A Comparative Study on the Relationship between Pension Plans and Individual Savings in

Asian Countries in an Institutional Point of View

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Abstract

This study was designed to identify various saving plans used as alternative pension

plans in Asian countries, to examine to what extent the saving plans contribute to the

pension schemes, and to suggest an alternative privately managed pension plan that policy

makers in other than Asian countries possibly can utilize in their own countries' pension

reform. A comparative study was employed to conduct this study. Data were collected from

six Asian countries: China, Hong Kong, Japan, Korea, Singapore, and Taiwan. The

comparison was concentrated on the examination of the differences and similarities in

individual countries' privately managed pension schemes and saving plans. This study

showed that a pension system does not have to be a privately managed plan in order to

encourage individual savings. A critical point for individual savings was to avoid a DB plan. On the basis of the findings of this study, a typology of relationships between second and

third pillars and provident funds, and incentive systems for individual savings was

developed. Eight types were identified under this typology.

Key words: Pension reform, individual saving, multi-pillar scheme, provident fund

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I. Introduction

Pension reform has been a global issue for decades. European countries, which have experienced demographic aging earlier than other areas, attempted to reform their pensions a couple of decades ago. The baton of the pension reform now has been handed to Asian countries, which recently have been entering the aging society. The objectives of pension reform have been different here and there, in accordance with individual countries' seriousness of potential pension deficits due to their demographic aging and their ideological bases, but a main objective of pension reform is to restore compatibility of pension benefits within the changing economic and demographic context (Bonoli, 2000).

To accomplish the objective of pension reform, retrenchment programs have been adopted in various countries. In pension reform, the term retrenchment includes two meanings: Reducing average replacement rates and increasing the role of privately managed retirement schemes (Schremmer, 2005; Bonoli, 2000). The former refers to reductions in generosity, coverage, or quality of pension benefits, while the latter means replacement of its distribution formula, or transformation of a state-sponsored pay-as-you-go (PAYG) system into various forms of privately managed plans.

Most countries engaged in pension reform usually do not adopt either one exclusively. Instead, they implement both reductions of pension benefits and replacement of distribution formula. Some European countries, such as France, Sweden, and Italy, have focused on replacement rates while, if necessary, changing their distribution formulas (Modigliani & Muralidhar, 2004; Bonoli, 2000). However, South American countries such as Chile, Brazil, and Peru have concentrated on transforming the distribution formula while, if necessary, reducing their replacement rates (Kay & Shina, 2008). In most countries, a mixture of both sides seems to have been adopted.

Asian countries have not been far away from this trend. They have reduced replacement rates and transformed their distribution formula into privately managed plans. This study has focused on the distribution formula, and was designed to identify various saving plans used as alternative pension plans in Asian countries, to examine to what extent the saving plans contribute to the pension schemes, and to suggest an alternative privately managed pension plan that policy makers in other than Asian countries possibly can utilize in their own countries' pension reform. In addition, the similarities and differences of Asian

countries' pension reforms were examined to highlight the major issues facing pension reforms and to provide alternatives pension plans for policymakers.

II. Theoretical Backgrounds of Pension Reform

Varying theories of pension reform have been introduced in the literature, but the approach to pension reform could be summarized in four directions: From a PAYG plan to a funded plan; from defined benefit (DB) to defined contribution (DC); from a publicly managed pension to privately managed pension; and from a singular scheme to a multipillar scheme.

First, a transformation from a PAYG plan to a funded plan seems to be considered a prerequisite for pension reforms. Reformists always condemn the PAYG plan as responsible for a dramatic increase of pension expenditures. Under the PAYG plan, retirees collect their pension benefits as promised. The current workers take the responsibility to pay for the pension benefits. As the population is getting older, the current workers have to pay a higher social security tax. Therefore, pension reform advocates have considered PAYG a Gordian knot to be cut off: Get rid of the PAYG, and establish a new financing plan by which retirees can take responsibility for their pension benefits.

Second, pension reform advocates have criticized the DB plan that always goes along with PAYG. Under the DB plan, no matter how much they have accumulated their social tax in their account, retirees collect their pension benefits as promised. According to pension reformists, pensioners have to collect their pension benefits on the basis of their contribution to their social security accounts, a so-called DB plan. In this context, the DB plan has to be transformed into the DC.

Third, pension plans have been recognized as publicly managed systems. No matter how they have lived when they were young, workers have been taken care of after retirement. In the Western states, the tradition of pension originated in the tradition of the Beveridge and Bismarck plans (Bonoli, 2005, 10–12). The former has contributed to establish poverty prevention policies, while the latter has influenced the introduction of social insurance plans. Both are publicly managed plans under which governments have to take final responsibilities for the retirees' pension benefits. These two traditions have been criticized. Why should governments be responsible? People can take care of themselves by

accumulating their savings. Employers also can share in the responsibilities. Therefore, a privately managed protection plan for retirees has been introduced in this context.

