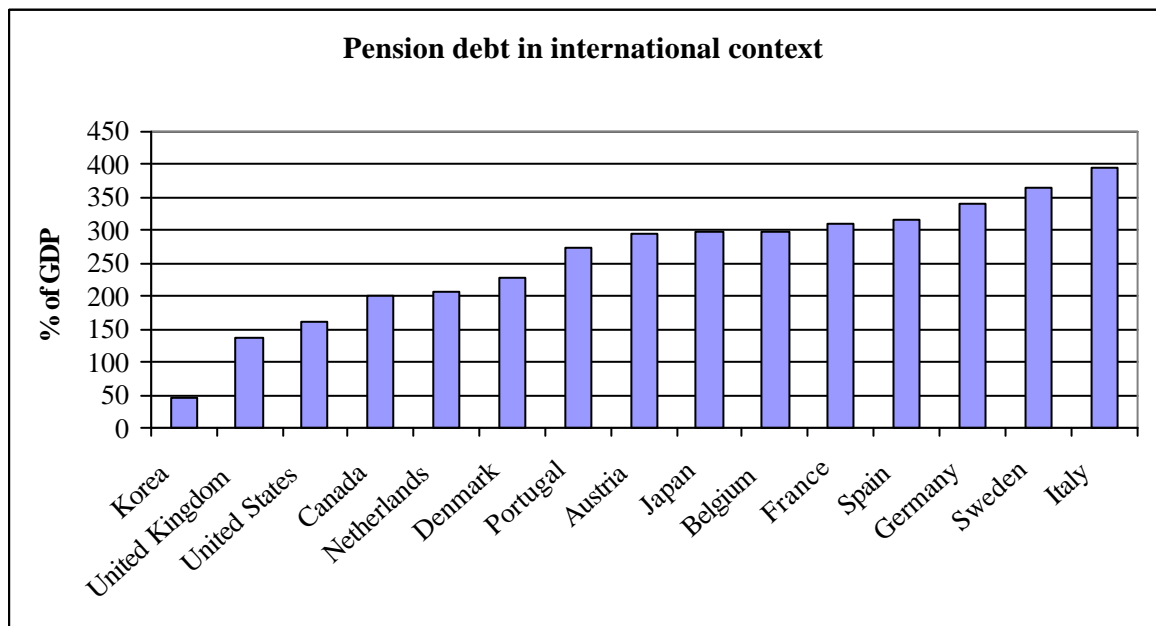
A defined-contribution scheme looks good at the beginning because it pays generous benefits as the market has a determined number of providers investing in a diversified portfolio whose payoff are well-above the market rates. Yet, what will happen when market rates start to decline to the world levels and no much gain can be obtained? What will happen with the problems that come form compliance of the self-employed, people who underreport earnings and some other not eligible, that at glance are the blind spot problem? Both questions constitute a large fiscal burden to the state at the time the government has to pay social insurance and welfare benefits. Currently Korea has an

immense debt of approximately 200 trillion won (Moon, 1999), almost one-third of the GDP (See Figure 5).

The figure is somehow misleading because if you compare the debt with the other OECD countries, it looks small. The problem is that the pension scheme in Korea is a very young. It only has a little more than eleven years while the rest of the countries mentioned before have pension and social security systems that are much older (50-60 years on average).

Consequently, it is not an easy topic to discuss and it has very sensitive points to consider, but several theorists believe in some possibilities that are worth mentioning.

**Figure 5.**



Source: World Bank presentation, Seoul, Sept. 1999, p. 15



To finance the transition from a PAYG to a FFS there are two main ways to do it. The first one is by government budget surpluses (either by taxation or by cutting public spending). The other way is by issuing new government debt like was suggested by Corsetti and Schmidt-Hebbel. Issuing any public liability like privatization of state own enterprises or drawing some reserves or strategic commodity stocks this can be done. In Korea's case are not new recipes because they follow the requirements imposed by IMF in order to lend the money back in 1997. One of these conditions was to privatize state-owned enterprises (*natural monopolies*), something that cannot be seen as new, thus is not new; thus, successful cases have been seen along different countries and decades.

