Social Security Reform Imperatives: The Southeast Asian Case

By

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The usual caveat applies.
I. INTRODUCTION

The main function of a social security system is to provide to a substantial proportion of the current and future retirees socially adequate level of replacement rate with a high degree of sustainability. This should however be achieved while minimizing possible adverse effects on economic growth, fiscal burden, equity, and international competitiveness. A social security system thus should be able to alleviate poverty and prevent significant and abrupt fall in the standard of living upon retirement, death, disability, occupational injury or disease, or unemployment.

The social security systems in the five Southeast Asian countries covered in this paper, namely, Indonesia, Malaysia, Philippines, Singapore and Thailand, have traditionally been based on certain key assumptions.

First, the policymakers have relied on the continuation of rapid economic growth, and consequent continuing reduction in the poverty levels in the region to take care of the financing of old age. Second, the policymakers have generally regarded social security provision for the non-public sector component of the labour force as essentially a private concern for the families, communities and employers (Phillips, 1999, p.4; Schmidt, 1998, pp. 32-33). Third, the Southeast Asian countries have leaned towards the organic view of the relationship between the individual and the state under which society is conceived of as a natural organism; and the needs and the goals of the community are stressed above those of the individual. This is in contrast to the mechanistic view, which regards government as an artificial entity created by individuals to achieve certain common objectives more efficiently. In Southeast Asia, the organic view has been combined with the close government-business relations, and active role of government in mobilizing the society towards primarily the economic growth objective. Social security needs of the individuals thus have been considered secondary to the growth objective and to the needs of the business sector.

The above key assumptions have meant that the development of formal social security institutions and safety nets have been much less developed in Southeast Asia in
relation to its level of economic development. There are however several reasons why the
current social security arrangements in Southeast Asia are likely to be inadequate in the
future and therefore are in need of major reform.

First, as a result of rapid economic growth and accompanying industrialisation and
urbanisation, these countries are experiencing an erosion of informal systems based on
family and community which have traditionally taken care of the aged.

Second, these countries are expected to experience both individual ageing (reflected
in higher life expectancy at birth) and population ageing (reflected in increasing share of the
population above 60 years of age) (Table 1). Thus, in Singapore the share of those above 60
years of age will increase by 3.5 times between 1990 and the year 2030; in Thailand, the
Corresponding share is expected to triple; while in the other countries, the share is expected
to more than double. The Elderly Dependency Ratio (EDR) is expected to rise significantly in
all five countries, but particularly in Singapore and Thailand (Table 1). As women live longer
than men, many older persons will be women. Indeed, in all five countries, women already
outnumber men among the old-old, i.e., those above 75 years of age (Bos et al., 1994). But,
typically women have lower degree of exposure to the labour market and lower level of
earnings than men. Social security arrangements in Southeast Asia will need to increasingly
take this into account.

During the 1990-2000 period, except for Singapore, the population grew at a faster
rate than the working age population (Table 1). As a result, rapid labour force growth could
be potentially relied on as an avenue for rapid economic growth. This situation may be
termed the demographic gift (Asian Development Bank, 1997, p. 14.2). Reliance on this gift,
however, would need to be gradually reduced, Thus, during the 2030-50 period, all five
countries are projected to experience demographic burden, i.e., when rate of growth of
working age population will lag behind that of the total population. One of the ways these
countries could capture the benefits of favourable demographic trends is to set up
sustainable social security arrangements before demographic gift turns in to a burden.

Third, individual and population ageing, along with modernisation, neglect of the
environment, and higher income are expected to lead to a convergence of the morbidity (i.e.,
nature of illnesses affecting the population) and mortality profiles of East and Southeast Asia towards those currently obtaining in the industrial countries, i.e., towards more chronic non-communicable diseases such as cancers, cardiovascular diseases, and neuropsychiatric disorders (Heller, 1997, p. 5). This, in turn, will increase the demand for health care substantially. In addition, technological change is expected to increase per unit cost of medical care. As a result, greater resources will be required to finance old age.

Even in the high-income countries, understanding of the necessity of choice by society and individuals in health care is a relatively recent phenomenon (Fuchs, 1998). In Southeast Asia, poorly structured health schemes which do not adequately take into account the efficiency, equity, costs, and affordability impacts, may aggravate the challenges of coping with individual and population ageing.