Finally, pension plans have been transformed from a singular publicly managed scheme to a multi-pillar scheme. There is an extreme example, e.g., Chile, which replaces the publicly managed pension plan with a privately managed scheme (de Mesa et. al., 2008), but a multi-pillar scheme has been adapted by most countries conducting pension reforms. According to the multi-pillar scheme, a universal basic pension or a social security pension has to be publicly secured by governments for the minimum livelihood and, in addition, a complementary privately management protection scheme has to be established in order to secure adequate retirement income for retirees. The complementary scheme is categorized into the second pillar and the third pillar. Both pillars work on a privately managed basis, but the second pillar usually is designed as a mandatory scheme while the third pillar is voluntary (World Bank, 1994).

The four directions have not always run parallel with one another. The reverse directions sometimes have been shown in the literature. Also, no one direction has been dominant over the other ones. Instead, several directions have been combined and employed as their own arguments by academics and as their reform programs by practitioners. In addition, some countries have adopted parametric reforms while others have systematic reforms.

Pension reforms of European countries frequently have been exposed to a subject of research (Bonoli, 2000). So are the cases of Latin American countries (Kay & Shina, 2008). However, those of Asian countries have been shown infrequently, in spite of these countries being transformed rapidly into an aging society. In the eyes of westerners, the philosophical backgrounds of Asian countries may seem similar. That is not true. Plenty of diversities exist in Asian countries, as do the directions of the pension reforms. The similarities and differences in the pension reforms of Asian countries can be useful for policy makers around the world, who have to find resolution sooner or later.

III. Research Methods

A comparative study was employed to conduct this study. Data were collected from six Asian countries: China, Hong Kong, Japan, Korea, Singapore, and Taiwan. The comparison was concentrated on the examination of the differences and similarities in individual

countries' privately managed pension schemes and saving plans. Prior to that, the structure of individual countries' overall pension systems also was examined in a comparative view because privately managed pension and saving plans, in most cases, have been introduced as a part of the overall pension system. The origin of individual countries' pension systems was a part of this study.

Secondly, data collected from individual countries' social insurance and pension management authorities were utilized for the analysis of this study. Six individual countries' web sites were a major source of the secondary data collection. A comprehensive search also was conducted of all pension reform literature. Both books and articles were included as long as they included cases of pension reform in Asian countries. In addition, an open-ended questionnaire was developed and delivered to those who work for the authorities to collect information on saving plans available, and their contribution to adequacy and sustainability.

A set of four interrelated steps was utilized to conduct a comparative analysis among the Asian countries. First, a before/after reform comparison was designed to identify individual countries' traditional origins of old pensions and to predict the orientation of their future pension reforms. Second, the structure of individual countries' overall pension systems was compared to examine the location and role of privately managed pension and savings plans, if any, and explore to what extent privately managed pensions, including saving plans, contribute to the overall pension system. Third, the structure of the privately managed pension systems was examined in a comparative view to look into the sustainability of pensions in what aspect and to what extent the transformation from public management to private management contributes. The privately managed pension is a complementary scheme in some countries, while it is independent of the publicly managed plan, or a singular privately managed plan, in other countries. Their contributions to pension sustainability can differ significantly. Fourth, the structure of individual countries' saving plans was examined to look into in what aspect and to what extent the savings accounts contribute to the adequacy and sustainability of overall pensions and increased contributions in individual countries.

1. A Before and After Reform Comparison

Origins. As can be seen in Table 1, broadly speaking, there were two different traditions of taking care of the elderly in Asian countries: traditional family bondage and employers' voluntary responsibility for their employees. China was an exception. In China, although it has a philosophical tradition of Confucianism that emphasizes family ties, the socialist economy became a more influential root than Confucian tradition in the establishment of a pension system. Family bondage and employers' responsibility, which both can be linked to a notion of paternalistic traditions, were the origin of the traditional style of pension in the other five countries: Hong Kong, Japan, Korea, Singapore, and Taiwan. While Japan especially has emphasized corporate paternalism as an origin of pensions (Chia, Kitamura, & Tsui, 2005), the other four also have stressed both family and corporate paternalism as the roots of their pension systems (Chiu, 2004; Gadbury, Barham, & Bonnett, 2003; Low & Choon, 2004).