In the United Kingdom during the 1980s and under the Thatcher administration, many companies that belonged to the government were sold. Some of these companies were British Airways, British Gas Corporation, and British Telecom, in the eighties. In the 1990s privatization has also been seen in Latin America and Africa. For instance the telecommunication and other strategic areas that in the past were reserved for the government, such as health care (very much related with pensions in many ways) and education. Anyhow, Korea is involved in a series of privatization efforts either by the external pressures or by own initiatives to achieve efficiency and competitiveness in the world market. Therefore, I believe these procedures are feasible. "*Debt financing implies that national saving, the capital stock, and intergenerational distribution of welfare are only marginally affected, by the magnitudes that depend on the net efficiency gains of the reform.*"<sup>42</sup> If you raise taxes the revenues are sometimes negative, others not, but at least

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<sup>42</sup> Giancarlo Corsetti and Klaus Schmidt-Hebbel, " Pension reform and growth," chap. 5 in *The Economics of Pensions*, edited by Valdez-Prieto, Salvador, op.cit. p. 132.

lowly than financing with public debt. This result is revealed in the study of Valdez-Prieto (See Table 4).

### ***The “recognition bond”***

This was a mechanism developed by the government in order to address the problem of recognizing the contribution of those who had contributed to the old system. The debt financing that is already huge in terms of social security debt and the blind spot problem could be solved with this mechanism. For example, the Chilean government at the time of transition called it the *recognition bond*, because the transition poses problems, such as:

- a) Determination of the rules of workers who will join the program and the ones who will stay under the old system.
- b) Devising a method to credit the contributions of workers made to the old system.
- c) Financing the pension payments to old-system retirees.
- d) Covering those who remain uncovered.

The new pension law should determine the workers who are able to join the new system. In Chile the experience was that changing to the new system gave retirees an immediate increase of an 11 percent which is more than 36 percent of the total employment transfer to the new system in less than one year of the establishment of the program (Edwards, 1996).

Hence, the recognition bonds were issued to recognize the past contributions and provided basis for the new retirement fund, including those already retired when the reform was enacted, as well as those that chose not to switch. The only condition

imposed to be eligible for the bond was that the worker must have made at least 12 monthly contributions into the old system during the previous 5 years. The bond paid large sums of money and was deposited in the individual accounts even these yield 4 percent in real terms.

This generated a major source of public spending, in-cash costs that peaked in early 1983 (2 years later of reform), and represented 4.58 percent of GDP. Even though the expenditure on the recognition bonds have increased (expected to decrease from 2010), the costs as a total of GDP and the cash transfer started to decline since 1984 and are projected to keep doing it in next decades. Table 5 gives us a clear view of the trend.

**Table 5.**

**Fiscal Impact of Social Security Reform; Its Effect on the Deficit of the Old System (percentage of GDP)**

<b>Year</b>	<b>Cash Deficit</b>	<b>Recognition Bonds</b>	<b>Total</b>
1981	1.47	0.01	1.48
1982	4.08	0.11	4.19
1983	4.58	0.22	4.80
1984	4.55	0.25	4.80
1985	4.27	0.30	4.57
1986	4.33	0.41	4.74
1987	4.35	0.49	4.84
1988	4.23	0.50	4.73
1995	3.10	0.80	3.91
2000	2.57	0.94	3.51
2005	1.84	0.99	2.83
2010	1.19	0.80	1.99
2015	0.80	0.40	1.20

Source: Edwards, NBER, 1996, Appendix.

On that account, some scholars have argued that these liabilities are very large and come from the government's pocket. Experts think that a new system will not be applicable in other countries (Mesa Lago, 1996). To agree with this statement, the policy makers and the society have to make a transparent and precise benefit-cost analysis and encounter the convenience or inconvenience of it. Anyhow, according to the question formulated by Edwards, a change is needed even if some costs are higher because like many other these trade-off in real life. *“Is it worthwhile maintaining a compulsory, and in most cases largely inefficient, government run pay-as-you-go system along side a privately managed one, in order to avoid the fiscal costs of transition?”*<sup>43</sup> What are the long-term effects of keeping something spoiled? Why not take the experience of other countries and correct it on time?

