【Review】

Income Security for the Elderly in Thailand

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Abstract

In this paper, I discuss the concept and types of scheme used to generate income security for the elderly, its sensitivity to demographic and economic changes, the nature of pension reforms in Latin American and the income security for the elderly in Thailand. Currently, the formal income security system for the elderly in Thailand consisted of 3 schemes: the pension scheme for government officials, provident fund and pension for non-agricultural private employees. Problems in each scheme were discussed and recommended changes were suggested. In 2001, these formal schemes covered about 25% of the working population and only 7% of them were covered by more than one scheme. Hence extension of the formal system to covered more working population is essential; and two approaches to expand the coverage were suggested. However strategies beyond pension and provident fund such as providing more working opportunity for the elderly, encouraging support from family and community and improving the procedure to reach the poor elderly can not be overlooked.

1. Introduction

The objective of this paper is to describe the income security system for the elderly in Thailand, comment and recommend ways to strengthen the system. In section 2 I briefly discuss the concept and types of scheme used to generate income security for the elderly. Section 3 describes the nature of pension reforms in Latin American. Section 4 describes current income security system of the elderly in Thailand and discusses problems in each scheme. Finally, in section 5, I recommend ways to strengthen the system in Thailand.

As a person ages, his/her productivity goes down, as well as his/her income. Hence without special arrangement, it is almost unavoidable that the elderly will fall under poverty eventually. In order to prevent them from descending into absolute (consumption below a minimum subsistence level) and relative (a fall in living standard) poverty after retirement, some methods of income transfer must be employed. The transfer can be intergenerational within the family such as in the case of traditional old age security where children look after their elder parents. It can be intra-generation transfer among various groups or individuals within one society such as in the case of public social security. Income can also be transferred over time via saving while working and dis-saving after retirement. This paper will not emphasize on the traditional old age security within family, nor on security via individual effort. But the focus will be on how to create a good system via public effort.

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2. Concept, Types of Scheme and Their Implications

2.1. Concept

A good income security system for the elderly should be able to achieve the main objective (prevent them from absolute and relative poverty) without creating (or at least minimizing) any distortions in the economy. An effective system always involves public rather than individual efforts. The reasons are: over the lifetime of some individuals, they may not earn enough to save for their old age, hence income transfer among different individuals is necessary and only through public efforts are such transfers possible. There are also individuals who could have saved enough for their old age security, but fail or are unwilling to do so because of short sighted or prefer to "game" with the public welfare system, believing that society will give helping hands in time of need. Hence mandatory participation may be necessary in some situation. Under individual effort, it may be difficult to calculate the amount of savings sufficient to be used until the end because of uncertainties, such as those due to longevity, fluctuation in the economy and inflation etc. Therefore income security systems for the elderly around the world are usually a public effort in the forms of social security financed by taxation or some forms of insurance-based system financed by contributions of members.

An income security system may consist of one universal scheme covering the whole population or it may consist of several schemes. Different schemes may cover different groups of the population or it may cover the same group of population, but add on to one another as different pillars. In order to have an effective protection, each individual is recommended to have at least two pillars. The reason is because every scheme has its own strengths and weaknesses, therefore a combination of several schemes will be more effective in providing income security in the world of uncertainty.

2.2. Classifications of schemes

There are various ways to classify income security schemes. They can be classified by its financing methods, namely whether the scheme is pre-funded or pay-as you-go (PAYG). In a pre-funded scheme, commitments to pay future pensions are covered by real or financial assets whereas in PAYG scheme, there is no pre-funding of the commitments, but the working generation is taxed to pay for the pension of the retirees, and when they themselves retire, it is expected that the new working generation will in turn pay for their pension. Schemes can also be classified by whether it is defined contribution (DC) or defined benefits (DB). In DC scheme, contributions are fixed, and the benefits that retirees will receive depend on past contributions and the returns on the accumulated assets. But in DB scheme, benefits that retirees will receive are defined in advance; they are independently of the contributions and the returns on the assets.