Both Hong Kong and Taiwan stress that they have avoided putting in place a comprehensive social security system (Daykin, 1999; The Economist, 1997). The Mandatory Provident Fund (MPF) was established in Hong Kong in the late 1990s, and the Labor Pension Act was enacted in Taiwan in 2004. Instead, in both countries, a kind of voluntary lump-sum benefits was given to employees by employers. Japan also has emphasized a tradition of severance payment by employers as the root of its corporate pension (McLellan, 2004). According to Fujiwara (2003), the tradition of Japan's retirement allowance goes back to as far as the Edo period (1603–1867). Such a payment in Japan was used as a tool to induce workers to stay with their employers (Fujiwara, 2003; Usuki, 2003; McLellan, 2004). Korea, which traditionally has been exposed to a Confucian philosophy, emphasized family ties and filial piety. Before the establishment of a national pension system, the Confucian tradition and employers' severance payment had become a kind of pension system in Korea, as in Hong Kong and Taiwan. Singapore was not an exception. Its pension system, or Central Provident Fund (CPF), has been linked closely to family ties and employers' obligations (Singapore's Central Provident Fund Board, 2000).

Therefore, it can be said that a tradition of taking care of the elderly in Asia was a form of paternalistically managed pension, different from a form of publicly managed pensions

in the Western countries, such as basic pension and a PAYG plan. Asian tradition was more likely to be characterized as a form of privately managed plan.

Before Pension Reforms. As seen in Table 1, paternalism has been replaced by legislated pension systems in Asian countries, but the ways of institutionalizing their pension systems were different: Hong Kong and Singapore established a provident fund; China, Japan, Korea, and Taiwan introduced a multi-pillar pension system.

The provident fund, introduced in Hong Kong and Singapore as a retirement fund to which both employers and employees contribute, is a compulsory scheme with individualized saving accounts. Its principle is that workers should look to their employers, and not to the state, to provide them with pension, medical care, and other benefits. While Singapore's central provident fund (CPF) is a state-mandated and state-managed fund, Hong Kong's mandatory provident fund (MPF) is a privately managed pension plan (Asher, 1999). The CFP was legislated in 1953, and put into effect in 1955; the MPF was enacted in 1995, its operating authority was established in 1998, and it came into operation in 2000. Both states have experienced British colonial rule. Strictly speaking, provident funds were established under the influence of British colonialism, but were well fitted to the tradition of family and corporate paternalism in the two countries.

The other four countries - China, Japan, Korea, and Taiwan - have established a social insurance system with a PAYG plan, but their PAYG plan, differently from that in European countries, was related closely to their tradition of corporate paternalism, especially in Japan. Japan's pension systems started with the implementation of employees' pension insurance as a "privately managed" PAYG plan in 1942, and a national pension as a basic pension in 1959. In Taiwan, an old-age benefit plan as a basic social insurance scheme was established in 1958, and a labor pension scheme as s DB occupational/employer pension was introduced in 1984. In Korea, a national pension as a PAYG plan for regular employees was introduced in 1989. In addition, private companies have their own severance allowance plan, paid as a lump-sum benefit. In China, a basic pension was established under the socialist economy in 1949; it guaranteed employment in state-owned enterprises. The system as a PAYG plan was financed by enterprise contributions. There were no employee contributions. Defined benefits were provided by enterprises (Trinh, 2006; Dunaway & Arora, 2007).

After Pension Reforms. As can be in Table 1, while Singapore and Hong Kong's form of provident funds have remained with minor changes, the other four countries have tended to establish a form of multi-pillar systems. No significant change has been shown in Hong Kong's MPF. In Singapore, the retirement age has been raised from 62 to 65 by 2015, and up to 67 beyond that, and withdrawal policies from individual savings have been generous, so that individual members can invest the withdrawals in properties and stocks. The other four countries have tended to find a missing link necessary to establish a multi-pillar system, develop new pension plans, and bridge a newly established plan to their current pension system. In most cases, their missing links were either a basic flat-rate benefit pension or a privately managed pension scheme, or both. Their pension system has become a sort of multi-pillar system after reforms.

In China, which has not yet enacted national social security legislation, government authorities issued a guideline to encourage provinces to establish a multi-pillar system in 1991. The guideline includes a social pension and individual accounts as its main components, in addition to basic pension. In China, the mandatory first pillar consists of the social pool and individual account. The social pool works on a PAYG basis and is financed totally by employers. The individual account in the first pillar is a mandatory DC plan, managed as fully funded individual accounts that originally were financed with contributions of 8 percent from employers and 3 percent from employees. The second pillar is a voluntary contribution-based social insurance that is financed either by employers or by a mix of employers' and employees' contributions. The third pillar consists of a voluntary complementary private savings account. The savings for the third pillar are not supported by tax incentives.

Japan's pension system included a two-pillar system: A flat-rate basic benefit to all sectors of the population, so-called national pension, as the first pillar, and employees' pension insurance as the second pillar. Japan's employees' pension insurance is privately managed, but PAYG defined benefit scheme. Therefore, this scheme has been facing huge deficits and focusing on reform. The DC plan and personal retirement account (PRA), as a pension reform was introduced in 2001 as a third pillar.