### ***Prudential regulation and technical reserves***

From the beginning the government should impose a prudential regulation on the type of assets the funds could invest. At an initial stage, clear concepts and definitions have to be given in order to protect the contributors and provide them with a high degree of confidence on the system. For example in Chile, a minimum rate of return was offered, paying the contributor either a 50 percent of the average return across AFPs, or 2 percentage points below the average (which ever is higher). Those AFPs that do not meet the minimum required were obliged to make up the difference withdrawing it from an “investment reserve” created specifically for this purpose. Thus, it is recommended to establish a “Pension Fund Guarantee”, that is a reserve fund which has to be constructed by the payments made by the private managed pension funds at the time they are

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<sup>43</sup> Sebastian Edwards, *The Chilean Pension Reform: A pioneering program*, Working Paper 5811, National

constituted. In Chile this was part of the financial reform that mandated not only to deposit a certain percentage of the fund (one percent of the value of the pension fund), but also to deposit a minimum capital and reserve requirements depending on the number of affiliates. The AFP was required as well to disclose the operative method used to set its investments.

There should be created a Pension Fund Guarantee, so that the population can know there is financial support for the firm in the market and can pay their benefits in the event of a bankruptcy. A complementary mechanism works in Chile as a mean of protection for the reserve. This reserve that could be 1 percent or more of the total value of the fund (depending on actuarial calculus) is invested in a portfolio that exactly mimics that of the fund. If an AFP cannot meet a profitability shortfall out of its reserves, it is liquidated (Edwards, 1996). The stake makes up the difference between the actual and minimum guaranteed return and then contributors transfer their funds to another AFP. There was also a maximum allowable return, determined as 50 percent or 2 percentage points over the average across AFPs. Those companies that exceed the maximum have to deposit the excess funds on a “profitability reserve”, which is part of the fund’s (and not the management company’s) assets. If in a subsequent year the AFP’s portfolio underperforms, this reserve can be used to make up the difference between the actual and minimum return. Some of these ideas could be adopted to build a new scheme.

### **5.3.3. Adjusting the rest of the programs to a new one**

There are different ways to consolidate the diverse kind of systems, especially the occupational ones. It has to be done depending on the country, but considering either gradual or “cold turkey” actions. To give some ideas let's cite the American case, a process that during the 1980s improved flexibility and portability for the Federal employees. However, other cases like the Ireland one took drastic measures and ended all types of preferential programs for civil servants.

Some other countries like Chile, Uruguay, and Peru have taken steps to terminate the civil service preferential scheme for new employees as part of the process of implementing pension reform for their national systems. Some OECD countries have adopted a less radical approach by integrating public servants into the general social insurance scheme and linking flat-rate pension to an earnings-related occupational scheme.<sup>44</sup> This reduction of preferential plans contributes, in a great extent, to the reduction of the burden of public employment and a form of cutting public deficits.

To conclude, in regard to the principles of unity and universality mentioned before, these make more difficult to justify the existence of separate schemes. Why should some government officials, private teachers, and military personnel receive large benefits at the expense of the rest of the community (as it was shown before) since 1977 the government was even subsidizing for the last group scheme.

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<sup>44</sup> World Bank, *Aid-Memorie by the Pension Mission of the World Bank*, July 5, 1998.

#### **5.3.4. Informing the consumer about a “good choice”**

Pension is a form of long-term care, so if a new scheme is to be implemented, the government has to play another important role. This role is to help the individual to select the most suitable system for his/hers situation. It has to protect the ones that have disadvantage in choosing properly from the private insurance providers. Therefore, this can only be effective “*..if they are empowered to make informed decisions about whether to purchase a product and which product to purchase. ..It is important to make the distinction between allowing for consumer choice and enabling informed consumer choice. This goals of allowing consumer choice and achieving informed consumer choice are by no means mutually exclusive.*”<sup>45</sup> This should be done accurately because in a world in which there is an increasing tendency to levy the responsibility of an individual’s pension on him/herself. Thus, the government should provide a wide variety of choices that need to be easily understood instead of providing complex choices that could actually confuse them more and reduce their objectiveness to select wisely.

This information can be communicated not only by the government but also by the civil society, such as volunteers that can help in the information process. Even though it sounds difficult, there have been promising attempts like the one that was called *The Gatekeeper Model*, a method created by the professors Evelyn Florio and Raymond Raschko, at Washington State University. This model effectively contributed to spread the information required by the community.

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<sup>45</sup> Steven Lutzky and Lisa Maria B. Alecxih, *Enabling Informed Choice in the Long-Term Care Insurance Market*, Journal of Aging & Social Policy, vol. 10.3 (1999): p. 29.