A DB scheme constitutes the nature of risk sharing as well as re-distribution. Therefore it is more effective in protecting the elderly from poverty. In DC scheme, the accumulated asset is credit to individual accounts; hence the benefits are directly related to the contributions and the rate of return to investment in those assets. There is no re-distribution in the DC scheme and individual bears its own risk. Thus DC scheme cannot provide security for those who happen to live very long and those who cannot save enough during their working period. Normally, a DC scheme is also fully funded, whereas a DB scheme is more likely to be PAYG or partially funded.

2.3. Sensitivity of each scheme type to demographic and economic changes

Whether a scheme is PAYG or pre-funded will be affected by demographic and economic changes differently. In PAYG scheme, the sustainability depends on keeping budget balance in the following equation: $N.w.t = R.b$ where N is the number of working generation who pay contribution to the pension fund according to their wage earnings (w) and the contribution rate (t). R is the number of retirees and b is the average pension benefits per retiree. An aging population reduces the ratio of N/R, and will cause imbalance in the equation if other variables in the equation remain constant. The balance can be restored either by increasing t in order to keep b, or reducing b in order to keep t, or increasing t and reducing b simultaneously. Any adjustment in these variables has proved to be politically difficult in practice. Increasing contribution rate will meet with resistance from current working age group and increase noncompliance rate. It also means a transfer of income from the younger to the older generation; whether this is desirable or justifiable in terms of social justice is open to debate. A reduction of the benefits will meet with the resistance from those already in the system. It may be hard for them to adjust their future plans, especially for those who are near retirement age. A decline in N due to early retirement, a reduction in the labor force participation rate, migration or a reduced growth rate in w will also cause an imbalance and similar adjustment in t or b or both is required.

On the other hand, the benefits of a pre-funded scheme always follow the contributions and returns on asset investments; hence budget has always been kept balance. Therefore it is less affected by demographic changes (such as population aging) or economic downturn. Yet some effect might work through a decline in the price of assets that the elderly owned because less effective demand is there in the capital market. But a pre-funded scheme will be highly affected by the rate of returns in asset investment during the accumulation period.

2.4. Implications on the economy

The pension scheme may affect the economy through its effect on saving rate, on the labor market and on capital market development. Empirical studies suggested that a pre-funded scheme tends to have more positive effect on savings and capital market development than a PAYG type. In fact, a public pension PAYG and DB scheme may even reduce private saving because there is no need for individuals to over-save to cover for uncertainty. If participation in a pre-funded scheme is compulsory, it is a form of forced saving, hence the saving rate should be higher than in the case without such a scheme. The effect on capital market development depends not only on the type of scheme, but also on how the pension funds are managed. Its effect on capital market development is expected to be higher if pension funds are privately managed and competition is encouraged.

The effects on the labor market also depend on the type of scheme. In a DB scheme, benefits are not (or only loosely) related to contributions, therefore there might be dis-incentive to work. Especially when the benefits are generous, early retirement will be even more encouraged. But in DC scheme, the benefits are related to the contributions; hence there is no disincentive to work because the longer an individual works, the larger will be the sum received when that person retires. If a system consists of several schemes covering different groups of working population, and they are not portable[1], it might reduce the adjustability of the labor market and cause some inefficiency in the economy.

2.5. A recommended system

In order to overcome the weaknesses in different types of scheme, in 1994, World Bank recommend-

ed an old age income security system that consisted of three different pillars. The first pillar is a universal non-contributory scheme that provides basic pension for all elderly, with an objective to prevent them from absolute poverty. The scheme should be PAYG, emphasizing on re-distribution and finance from general tax revenue. The second and third pillars are mandatory and voluntary DC schemes respectively, with an objective to encourage more saving and to prevent the elderly from relative poverty. Funds under these two schemes should be managed privately in order to maximize returns from investment and to stimulate capital market development. It is believed that such a three-pillar system should best protect the elderly from poverty while creating least moral hazard as due to disincentive in work or in saving. At the same time, such a system should be flexible enough to adjust to demographic and economic changes.

However, such recommendation is not without challenge. For example, Lloyd-Sherlock, Peter (2000) argued that since the three-pillar system in general covered only a small percentage of the workforce who are relatively better off in developing countries, the priority given by international communities to reform pension system nowadays, using the World Bank model, has distracted attention away from policies that can really benefit the poor in these countries. St. John, Susan and Larry Willmore (2001) argued that a two-pillar model used in New Zealand, comprising of a basic flat-rate pension for all elderly, financed by general tax revenue and supplement by a voluntary DC saving scheme has proved to have several desirable characteristics, such as its simplicity, low administrative cost, fiscal responsibilities and durable. Hence it offers as another reform option for both developed and developing countries.