In Korea, a PAYG defined benefits scheme as the second pillar was established in 1989. In addition to the second pillar, private companies had their own severance allowance plan as a tradition of corporate paternalism. The severance allowance was transformed in 2005 into a Korean version of 401(K), including a voluntary occupation plan and individual

retirement accounts. In 2008, a basic pension as the first pillar was established for those who cannot participate in any pension schemes due to their income and other social status.

Taiwan's pension is composed of several plans of the second pillar and basic pension as the first pillar. Labor insurance as a second pillar was the first pension plan introduced in 1958. The labor pension considered as a severance payment was established in 1984. This plan, as another second pillar, is scheduled as a lump-sum payment on the basis of worker's seniority working for a company. The labor insurance introduced in 1959 was revised to the labor pension with a DC plan financed by both employers and employees. In 2007, a basic pension plan was introduced as a first pillar. A third pillar hardly was found in Taiwan's pension.

In sum, Asian countries have had a tradition of privately managed pensions, so-called family and corporate paternalism. Especially corporate paternalism, being in contact with the tradition of British colonization, has materialized into a unique form of pension, so-called provident funds, in Singapore and Hong Kong. The corporate paternalism, being in a contact with various pension reform theories, has led Asian countries to establish a form of multi-pillar system. In a Western view, Asian countries have a tendency to adopt a form of multi-pillar system suggested by the World Bank. Without doubt, it is true. However, in an Asian view, it also can be said that the role of corporate paternalism has been reinforced and transformed into privately managed pension plan, and finally a multi-pillar system.

Table 1. Pension Plans in Asia: Before and After their Reforms

Countries China	Origins Socialist economy	Before A basic pension guaranteed in state-owned enterprises under the socialist economy	After A dual-pillar system: Social insurance and mandatory individual account system
Hong Kong	Family tie & employers' retirement allowance to their employees until the mid 1990s	A voluntary established retirement schemes established in 1993 after the enactment of the Occupational Retirement Schemes Ordinance (ORSO), and a privately managed, employment-related MPF scheme was enacted in 1995, and began operating in 2000	No significant reform since the establishment of MPF
Japan	Employers' retirement allowance to their employees	Employees' pension insurance in 1942 as a PAYG plan and national pension in 1959 were introduced as a form of co-mingled public and private benefits, or a multi-pillar system.	A defined contribution plan, or a Japanese version of 401(K) was established
Korea	Family tie & employers' retirement allowance to their employees	A PAYG defined benefits scheme was established in 1989. In addition, private companies had their own severance allowance plan.	The private companies' severance allowance was transformed into a privately managed occupational pension in 2005. A basic pension was added in 2008.
Singapore	Family tie & employers' retirement allowance to their employees	A state-mandated and state- managed Central Provident Fund was established in 1953.	No significant reform since the establishment of CPF
Taiwan	Family tie & employers' retirement allowance to their employees	The labor insurance with a DB plan as a second pillar was introduced in 1958, and the labor pension scheme with a DB occupational/employer plan as another second pillar was introduced in 1984	A labor pension plan with a DC occupational pension as a revision of 1958 version was introduced in 2007 and the national pension as a basic pension scheme as the first pillar was added in 2008

2. Privately Managed Plans in the Structure of Pension Systems

The structure of Asian countries' pension schemes can be classified into two groups: A provident fund and a multi-pillar pension system. Singapore and Hong Kong are operating provident funds, while China, Japan, Korea, and Taiwan currently are implementing their own versions of a multi-pillar pension scheme.

Provident Funds. A provident fund originally was designed so the British government would not be required to look after the social security needs of its colonies (Pai, 2006, 34) and currently has been institutionalized as a unique form of self-help pension scheme in Singapore and Hong Kong. Their structures showed similarities in terms of DC, compulsory plans, and individualized saving accounts, but differences in terms of management system. Singapore's CPF is a state-mandated and state-managed scheme, while Hong Kong's MPF is a privately managed, fully funded scheme. Therefore, the Singaporean government controls every step of CPF, while the Hong Kong government issues the ordinance that employers have to use in order to properly manage the funds accumulated by themselves and their employees.

Singapore's CPF has more flexible policies than Hong Kong's MPF in terms of savings withdrawal. Account holders of Singapore's CPF can withdraw their savings to the extent that they meet certain criteria to buy flats and invest, but those of Hong Kong's MPF are not allowed to withdraw their savings before retirements. Most importantly, Singapore's CPF is a "singular" form of retirement benefit plan, but Hong Kong's MPF is not only one retirement plan. A voluntary occupational scheme, named the Occupational Retirement Schemes Ordinance (ORSO), currently coexists in Hong Kong. ORSO is a voluntary occupational scheme officially established in 1993. ORSO holders are exempted from the MPF scheme (Pai, 2006).