The Gatekeeper model is highlighted as a method to insure that older adults at risk of problems that impact their ability to live independently can be helped by existing systems of care. The model trains employees of community business and corporations who work with the public to serve as community gatekeepers by identifying and referring community-dwelling older adults who may be in need of help.  
<sup>46</sup>

This strategic information dissemination model works with the help of people, citizens that in their daily work already have contact with the population that the model calls “at-risk,” people such as postal workers, delivery boys, bank tellers, and in general volunteers. In relation to the Korean case, I believe that this could be shaped through the *Saemaul* movement, which encourages to deal with this kind of activities for the next decade as it is shown in the promoting activities they are sharing with the society.

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<sup>46</sup> Evelyn Florio R. and Raymond Raschko, *The Gatekeeper Model: Implications for Social Policy*, Journal of Aging & Social Policy, vol. 10.1 (1998): p. 37.



## CHAPTER VI

### CONCLUSIONS AND RECOMMENDATIONS

In addition to all the theoretical background provided, some recommendations need to have to be pointed out to set the new rules of the game. In summary, all the benefits considered so far upon private programs could be the ones that make Korea a good candidate for new frontiers in social security plans.

Two groups of ideas epitomize my line of thinking. The first ones are based on the fundamentals of equity, solidarity, unity, and universality. In this attempt some basic facts should be recalled, first new pensions system are easy to launch when income is equally distributed among the population.

- As a matter of fact we know that complete equitable growth is not possible to achieve. Funds that are not transportable will never accomplish the solidarity and efficiency basic. If there are not constraints to carry individual savings to mutual funds invested by AFPs, the economy through the market directly and indirectly will foster intra-generational transfers from high income individuals to low and medium income compatriots, developing mechanisms not seen before.
- A careful look should be given to the reserve funds. If these are exhausted, the burden that the government has to sustain will be implicitly translated to the society. The budget deficits to pay out all the benefits of aging population would crowd out economic growth; thus, destroying from different angles the idea of sustainable

growth, something that is hotly debated around the world. The entire society will suffer the imbalance of the inappropriate decisions taken today. If the transformation is made, younger generations will see their future more clearly. They will not have to support the elderly and they will avoid intergenerational transfers because these will be it “transfers” and not “burdens”. Consequently, the situations seen in the pay-as-you-go systems, where earlier generations are left better off but latter generations end up in a worst situation, will be rarely seen.

At length the relevance of these second assortments of conclusions for adopting a private scheme depends, of course, on some other cultural and institutional factors. Nevertheless, they acknowledge the strong incentives apply to private plans. They are shaped in a reflexive form as a way to resonate upon them.

- ***Inexperience or fear?*** There is not such a thing as inexperience in managing funds; there is an illusion of the lack of expertise. When a new policy is adopted it is very hard for a country to understand it from the beginning. It will take time and money to run an effective system, but people have to prepare themselves to look forward to learning the new method and applying in their on-job-training.
- ***The evasion problem and disperse salary components:*** Hidden earnings are negligible for the program. The more you pay, the more you get. It’s easy to understand that if you do not save, you will be left in a bad financial situation in the future. Then people will not evade, because they will be looking forward to a relaxing and enjoyable life in their later years. The private system will only take care of the

people that have subscribed to the program and provide BI or MPB for the rest of low-income elderly. In the private sector there is no place for evading since the system rejects this inconvenience immediately. If you delay your contributions or pay them after the due date, you do not receive what you are supposed to, or simply your benefits will be suspended until you meet your obligations. Debtors do not qualify for private schemes. If you are a registrant you want higher replacement ratios and there is no doubt that everyone knows what is best for him or herself.

In addition to this, people incur evasion when the benefits they are to receive do not fulfill their expectations, provide low benefit levels and poor quality services. Government invests poorly and below the standards are the yields that can maintain the state pension programs. If evasion happens, liquidity will be gone and administrative costs will raise, the big pitfall of public systems.

- ***Freedom and symmetry:*** You choose where and when to invest. Here a selection of a pension provider is an important as the advantages the individual chooses. The pension fund administrator will try to attract or retain you by promoting its services and improving the quality of the benefits. Transparency is likely to be achieved to gain potential clients and efficiency too; thus, the heard problem of corporate governance will be neglected. Private firms will have an incentive to provide extra services such as additional medical services for the elderly, discounts in hospitals, and other kind of marketing promotions.