3. Old Age Pension Reform in Latin American

Old age pension in most European countries is PAYG and DB. Since the schemes were started when the population was still relatively young, therefore they tended to provide generous pension benefits. But as the population ages, the number of contributors cannot keep pace with a rapidly increase in the number of pensioners. Thus sustainability could not be maintained without reforms. Latin American countries had adopted the old age pension model from Europe and had been the most innovative region in the area of pension reform. Reasons for the active reform in this region are because before the reform, their systems are plagued with many problems. Unlike the problems in European countries that mainly arose because of population aging, the problems in Latin American countries included also non-compliance, mismanagement of the fund, and interference from politicians. The reform model in Latin American started in Chile and had been widely accepted in the region. OECD countries nowadays also in the process of reforming their old age pension and looking at the Chilean model in order to draw lessons from there.

Basically, the reform in Latin American is to reduce the role of the public PAYG and DB scheme, and increase the role of pre-funded and DC scheme, which is privately managed. But in details, the reforms in each country are different, depending on to the size and the maturity of the public schemes, as well as on the fiscal and political circumstances in each country. Roughly, the reform models in Latin American could be classified as follows. 1) A substitute model, under this model, the public PAYG (or partially funded) and DB scheme is terminated and is replaced by a fully funded and DC scheme, which is usually privately managed. Chile, Bolivia, Mexico, El Salvador and Nicaragua fall in this category. 2) A parallel model, under this model, the old public PAYG and DB scheme was not terminated, but undergoing some reforms, and offered a new pre-funded scheme as alternative. Peru and Colombia are

examples of countries fall in this category. 3) A mixed model, under which the old PAYG and DB scheme is not terminated but reformed, and then establishing new pre-funded, DC schemes to supplement the old one. The reformed PAYG scheme is likely to pay only basic pension and acts as the first pillar, where as the new pre-funded scheme acts as the second pillar in the framework recommended by World Bank. Examples of countries falling in this category are Argentina, Uruguay and Costa Rica. (Mesa-lago, Carmelo 2002)

When the old scheme is not terminated, usually the nature of reform is to reduce new implicit debts and/or to correct any distortion introduced by the scheme as far as possible. Examples of changes made were increasing the retirement age or making early retirement rules stricter, increasing contribution and/or reducing the benefits. Increasing contributions is a far less used measure than the others. Of course, if the contribution rate is already high, there is not much room to further increase contributions. Increasing the retirement age will increase the ratio of working population to pensioners; hence help to restore budget balance. Likewise, make early retirement rules stricter (or at least remove any penalty on those who continue working after reaching eligible age) should result in a higher labor force participation rate among those approaching old age and help to reduce the imbalance. As for reducing the benefits, there are various practical ways such as changing the rule of pension indexation[2] or changing income base that is used to calculate pension. For example, instead of calculating pension as a percentage of the last year's wage earnings, it should be changed to a percentage of the average lifetime wage earnings. This method also reduces the disadvantage of working cohorts who happen to face years of economic downturn when they are approaching retirement age.

In order to start a new pre-funded scheme, each country must choose some methods to finance the system during the transition. As mentioned earlier, reform is usually faces with some resistance because someone (usually those who are in the old generous system) is bound to lose from the reform. Hence, it is not unusual that reform cannot take place until the system is on the brink of collapsing. This means that the system has already accumulated huge implicit debts; and under the PAYG system, present and future working generations have the obligation to pay for the debts via some forms of taxation. Without changes in the method of financing the system, the current working generation has to start contributing in the new scheme, as well as paying for the old PAYG scheme under the old system. This burden is unlikely to be accepted by the current working generation. Therefore, other methods to finance the implicit debts in the old scheme must be found. Most commonly used methods seem to fall under these two categories. 1) The government recognizes past contribution of an individual under the old scheme and issues bonds to each individual accordingly. The bond matures when that individual retires and the sum is deposited into the individual's account. Countries using this method of financing include Chile, Colombia, Peru and El Salvador. 2) The government recognizes past contributions by paying some monthly compensatory pension to individuals. This method has stretched out the burden of servicing the implicit debts under the old scheme over a longer period of time. Countries used this method include Argentina and Bolivia. In addition, Bolivia combined pension reform with privatization of state enterprises by using the money earned from privatization to start up a new universal basic pension scheme. (Queisser, Monika 1998)