In terms of their structure, Singapore's CPF originally was established as a retirement fund, but has been expanded to cover homeownership, health care needs, children's education, family protection, and asset enhancement. However, Hong Kong's MPF originally was established and currently is implemented as a retirement plan only. The former can be characterized as an individual savings account for investment as well as a social protection package, including income security, health protection, education, etc., but the latter is considered a mandatory retirement saving identical with a second pillar. The common element of the structure of the two provident funds is that they are individual savings accounts. The members of Singapore's CPF can manage their saving accounts individually after meeting certain criteria. However, those of Hong Kong's MPF are not allowed to manage their saving accounts individually.

Multi-Pillar Pension Systems. Four Asian countries—China, Japan, Korea, and Taiwan—operate their own version of a multi-pillar pension system. One common characteristic is

that all of them have their own version of the first pillar. Japan, Korea, and Taiwan run a flat-rated universal pension benefit plan as the first pillar, but China operates two forms of the first pillar: one is a publicly managed PAYG system totally financed by employers only; the other is a mandatory DC plan managed as fully funded individual accounts that originally were financed with contributions of 8 percent from enterprises and 3 percent from individuals.

All four countries operate the second pillar pension plans, but their schedules are diversified. The second pillar works on a privately managed base in China and Japan', however, China's second pillar is a fully funded plan while that of Japan is a PAYG benefit defined plan. Korea operates a publicly managed PAYG defined benefit plan, financed by employers and employers in the case of salaried workers and individuals only in the case of unsalaried workforces, including self-employed and farmers. It is designed as a form of redistributive social insurance, and financed by both employers and employees for the salaried individuals, but not designed to encourage individual savings. Taiwan operates both a publicly and privately managed second pillar. The defined benefit and defined contribution schemes coexist in Taiwan's second pillar. The old occupational/employer scheme still effective upon employees' selection is a defined benefit, while the new one is a defined contribution.

All three countries except for Taiwan operate the third pillar pension plans that usually focus on relatively upper-class workers, but their schedule are different rather than similar. Japan's and Korea's third pillar schemes are similar to the US 401(K). The Chinese third pillar, categorized by the government, is actually a pillar financed by both state-owned enterprises and employees. This plan is a fully funded plan that is both publicly as well as privately managed. This plan is publicly managed because all enterprises are state-owned, and is privately managed because employees working for the enterprises also contribute. The third pillar has hardly been introduced in Taiwan. Any specific regulations on the third pillar are enacted in the most recently revised act, Labor Pension Act. As mentioned previously, both DB and DC plans are operating under the second pillar, and another two plans are working under the DC plan: an individual retirement plan and an annuity plan. The latter is for employers hiring over 200 persons with the consent of a labor union and half of the employers (Labor Pension of 2004). The DC plan was originally designed as a Taiwanese version of 401(k). It is not quite similar to 401(k), but a DC plan wearing a DB coat (Chang 2006; Chiu, 2004).

Table 2. Multi-Pillar Systems in Asian Countries

	F	First Pillar	Second Pillar	Third Pillar	
Countries	Basic Pension	Social Security: Publicly Managed Plan	Defined Contribution Plan	Voluntary Occupational Plan, 401(K)	Voluntary Individual Account
China	PAYG	DC, Funded	DC, Voluntary		O
Japan	PAYG		DB, PAYG, Mandatory	O	O
Korea	Revenue		DB, PAYG	O	O
Taiwan	PAYG		Both DB and DC plans (individual retirement account and annuity insurance)		

In sum, a first pillar, known as a basic flat-rated plan or a publicly PAYG defined benefit plan, has become a fundamental pension for the four Asian countries, except for Singapore and Hong Kong. The second pillar is known as a mandatory individual account in a DC plan. All six Asian countries have established their own forms of second pillar plans: Provident funds in Singapore and Hong Kong, a voluntary DC plan in China, a mandatory DB plan in Japan and Korea, and both DB and DC plans in Taiwan. Three countries, China, Hong Kong, and Singapore, have operated a second pillar that encourages individual accounts. China, Korea, and Japan have established a third pillar known as a form of voluntary occupation plan run by employers for the benefit of employees. This plan is designed to encourage an individual account. Korea and Japan have operated both a version of 401(K) and individual retirement account, while China has established individual retirement account only.

3. Provident Fund Policies and Individual Savings

As mentioned previously, Singapore's CPF and Hong Kong's MPF share the same name, provident funds, and the same second pillar, but their structures are different. The former is a state-operated scheme while the latter is a privately managed plan. Both share some similarities. Provident funds in both countries are considered as self-funded plans designed for people to help themselves after retirement. More importantly, they have been established on the basis of individual saving accounts.