- ***It is possible to achieve efficiency:*** For this study efficiency can be defined as lower costs and better benefits. The actual level of contribution is 9 percent and if the government takes the administration of it, the rate has to be increased to at least up to 17.3 percent proposed by the NPRB. Yet, if we allow firms to compete and reach the current contribution that is lower compared to other countries, we can keep this percentage and receive high quality services and benefits. Several plans for numerous categories will be implemented and then, it will depend on the type of plan you sign up to receive that will determine if you will get higher or lower benefits. In some cases the replacement rate can be above the 50 percent considered by the reformist efforts. Still, one can think that again redistribution will be gone. If the plan works, yes, redistribution will not exist anymore. However, here is where *transportability* plays an important role. The funds can be centralized and the yield these reserves will generate a benefit that will help the country as a whole. This communal fund can be as much as 40 percent of GDP by the year 2020.

This unbelievable figure will even motivate the government to become competitive and gain liquidity, something required to generate consequent public policies. The poor investment the government used to make will be no longer held. They will also like to search for competent managers who will be looking for higher yields and diversifying their portfolio, obeying the dictates of a sound and transparent prudential regulation and with the implicit guarantee of the Pension Guarantee Fund.

Then, why shouldn't Korea engage in this "risky game"? Are people afraid of being disappointed, or does Korea have a really a weakened economy who is not ready to

adopt more changes? I consider reorganizations are needed. Of it will be more difficult for some groups to adapt to these changes, but now is the time to do it. Even if the economy is recovering from a crisis, and if reforms are not shaped, continuing with the same system will create a new crisis. If measures are not taken right now, later might be too late!

Until this point I have dealt mainly with the economic issues, but before I conclude I would like to reflex upon other aspects related to humanity's well being. Decision-makers should not wait for *perfect conditions*, because perfect status is unachievable in real world. If it is possible that such perfect conditions are achievable, it will be tardy with the ones that died on the process of seen how "Old Age Crisis" was passing through their lives. All this derives from a problem that will only be realized 20 or 30 years from now. Should we wait so long and make young generations pay for the whole mess?

Still there is an open door for new prospectus and mechanisms for pension schemes. It is feasible then, to think in a *sui generis* mix pension scheme that can be developed later such as a private and public combined system in which both sectors can compete to attract subscribers and be benefited themselves, from doing so. Be open minded, let Korea develop a program that contributes to economic growth, reduction of inequality, and prosperity of the solidarity principle.

A diligent plan will receive its maximum rewards by a very greatly thankful citizenry who experienced and who will experience successful stories of welfare improvement. If the plan works, Korea would have the opportunity to export a reputable "Second Korean

Economic Miracle,” but this time in the name of social policy and certainly with positive effects over the rest of the economy.

## **BIBLIOGRAPHY**

## BIBLIOGRAPHY

- Chun, Young-Jun, *Personal Income Tax: Personal Pension increase the National Savings in Korea*, Public Finance lectures, Seoul: School of Public Policy and Global Management, KDI, 27 Sept. 1999.
- Chun, Young-Jun, *The Inter –and- Intra Cohort Redistributive Effect of the Return of National Pension System in Korea*, Working Paper 98-05, Seoul: Korea Institute of Public Finance, Sept. 1998.
- Comision Interventora del IESS, *Memoria Tecnica para la Reforma del Seguro General Obligatorio*, Quito: 1999.
- Creedy, John, *Pensions and Population Ageing*, Northampton: Edward Elgar Publishing Limited, 1998.
- Creedy, John, and Richard Disney, *Social Insurance in Transition*, Oxford: David Stanford, 1985.
- De Jong, R., and Theodor Marmor R., *Social Policy and Labour Market*, Vol. 2, Aldershot: Ashgate Publishing Ltd., 1997.
- Diamond, Peter, *Privatization of Social Security: Lessons from Chile*, Working Paper 5811, National Bureau of Economic Research, Cambridge: November 1993.
- Dilnot, Andrew, and Ian Walker, *The Economics of Social Security*, Oxford: Oxford University Press, 1989.
- Doherty, Robert E., *Industrial and Labor Relations Terms: A Glossary*, Ithaca: ILR Press, 1989.
- Edwards, Sebastian, *The Chilean Pension Reform: A pioneering program*, Working Paper 5811, Cambridge: National Bureau of Economic Research, 1996.
- Feder, Judith, Georgetown University, “Journal of Aging and Social Policy: Improving Public Financing for Long-Term Care: The Political Challenge”, Vol.10 #3, New York: The Haworth Press, Inc., 1999.
- Feldstein, Martin, *Privatizing Social Security*, Chicago: National Bureau of Economic Research, The Chicago University Press, 1998.
- Florio R., Evelyn, and Raymond Raschko, “Journal of Aging and Social