Although the Chilean and Latin American reform models have set the pattern of pension reforms around the world, but it is not without problems. Carmelo Mesa-lago (2002) contrast twelve myths with realities about the Latin American reforms and concluded that five myths (a private system increase coverage, ensures low administrative cost, encourage punctual payment of contributions, promote competi-

tion and increase national saving) could be rejected while seven others could not be confirmed nor rejected due to either insufficient evidence or mixed results. His paper reflects some problems and some un-realistic expectation of the Latin American reforms. The author concluded, "I would add [another advice][3] that countries considering any reform should carefully study the Latin American evidence ..." (Mesa-lago, Carmelo 2002 p. 15).

4. Income Security System for the Elderly in Thailand

The size of population in Thailand has increased from 54.5 millions in 1990 to 62.4 millions in 2000 and is projected to be 67.2 and 70.5 in 2010 and 2020 respectively. The size of population aged 60 years and above was 5.7 millions in 2000 and is projected to be 10.7 in 2020, while its proportion to total population is projected to increase from 9.2% to 15.2% in the same period. It took France, Sweden and the USA, respectively, 114, 85 and 72 years for the proportion of population aged 65 years and above to increase from 7% to 14%. But according to projected figures, it will take Thailand only 22 years (2007-2029) for the same proportionate change. Couple with such a rapidly aging population, Thailand is also undergoing changes in household structure toward nuclear type, changes in work pattern away from home. These mean that the traditional security for the elderly within household may no longer be sufficient. Therefore a formal income security system for them is necessary. Designing a good system in rich countries is challenging enough. But Thai population may become old while remain poor. With less resource to go around, providing income security for the rapidly growing elderly will be even more challenging.

Formal income security for the elderly in Thailand consisted of three schemes: pensions for government officials, provident fund that is compulsory for employees of government and of state enterprises and voluntary for private employees; and a mandatory pension scheme for private employees.

4.1. Pension scheme for government officials

Income security for government officials after retirement is the oldest scheme started since 1901. In the beginning, pension received by retired government officials was not automatic; rather it was considered as reward for those who had been successfully served the royal government for a long period of time. Although later, the scheme had gradually changed into pension for everyone; but the non-contrib-

Table 1. Thailand population by broad age group[1/].

	1990	2000	2010	2020
Total population (in thousand)	54,549	62,408	67,234	70,505
Population aged less than 15 years (in thousand)	15,947	15,960	14,915	13,884
Population aged 15-59 year old (in thousand)	34,585	40,715	44,680	45,845
Population aged above 60 year old (in thousand)	4,017	5,733	7,639	10,776
The percentage of population aged less than 15 years	29.23	25.57	22.18	19.69
The percentage of population aged 15-59 year old	63.40	65.24	66.45	65.02
The percentage of population aged above 60 year old	7.36	9.19	11.36	15.28
The percentage of female elderly	53.71	54.00	54.48	54.29

Data sources: 1/ Population Census 1990 and population projection by NESDB 1995

utory nature carried on. Hence this scheme is totally financed by general tax revenue on PAYG and DB basis. Pension was then considered, as a compensation for persons who chose to work for the government, despite the fact that pay scale in the public is much lower than that in the private sector. But as the number of government officials increased and the pensioners tended to live longer, coupled with a rather generous replacement ratio[4], government expenditure on this scheme increased rapidly at an average growth rate of 20% per annum during 1990-1996.

By coincidence, during that time, Thailand was experiencing a period of historically high economic growth. Wage rate in the private sector increased rapidly that resulted in a widening gap in wage differentials between the public and private sector. This led to a serious brain drain from the public sector. In order to solve the problem of brain drain, a natural proposal was to adjust the pay scale in the public sector upward, to be in line with the private sector. However, since pension for the retired government officials was indexed by pay scale in the public sector, any increase in the wage rate for government officials would substantially increase the burden of government on pension, which was already high and increased rapidly at the time. Therefore, since 1991, there was a call for reform by replacing the PAYG and non-contributory scheme with a pre-funded and contributory one. However, due to strong resistance from government officials, it took several years before the reform could take place, and only marginal reform could be made when it took place finally.