Hong Kong's MPF is a type of second pillar plan for retirement protection. It is not voluntary but mandatory, so that self-employed persons as well as salaried persons have to

participate in the scheme. Broadly, three types of management schemes are in operation: Master trust fund scheme, employer-sponsored scheme, and industry scheme. The master scheme is being used for small and medium-sized companies. Self-employed persons can join in this scheme. The employer-sponsored scheme is established by large corporations. Membership is limited to the employees of the sponsor company and its associated companies. The industry scheme is operated for employees of the catering and construction industries, where there is high labor mobility. Members can transfer their accounts as long as they are in the same trust fund (Pai, 2006). For salaried persons, both employers and employees make contributions into an MPF scheme and self-employed individuals finance for themselves. Unlike Singapore's CPF, members cannot withdraw savings for investment purposes, so their incentives for individual savings are more limited than Singapore's CPF.

Singapore's CPF is composed of three accounts: Ordinary account, special account, and Medisave account. The savings for the ordinary account are originally designed for retirement, but they can be used for buying homes, buying CPF insurance, investment, and education. The savings for the special account is reserved for old age and contingencies, but they can be used for investing in retirement-related financial products. The Medisave is designed for paying hospital bills and approved medical insurance, but the savings in this account can be used for investing in better medical insurance. It is mandatory for the salaried persons to participate in the three accounts, but the Medisave account is only mandatory for self-employed individuals. The self-employed can participate in the other two accounts if they want. Unlike Hong Kong's MPF, the CPF is disbursable before retirement. The CPF members also have the option of topping up their parents' and spouses' retirement accounts through cash deposits or transfer of savings from their own accounts. The CPF is a state-managed scheme, but has been developed to allow its members to invest their savings in homes, properties, and even stocks, meaning that more savings lead to better opportunities for investment. The CPF can be evaluated as one of the best schemes for encouraging individual savings.

In a comparative view, it can be said that Singapore's CPF is a state-owned and operated plan while Hong Kong's is a privately managed one. Nevertheless, a higher level of flexibility is given to the CPF than the MPF. Individual savings can be withdrawn after the accumulation of the minimum sum, or "the subsistence level for old age needs" (Low & Choon, 2004, 180). In this sense, CPF includes a notion of a third pillar. The CPF is a better organized program than the MPF in terms of the encouragement of individual savings. The

CPF also is a sort of socioeconomic policy including both economic and social policies at the same time. The MPF is a pension scheme based on individual savings. In addition to a pension plan, the CPF can be used as an economic policy instrument. During periods of heavy infrastructural development in the mid 1980s, the government increased CPF contributions to 25 percent for employers and employees, while in times of economic downturn, such as during the years after the Asia financial crisis, the government has reduced employer contributions from 20 percent to 10 percent to stimulate the economy (Pai, 2006). Individuals may use the CPF as a pension plan and an investment device at the same time, while they only can use the MPF as a pension plan. The CPF as an investment instrument seems to encourage individual savings.

Table 3. Provident Funds and Individual Savings

Countries	Accounts, or schemes	Compulsory	Investment, or transferability	Designed for individual savings
	Master trust scheme	For employees of small and medium-sized companies and self- employed persons	Transferable under the same master trust scheme, but not for investment	Yes
Hong Kong	Employer- sponsored scheme	For employees of large corporations	Transferable under the same associated companies, but not for investment	Yes
	Industry scheme	For employees of the catering and construction industries	Transferable under the same industry scheme, but not for investment	Yes
Singapore	Ordinary account	Salaried person only	Home, properties, education loans	Yes
	Medisave account	Both salaried and self- employed person	Hospital bills and approved medical insurance	Yes
	Special account	Salaried person only	Retirement-related financial products	Yes

4. Privately Managed Pension Plans and Individual Savings

The second and third pillars are designed for supplementary retirement pension benefits based on saving accounts, while the first pillar is designed for redistribution and minimum social protection (World Bank, 1944, 14; Low & Choon, 199–200). All six Asian countries operate either both or one of the second or third pillars. Hong Kong's MPF falls under the second pillar, and so does the Singapore's CPF, except for being publicly managed (p. 199). Provident funds are unique pension schemes that can be distinguished from the second and

third pillars in the other Asian countries with a multi-pillar pension scheme. The approaches of the provident fund scheme to encourage savings can be different, and therefore, are examined separately.

Second Pillar and Individual Savings. China, Japan, Korea, and Taiwan all operate their own versions of the second pillar. In most cases, the second pillar does not work effectively in terms of encouraging individual savings. Japan's and Korea's second pillar in their characteristics and operations are closer to social insurance than a privately managed scheme to encourage individual savings. China's second pillar is designed to encourage individual savings, but the participation rate is so low that may not play role in savings.