Fourth, with increasing per capita income, demand for economic security by individuals in Southeast Asia is expected to increase. Moreover, if international experience is any guide, continued economic growth and westernization are likely to bring about an attitudinal shift towards more individualistic life styles and consumption patterns. One of the consequences would be to make parents less willing to live with their children in their old age and vice versa. Increasingly, deeper integration of the Southeast Asian economies with the world economy will necessitate provision of adequate social safety nets if these countries are to sustain the necessary internal social cohesion and political support for globalization.

As globalization leads to a much greater labour mobility, at least among the professional, managerial, and skilled workers, appropriate amenities, including competitive social security systems, would need to be provided to retain and to attract such workers from abroad. Acute scarcity of such workers in Southeast Asia, particularly when measured against the urgent need to move production upmarket to counter competition from China and India demonstrates the relevance of this point for the region. Within Southeast Asia, Malaysia, Singapore, and Thailand are also recipients of substantial number of unskilled and semi-skilled workers. Their social security needs, at present largely ignored by the recipient countries, would also become an issue in the regional cooperation.
Fifth, the contagion effect on the region of the devaluation of the Thai Baht on July 2, 1997 has significant implications for social security arrangements in Southeast Asia (Lee, 1998). Not only is the medium-term economic growth expected to slow significantly, but many unpopular and painful reform measures would need to be undertaken. To ensure social cohesion, it is essential that burden sharing required to cope with the aftermath of the turmoil be perceived by the population as equitable, and to address the heightened anxiety of the population of these countries concerning their future economic well being (Sato, 1998).

The above discussion strongly suggests that the policymakers in Southeast Asia are unlikely to continue to be able to view the ageing problem predominantly in the family context (Phillips, 1999). It has now become essential to give much greater attention to the development of the formal social security systems, even as care is taken to ensure that the informal systems do continue to play an important role as long as possible.

Accordingly, the main objective of this paper is to analyse the formal social security systems of the five Southeast countries with a view to enhancing their financial adequacy and sustainability.

The rest of the paper is organized as follows. The next section provides an overview of the major characteristics of the social security systems of the five Southeast Asian countries. These systems demonstrate both continuity and adaptation. The Section argues that while these systems do have strengths, unless further reforms are undertaken, the systems will not be able to adequately perform the main function of a social security system. A brief discussion of suggested reform measures is provided in Section III.

II. MAJOR CHARACTERISTICS

This section summarises major characteristics of the formal social security arrangements in Southeast Asia. The discussion focuses on the nature of the formal systems, coverage, contribution rates, pre-retirement withdrawals, tax treatment, investment
policies and performance, expected replacement rates, and distribution of accumulated funds at the specified age of withdrawal.  

**The Nature of the Formal Systems**

The nature of the formal social security systems in Southeast Asia reflects both continuity and adaptation. Thus, Malaysia and Singapore have continued to adhere to the National Provident Fund (NPF) mechanism set up in the early 1950s by the British to provide social security for the bulk of the civilian workforce, while using the Pay-As-You-Go (PAYG) mechanism to provide retirement benefits to the government employees and armed forces. Malaysia’s NPF is called the Employees Provident Fund (EPF), while Singapore’s is called the Central Provident Fund (CPF). Both have used the NPF mechanism inherited from their colonial past to achieve housing, healthcare, and other objectives. Malaysia has also incorporated social risk pooling in its work related sickness and disability schemes. These are administered by the Social Security Organization (SOCSO) set up in 1971.

Singapore has been able to drastically reduce the number of government and armed forces personnel who receive pension on a PAYG basis. The rest have been moved to the CPF system (Asher, 2000). Even then, in the fiscal year 1999, gratuities and pensions expenditure was S $ 763 million, equivalent to 5.5 percent of total operating expenditure and 0.53 percent of GDP (Asher, 2000, table 4). This is well within Singapore’s fiscal ability. Even this low level of expenditure is likely to show a decline in relative terms. Malaysia however has found it politically much more difficult to shift the government employees and the armed forces personnel towards pre-funded contributory schemes. Between 1981 and 1998, the number of pension recipients showed an average annual rate of increase of 9.4 percent, while the corresponding increase in total expenditure was slightly higher at 10.4 percent (Asher, 2000, Table 3). The total pension expenditure to GDP ratio was 1.03 percent in 1998; and this is expected to increase significantly as the sharp expansion in government employment undertaken during the 1970s as a part of its New Economic Policy (NEP) begins to impact on the pension costs (Asher, 2000).
The colonial past of the Philippines is evident in the general acceptance of the social insurance principle for all employees. It thus continues to rely on a partially funded PAYG system to provide social security for the general population. The Social Security System (SSS) set up in 1954 administers programs for the private sector employees while Government Service Insurance System (GSIS), set up in 1936, administers programs for the government employees and those in state enterprises. Armed forces and the judiciary have separate plans. The Philippines also has a Home Development Mutual Fund (Pag-IBIG Fund). It is a mandatory savings program covering all individuals in the SSS and GSIS programs.