Under the current scheme that started implementing in 1996, government officials still enjoy a pension scheme that is financed by general tax revenue on PAYG and DB basis, albeit a minor adjustment in pension calculation which results in a slightly lower benefits. (Before the reform, pension was calculated by the following formula: $P = L.S/50$ where P is monthly pension, $L \geq 25$ is the number of years in service, S is the last monthly salary. Hence the replacement ratio was 50% for those who work 25 years with an accrual rate[5] of 2% for every additional year in service beyond 25 years. No ceiling was placed on the replacement ratio. After the reform, the same formula to calculate pension is used, but instead of basing on the last monthly salary, an average salary of the last 60 months is used instead and a ceiling of replacement ratio is set at 70%). On top of such a reformed pension scheme, all new government officials must participate in a contributory pre-funded scheme. At the time of retirement, retirees will receive a lump sum payment from the fund, which constitutes their own contributions, the contributions of government as employer and the return from past investment. Government officials who were employed before March 27, 1997 were given a onetime chance to choose either to remain in the old system or switch to the new one. Those who chose to switch to the new system, previous right accumulated under the old system was recognized by a lump sum compensation; which will be deposited in individual accounts under the new pre-funded scheme. Government officials will receive this compensation at the point of retirement. But new government officials who were employed after March 27, 1997 were compelled to join the new system. Local government officials were not allowed to join the new system. All of them remain under the coverage of the old government pension scheme.

The reform in the government official scheme is similar to a mixed reform model in Latin American mentioned in section three. However, the downsizing of the old PAYG, DB scheme does not seem to be significant enough. Hence the burden of the government on this scheme is still increasing, but at reduced rate. During 1996-2001, the government expenditure on this scheme, on the average increased by 12% per annum, down from 20% five years earlier. It is expected that the burden for this scheme will increase at further reduced rate in the future when all government officials who chose to remain in the old system retire eventually.

As of 2001, the average pension was 10,936 Baht per month; it was about 68% of the average monthly wage rate in the public sector. Since their pensions are also indexed by pay scale in the public sector, they are to a certain extent, protected from inflation. Thus, government officials as a group, has the best income security after retirement compared to others. However, the drawback of this scheme is that it is not portable, meaning that any accumulated rights cannot be transferred once resigning from the public sector.

4.2. Provident fund

The first law to regulate provident fund was enacted in 1987 and was modified later in 1999. But even before 1987, there were already provident funds established mainly by foreign companies doing business in Thailand. But the fund was not a separate entity from the employers' establishment; only employers contributed to the fund; and no tax incentive was given. In enacting the law in 1987, two objectives were mentioned. The first objective is to increase income security for employees who retire or have become unemployed; and the second is to increase domestic saving rate. After enacting the law in 1987, it was still up to the employers and employees to voluntarily set up a provident fund. But if they decided to set up one, both employer and employee must contribute to the fund. The established fund must be a separate entity from the establishment of the employer and must be managed by licensed private fund managers. In order to increase voluntary participation in provident fund, tax incentives were given to both employees and employers. As of the latest law enacted in 1999, employees can voluntarily contribute 2-15% of their wage income into the fund, and employers must contribute at a percentage not lower than that contributed by employees. Contributions from both sides are credited to individuals' accounts with interest being added. Within one month after employment termination, the total sum in the employee's account must be returned to him/her or to his/her survivor. In 2002, there were 5,166 employers, 1,298,267 employees participating in 594 provident funds. The total worth of the funds was 244,823 millions Baht, or on the average, each employee had accumulated about 188,577 Baht in the fund.