Japan's and Korea's second pillars are not designed to encourage individual savings, while both China's and Taiwan's operate on the basis of encouraging individual savings. The PAYG defined benefit plan was established as an earning-related scheme for private sector salaried workers only in Japan and for both salaried and non-salaried persons. Under this plan, both employers and employees contribute on the basis of their salary in case of salaried persons. Self-employed persons contribute their own premium on the basis of their income in the case of Korea. This plan in both Japan and Korea has been a source of huge deficit due to its PAYG defined benefit plan rather than a scheme for encouraging individual savings.

China's second pillar is like occupational pensions in Western countries, e.g., the United Kingdom and the United States, but it is voluntary rather than mandatory. This pillar is financed by both employers and employees. The second pillar is designed to encourage individual savings, but has proven ineffective in China. A few profitable enterprises participate in this pillar, since tax incentives are not established; therefore, most firms consider such contributions as a form of tax (Hu, 2006; Frazier, 2004). Taiwan's second pillar is composed of a PAYG defined benefit plan and a fully funded DC plan. The DC plan works on the basis of encouraging individual savings, while the DB plan does not.

Third Pillar and Individual Savings. All four Asian countries operate the third pillar. The Japanese and Korean versions are similar to the United States 401(K) plan, while the Chinese and Taiwan versions serve as a complementary individual savings account plan. The former two countries' third pillars are working well, while the latter two countries are not. The third pillar in China is designed for those who want to save more money for their

post-retirement lives. Due to the lack of income tax incentives for saving money, few take up this option.

Under Japan's voluntary occupational plan, or the third pillar, two types of DC plan have been implemented: the employer-sponsored DC plan and the personal retirement account. Under the employer-sponsored DC plan, only employers contribute to the plan for workers under age 60 with no matching contribution from employees. Under the personal retirement accounts (PRA), each individual can deposit 4 percent of monthly earnings to the account. The third pillar, or Japanese version of 401(K), is a fully funded DC plan for salaried workers who can get paid their pension benefits based on investment return. There are two types of pension plans in the third pillar: employer-sponsored type and the individual personal type. Under the employer-sponsored plan, only employers contribute to the plan for workers under age 60 with no matching contribution from employees. Under the PRA, each individual could deposit 4 percent of monthly earnings to the account.

Korea's third pillar is a mandatory occupational pension scheme. Two plans are being operated under the third pillar: DC and DB. Both plans are financed by employers, but employees can make additional payment under the DC plan. Employers have to select either one with an agreement with labor unions. Pension funds are managed by employers under the DB plan, while the funds are operated by employees under the DC plan. Employees have more flexibility of drawing savings from their individual account and changing fund managers under the DC plan than under the DB plan. In addition, an individual retirement account (IRA) is established in case of employees' transferring to other companies. Employees can draw its saving from their accounts established in the previous company, and transfer it to new account established in the current company without any disadvantages.

In a comparative view, it can be said that China's second pillar and Taiwan's DC plan as a second pillar were designed as a scheme to encourage individual savings. All the third pillars in China, Japan, and Korea were established to encourage individual savings, but their performance has shown differently. China's third pillar does not work due to there being no tax incentive system. Japan's DC plan has not been working very well because only employers contribute to saving accounts so that employees could not have incentives to save. In Japan, PRA has been working to encourage savings. Korea's DB plan does not work very well in terms of savings for the same reason as Japan, but its DC plan has been working to encourage savings. Singapore's CPF includes notions of second and third pillars.

CPF connotes a second pillar because it includes a mandatory occupational DC plan, and a third pillar because it is composed of individual accounts that its members can withdraw from to invest.

Table 4. Privately Managed Plans and Individual Savings

Countries	Pillars	Plans	Design for Individual Saving	Operation as Planed
China	Second pillar		Yes	Not quite well
	Third pillar		Yes	No
Japan	Second pillar		No	Yes, but not for saving
	Third pillar	DC	Not really	Not really for saving
		PRA	Yes	Yes
Korea	Second pillar	N/A	N/A	N/A
	Third pillar	DB	Not really	Not really for saving
		DC	Yes	Yes
Taiwan	Second pillar	DB	No	No
		IRA	Yes	Yes
		DC AI	Yes	Yes
	Third pillar	N/A	N/A	N/A

V. Summary and Conclusion

On the basis of the findings of this study, a typology of relationships between second and third pillars and provident funds, and incentive systems for individual savings was developed. As can be seen in Figure 1, this typology was drawn by dividing second and third pillars into DC and DB plan at the first step, privately and publicly managed plans at the second step, and finally incentive and non-incentive plans. Eight types were identified under this typology: A privately managed DC and incentive plan; a privately managed DC and non-incentive plan; a publicly managed DC and incentive plan; a publicly managed DC and non-incentive plan; a publicly managed DB and incentive plan; and a privately managed DB and non-incentive plan; a privately managed DB and incentive plan; and a privately managed DB and non-incentive plan. Of the eight, one of five types fits at least one country. Therefore, it is hard to argue that the second and third pillars are as a form of privately managed plans. The findings can be summarized as follows:

First, both DC and DB have been employed in Asian countries' second and third pillars. It is known that second and third pillars connote a "privately managed" and "defined contribution," or DC plan, but that is not always true. Singapore's CPF was publicly managed, but it can be categorized as a second pillar. Japan's and Taiwan's second pillar were privately managed plans, but they includes a DB rather than DC plan.