- Policy: The Gatekeeper Model: Implications for the Social Policy: The Political Challenge”, Volume 10 #1, New York: The Haworth Press, Inc., 1999.
- Freeman, Richard, ed. *Working Under Different Rules*, “Does Larger Social Safety Net Men Less Economic Flexibility?,” Chap. 5, New York: Russel Sage Foundation, 1993.
- Gordon, Margaret S., *Social Security Policies in Industrial Countries: A comparative analysis*, New York: Cambridge University Press, 1998.
- Gustafsson, B, and Anders Klevmarken, *The Political Economy of Social Security*, Amsterdam: North Holland, 1989.
- Heller, Peter S., *Aging in the Asian Tiger Economies*, Finance & Development, Washington: June, 1998.[Online] ProQuest Order 105364995 (08/12/99).
- Hyun, Jin-Kwon, *Tax reform in Korea: Government proposal an evaluation and the future*, The Korea Herald, 26 Aug.1999, A2.
- Korea International Labour Foundation, *Korea Labor News (Jan. 1 ~ Jun.30, 1999)*, Seoul: KOLIAF, 1999.
- Lee, Ju-Ho, and Jong-Il You, “Economic and Social Consequences of Globalization: The Case of South Korea”: Seoul: KDI School of International Policy and Management, revised May 1999.
- Lutzky, Steven, and Lisa Alecxih, The Lewin Group Fairfax, Virginia, “Journal of Aging and Social Policy: Enabling Informed Consumer Choice in the Long-Term Care Insurance Market”, Volume 10 #3, New York: The Haworth Press, Inc., 1999.
- Mackellar, F. Landis, and William P. McGreevey, *The Growth and Containment of Social Security Systems*, Development Policy Review: Volume 17 #1, Washington: Overseas Development Institute, 1999.
- Mallier, A.T., and T.A.C. Shafto, *The Economics of Flexible Retirement*, London: Academic Press Limited, 1992.
- Mancero, Alfredo, *La estrategia del nuevo IESS para eliminar su saldo rojo*, Quito: Semanario LIDERES, 20 may, 1999.
- Ministry of Finance and Economy, *Djnomics: Korean Economic Development*, Seoul: 1999.

- Moon, Hyung-Pyo, *The Korean Pension Scheme*, Labor Market and Social Policy lectures, Seoul: School of Public Policy and Global Management, KDI, 2 Aug. 1999.
- Murphy, Joseph, *The Privatization of Schooling: Problems and Possibilities*, California: Corwin Press, 1996.
- National Pension Corporation, *National Pension Scheme in Korea*, 4<sup>th</sup> ed., Seoul: National Pension Corporation of the Republic of Korea, 1997.
- Organization for Economic Co-operation and Development (OECD) OECD Jobs Study: Facts, Analysis, Strategies, Paris: OECD, 1994.
- Proceedings of the National Pension Board: Korean Pension Scheme, Seoul: 1998.
- Valdez-Prieto, Salvador, *The Economics of Pensions*, New York: Cambridge University Press, 1997.
- Wise, David A, *Pensions, Labor and Individual Choice*, Chicago: National Bureau of Economic Research, The Chicago University Press, 1985.
- Won, Gill-Sang, Anna Song, Woo-Young Kim, and Hai-Young Yun, Editors, *Guide to Writing Thesis/Dissertation*, Seoul: School of Public Policy and Global Management, KDI, 1999.
- World Bank, *Financing Health Services in Developing Countries*, Washington D.C.: Oxford University Press, World Bank, 1987.
- World Bank, *The East Asian Miracle*, Washington D.C.: Oxford University Press, The World Bank, 1993.
- World Bank, *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, Washington D.C.: Oxford University Press, The World Bank, 1994.
- World Bank, *Aide-Memoire by the Pension Mission of the World Bank*, (Mission conformed by Robert Holzmann, Robert Palacios, Yvonne Sin and Alberto Musalem), Washington D.C.: World Bank, 1998.
- World Bank, *Korean old age income security at the crossroads*, (Presentation to Korean Pension Reform Task force by Robert Palacios and Yvonne Sin), Seoul, The World Bank, Sept.9, 1999.