In term of protecting the elderly from poverty, members of provident fund are less protected than government officials. As stated in the law, the purpose of a provident fund is not only for old age security, but also as safety net in time of unemployment. Therefore, it is quite possible that the money will be used up before retirement. Even though the amount has been kept in the account until retirement, it is unlikely that all retirees have accumulated enough and can manage the money properly to be used until the end of their lives. Using the money to buy annuity[6] can reduce risk from mismanagement, but it is not yet an option available in Thailand. In order to make provident fund a more effective income security for the elderly, annuity market should be developed. Moreover, with the introduction of unemployment insurance in 2004, this scheme should be modified, aimed solely at providing income security for the elderly, as another pillar in the security structure recommended by World Bank. Two adjustments should be made: 1) Provident fund should be made portable. At the moment, if a person can find a new employment that has established provident fund for employees within one month after the previous employment has terminated, the sum accumulated during previous employment can be transferred to the new provident fund, otherwise, the sum must be withdrawn which means that the saving process is disrupted and some returns on investment must be forgone. And 2) with some exceptions such as, for investment in the education of children or in housing, a minimum age should be imposed before allowing withdraws from the fund.

Before the reform of the government official pension scheme, permanent employees of government and employees of state enterprises received a lump sum payment at the time of retirement, similar to government officials who were in service for less than 25 years. But after the reform, both groups of employees are required to participate in a provident fund, in which the government or state enterprises also contribute as employer in private sector. The number of employees under these two categories was about 557,000 in 2001.

4.3. Pension for non-agricultural private employees

The Social Security Act enacted in 1990 that applied only to non-agricultural private employees had specified dates when Social Security Office (SSO) must start implementing various branches of social insurance. Four types of insurance, namely sickness un-related to work, maternity, invalidity, and funeral cost in the case of death, must be implemented immediately; old age pension and child allowance must be implemented by 1998; but no specific date set for start implementing unemployment insurance. A pension scheme actually started on the 31 of December 1998. It is a contributory DB scheme. The contribution rate is set at 6% of wage payment that is within the range of 1,650-15,000 Baht per month. The contribution rate of 6% is divided equally between employers and employees. Eligible conditions are that employees (or insured persons) must have contributed to the pension fund for at least 180 months (with or without interruption) and have reached 55 years of age. Pension is calculated by the following formula: $P = M.W/1200$, where P represents monthly pension, W is the average wage earned during the last 60 months and M is months of contribution. Thus, if an insured person retires after contributing 180 months into the fund, replacement ratio will be 15% of the average wage earned during the last 60 months. The replacement ratio increases 1% for every additional year of contribution beyond 15 years. Employees who contribute to the fund for less than 15 years will receive a lump sum payment at the time of retirement. The payment includes the person own contributions and that of the employer.

At the stage of designing the scheme, several working committees composing of representatives of the employers' association, of labor union, and domestic and international experts were set up. However, it was up to the board of the SSO, which is also composed of tripartite representatives to modify the design to be presented to the cabinet for final decision. Therefore political negotiation and lobbying can sometime outweigh academic soundness of the scheme. As it turns out, the design of current scheme appears to have several problems. Firstly, the replacement ratio is too low to prevent pensioners from poverty. The replacement ratio of a person who starts working at the age of 25 and retires at the age of 60 will be 35% of the average earning over the last 5 working years. This is rather low compared to a replacement ratio of 70% for government officials who have worked for the same length of time. Secondly, the contributions and the benefits are not actuarially balance. In order to provide that level of pension benefit, the contribution rate must be around 12% of wage earning. Therefore the scheme is actually partially funded at the moment; and without any changes, the scheme will gradually evolve to a PAYG scheme that is unsustainable in the long run. Hence it is a matter of time to reform the scheme. The longer the reform is postponed, the larger will be the transfer of income from the future working generation to the present working one. Thirdly, a one percent accrual rate for every additional year of contribution implies that the ratio of the present value of benefit to the present value of contribution is higher for those who work more years than those who work fewer years over their lifetime. It implicitly implies a re-distribution of income from women to men who tend to be more continuously attached to

the labor market than women. The objective of introducing an accrual rate in a pension scheme is to encourage employees to participate more in the labor market. However, it should be re-distribution neutral, namely the ratio of the present value of benefit to the present value of contribution should be independent of the number of years participating in the labor market.

Based on the simulation by Wiener, Mitchell for ADB in 2002, without any reform, the scheme will become insolvent, approximately within 50 years. In order to prevent the fund from insolvency, the following reforms had been recommended.