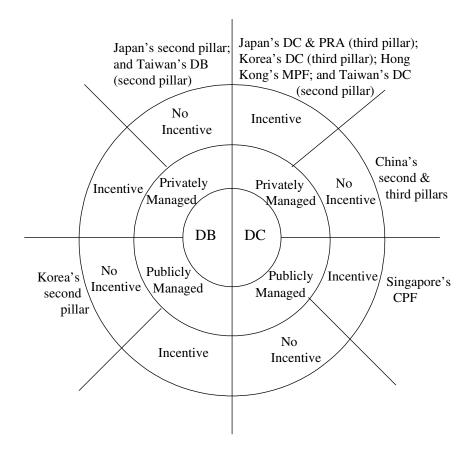
Second, a privately managed DC plan was the most frequently used plan in Asian countries' second and third pillars. This study also showed that a variety of second and third pillar types could be adopted, as seen in Figure 1. China's second and third pillar was a privately managed DC, non-incentive plan, while Singapore's CPF was a publicly managed DC, incentive plan. Korea's second pillar is a publicly managed, non-incentive plan, while Japan's and Taiwan's second pillar was a privately managed, non-incentive plan.

Third, Singapore's CPF was a kind of publicly managed DC plan. The CPF has been proven one of the most effective plans for encouraging individual savings. The CPF was a publicly managed plan, but various incentive policies were included in the plan. The incentive policies refer not only to tax deduction but also family protection, health care, investment to flats, properties, and stocks, and education.

Fourth, an incentive system usually has not been adopted in a DB plan. Although a DB plan was operated under a privately managed plan, such as in Japan and Taiwan, the plan could not go along with an incentive system. Therefore, it can be said that a DC plan rather than a DB should be established to encourage individual savings.

Finally, a pension system does not have to be a privately managed plan in order to encourage individual savings. In this study, it has been seen that a publicly managed DC plan could encourage individual savings much better than a privately managed DC plan. Singapore's CPF was the case. Therefore, a critical point for individual savings was to avoid a DB plan.

Figure 1. A typology of Asian Countries' Second and Third Pillars



In Asian countries, pension systems have been developed on the basis of family and corporate paternalism, evolved to social insurance system, and recently adopted privately managed DC plans and individual saving accounts as a mean to connect a missing link to a multi-pillar system. Meanwhile, the responsibility for the elderly has been changed from family and corporate to state, and state to corporate and individuals.

In addition, an interesting contrast between Asia and Europe was examined in the origin of pension system through this study. Two different but interrelated traditions have made up pension plans in Western states: the social insurance tradition and the poverty prevention tradition (Bonoli, 2005). In Asian countries, such a tradition can hardly be identified in the tradition of their pension systems. Instead, the vestige of family and corporate paternalism has remained in their systems. For instance, Singapore's family protection plan under the CPF schemes covers three generations, allowing members to care for themselves, their spouses, children, and even siblings. Employers' severance allowance to their employees before the establishment of their national pension system was another

example of corporate paternalism. These traditions have led Asian countries to establish their own privately managed pension systems, such as Singapore's CPF, Hong Kong's MPF, and the third pillar in Japan, Korea, and Taiwan.

In these contexts, pension reform in Asian countries has been implemented in a way of reinforcing the role of corporate paternalism and that in European countries in a way of resolving market and government failures to cope with demographic aging. Their approaches to pension reform were different, but their answers were the same: Change the distribution formula from a state supported PAYG plan to a privately managed pension plan encouraging individual savings. However, the transformation of distribution formula did not necessarily mean successful encouragement of individual savings. A critical point for the successful implementation was appropriate utilization of incentive systems. China's second and third pillars have failed due to a lack of tax incentive for employers and employees, while Japan's and Korea's DC plans including the tax incentive have been successful.

Singapore's CPF provides a good example of an incentive system. CPF has remained the same as a form of provident fund since its establishment in 1953. However, it continuously has been reshaping its plans toward encouragement of individual saving by adopting a "minimum sum" policy. So, individual savings can be withdrawn for investment after the accumulation of the minimum sum, or "the subsistence level for old age needs." The investment areas have been widened from government flats to properties, and finally stocks. These incentive programs are why CPF has become a unique and successful case. Individual saving accounts under the third pillar can be utilized as a form of CPF in terms of withdrawal and investment programs.

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