1) The eligible age for receiving pension should be raised from 55 years to 60 years as soon as possible. At the moment, unions still resist on such change, on the ground that it has been difficult already for employees to keep their employment until age 55 years. Hence raising retirement age will cause serious hardship for employees who might be forced to live with no income for a longer time interval.
2) Increase the contribution rate to the level that is actuarial balance as soon as possible. This proposal is also rejected at the moment, viewing by most parties involved that it is not yet an urgent issue.
3) Accrual rate should be reduced from one to 0.8%. Again this proposal is rejected on the ground that it is infeasible in practice, at least for the time being.
4) Because the replacement ratio is quite low and cannot prevent pensioners from poverty, a basic minimum pension should be introduced; and pension should be indexed according to either price or wage rate. The SSO agrees with this one and plans to incorporate both basic minimum pensions and indexation in the near future.

The pension scheme for private employees was established amid the ongoing reforms in many countries around the world. Hence Thailand has the advantage of being able to learn from the experience of other countries in designing its own scheme. However, it looks like she is going to repeat the same mistake of the fore runners, and reform does not seem possible in the near future. The mathematics of a pension scheme is straightforward, but vested and political interests make it difficult to design a good scheme even from the beginning.

4.4. A summary of current formal system

Table 2 gives a summary of the coverage of the three formal schemes described above. In 2001, the population of Thailand was 63.1 millions, of which 34.1 millions were economically active. The government pension scheme covers about 1.2 millions government officials. This group also is covered by a contributory DC scheme, meaning that they have two pillars to ensure their income security.

There were about 1 million local government officials who were still under the old government official pension scheme, hence having only one pillar of security. Employees of the government and employees of state enterprises are covered by a mandatory provident fund only. Roughly there were 0.56 million persons in these two work statuses. There were 10.9 million private employees in 2001, but the pension scheme for private employees covered only 5.9 millions in 2001. In addition, about 1.2 millions of private employees voluntarily participate in a provident fund which is the third pillar of security according to the World Bank model. Approximately, there were about 8.7 million employees (or about 25% of the economically active population) who are covered by at least one old age income security scheme. But only 7% are covered by more than one scheme. This leaves 75% of the economically active population who do not have any income security for their old age. They are mainly employees in small establishments, persons who work in the agricultural sector or work as self-employed and unpaid

Table 2. Population by work status and by pension coverage in 2001.

Work status	Number (in thousand)	Pension (DB)	Mandated provident fund (DC)	Voluntary provident fund (DC)
Government official	2,725[1/]	1,204,772	1,151,148	
Government employee			272,421	
Employee of state enterprises			284,574	
Employer	1,043.2			
Private employee	10,911.1	5,865,208		1,221,663
Other statuses[2/]	18,421.0			
Persons employed	33,100.4			
Unemployed	959.6			
Economically active	34,060.0			
Total population	63,130.4			

Source: Employment Survey, round 4, 2001
Note: 1/ Includes government officials, government employees and employee of state enterprises.
2/ Includes self employed, unpaid family workers and persons in other work statuses.

family workers. Since April 1, 2002 all private employees in non-agricultural sector are required to participate in the private employee pension scheme. But currently, the compliance rate is still low. But even with complete compliance, the formal income security system still can cover less than half of the working population. Such a low coverage of the formal income security system for the elderly is quite common in developing countries where informal economic activities are predominant. Therefore in order to ensure minimum economic well being for all elderly, strategies beyond pension or provident funds are necessary.

4.5. Beyond pension and provident fund

Persons who are not covered by any scheme have to rely on family, social welfare or continue working as long as health permit. Since 1994, the Department of Welfare has provided some living allowance for the elderly who are abandoned or have no one look after them. Currently the allowance provided is 300 Baht per month. But due to budget constraint, allowance could be given to 400,000 persons only, while in fact, there are many more who need such assistance. According to Socio-Economic Survey in 1992, 47.3% of the population aged 60 and above said they did not have any income, of those who had, 28.2% either received from one of the old age schemes mentioned above, or from unemployment compensation or from social welfare. A study by Chayovan and Knodel 1996 shown that the most frequent source of income for the elderly in Thailand is either self earned income or that earned by their spouse. The next frequent source of income is from children. Female elderly relied on children more than male. According to the 1997 Labor Force Survey, about 23% of female elderly and 42% of male are economically active. The percentage is higher for elderly who live in rural than those in urban areas. For those who remain economically active, men worked on the average 51 hours per week, where as the average for women was 47 hours. In 1997, 65.2% of the elderly who were still working earned less than 2,000 Baht per month. Lack of opportunity to participate in more productive work probably leaves them

with no choice but to work that many hours in order to earn enough for living.

Based on the level and the sources of income reviewed in previous paragraph, strategies to improve economic welfare of the elderly, in addition to increase the coverage of the formal income security system, should also include: 1) increase work opportunity for the elderly 2) assist the elderly through family or community and 3) improve the welfare system so it can truly reach the needy. In order to help the elderly to keep their job, on the job training and re-training are essential. When family size get smaller, the burden of taking care of the elderly becomes heavier, hence some of the burden might be able to share within community. Establishing village funds has become quite common in Thailand and is another potential source of security for the needy elderly in the community. The practice is that villagers contribute regularly into the community fund and can borrow from it in time of need. Some village funds have been quite successful and the sum accumulated has been quite substantial. Then a portion of the fund is usually allocated for the welfare of villagers, including assistance to the elderly. Finally, a social welfare system that gives cash benefits to abandoned elderly is still necessary; but procedure to target them needs some improvement.

5. Conclusion

The majorities of working population in Thailand are self-employed or work as unpaid family workers. They are not covered by the existing income security schemes that target only those who work as employee in non-agricultural sector. At the moment only one fourth of the working population has some form of income security when they retire. An even a smaller proportion of 7% of the working population has more than one pillar of old age security. Therefore the informal system is still the most important source of income security for current elderly. However, with smaller family size and a higher participation of women in employment away from home, it will be more difficult to maintain the effectiveness of an informal system to generate economic well being for the elderly. With a higher proportion of employees that have a mandated retirement age and a rapid change in technology, it will be even more difficult for the elderly to rely on continue working as their source of income. Hence, an expansion of formal security system to cover those who work in the agricultural sector and self-employed is necessary.

Two approaches to expand the coverage and to consolidate the system are proposed here. The first approach is to consolidate the first pillar of all the employee schemes while leaving each occupational group designs it own second pillar. In addition, a new DB scheme designed to cover those who are currently uncovered by any scheme should be introduced as soon as possible. The second approach is to reform each of the current schemes independently, add on another scheme if necessary so all employees at least have two pillars of income security; and introduce a new DB for the uncovered working population as in the first approach. The first approach is more desirable because it will solve the problem of un-portability in the first pillar automatically. Moreover, it can be seen as a transition phase, to pave the way for a universal first pillar that will result in a more consolidated and more equitable society. However, resistance to this approach is also expected to be high. Government officials who used to a generous pension benefits without contribution will surely resist to such change. Officials who manage current schemes may resist, feeling that their small empires are invaded. The Thai government is currently in the process of overhauling its bureaucratic structure, in order to make the public sector become more efficient. If it is successful in this endeavor, then an overhaul of its wage structure should follow

and combining wage increase with contribution in the first pillar, may face less resistance.

Under the second approach, in addition to some reforms within each scheme as suggested above, new scheme should be added to some occupational groups, namely a compulsory second pillar, of DC type of scheme should be added on for local government officials, a first pillar, of DB type of scheme should be added on for permanent government employees and employees of state enterprises, provident fund should be compulsory for private employees instead of voluntary as in current practice.

Since the majority of the uncovered working population belongs to a lower income class, any DB scheme designed to cover them must be partially subsidized by the government. This can be a substantial burden for the government. In fact, to have a universal first pillar coverage is a very ambitious goal for developing countries. Therefore other measures to guarantee some minimum economic well being of the elderly are also necessary.

Notes

(1) Portability refers to the right of an employee to transfer his pension right between different employers without loss of value.
(2) The purpose of pension indexation is to maintain its purchasing power, hence it is usually required that pension increases in line with price or wages.
(3) Words in parenthesis are added by the author of this paper.
(4) Replacement ratio is the ratio of pension to earnings at the point of retirement.
(5) An accrual rate is the rate of accumulating pension by years of services.
(6) Annuity is a form of financial contract, usually offered by insurance company, to provide a given income at a regular interval from retirement till death.

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