In Indonesia, civil servants are covered by two income maintenance schemes: TASPEN (Tabungan dan Asuransi Pegawai Negeri or The Government Civilian Employees' Saving and Insurance Scheme) and pension. TASPEN was originally an endowment insurance scheme and was established in 1963. In 1981, it was expanded to provide life insurance. The benefit is paid at retirement or death, and is about 19 times the final monthly salary. For the military, there is Armed Forces Social Insurance Plan whose Indonesian acronym is ASABRI. It was set up in 1971. The retirement provision for private sector workers in Indonesia is through a compulsory provident fund called JAMSOSTEK (Jaminan Social Tenaga Kerja). It was established under the Social Security Act of 1992, and it replaced ASTEK (Asuransi Social Tenaga Kerja) established in 1977.

Thailand’s 1990 Social Security Act (SSA) incorporates social insurance principle in the provision of various benefits, including old-age pension and child allowances, which were implemented in December 1999. The unemployment insurance provision is in the Act but is yet to be implemented. The implementing agency for the SSA is the Social Security Organization (SSO). The authorities in Thailand have also been expanding the role of provident fund mechanism for private sector and for state enterprise employees. While the firms and enterprises have been mandated to set up provident funds, it is not compulsory for the employees to join. There is an absence of portability.

Until March 1998, pensions for the government officials and the security personnel of the PAYG type, with funds coming entirely from general revenue. Since then the officials
receive pensions in two components. The first is the Defined Benefit (DB) component which is non-contributory. The officials also receive non-contributory health benefits provided they are eligible to receive pensions. The costs of these benefits are not available.

The second component is the Defined Contribution (DC) component which is funded by employee and employer each contributing at a rate of 3 percent of wages (with no wage ceiling) for a combined contribution of 6 percent. This component is mandatory for officials joining after March 27, 1997, but voluntary for those who joined earlier. As an incentive for the government’s official to join the government has promised to make additional contributions, through their level and duration remain unclear. The accumulated balances are to be returned at retirement in a lump sum rather than in periodic payments. There is an absence of portability.

The above provisions were introduced under the Civil Servant Pension Fund Act introduced in 2539 BE or in 1996. Under the Act, the Government Pension Fund (GPF) was set up as an independent entity. It has its own Board with 22 members, comprised of 10 ex-officio members, 9 members from 9 different government offices, and 3 outside experts. The main objective of the GPF is to assist in increasing national savings rate, and to provide greater certainty of pensions to the government officials.

Occupational and personal pension plans are found in all the five countries. However, access to them is mainly confined to the employees of large corporations, including some major state enterprises. Its role at present is not major. All Southeast Asian countries also have workman compensation programs, though their scope, level of benefits, and other condition vary.

Two observations may be made from the above discussion. With the exception of the Philippines, nature of the formal social security system for government employees and armed forces differs from the system for the private sector employees. Second, social security systems in Southeast Asia contain different methods of financing, though the precise mix varies from country to country. Pre-funding for retirement needs is however gaining in importance.
Coverage

The coverage of the social security programs varies considerably among the Southeast Asian countries. In analysing the coverage, a distinction between membership and active contributors must be kept in mind. The former includes not only those who are contributing during the current periods, but also those who because they contributed in the past may have an account with the relevant social security institution. Thus the number of members is usually much larger than that of the active contributors. As an example, as at end 1998, Singapore’s Central Provident Fund (CPF) had a membership of 2.80 million (88.5 percent of the resident population), but the contributors numbered only 1.20 million (62.2 percent of the labour force), which is only 43 percent of the members (Table 2). Since September 1998 only Singapore citizens and permanent residents have been required to contribute to the CPF. As about 25 percent of its 1999 labour force of 1.976 million is estimated to be foreign, the coverage among the Singaporeans in the labour force is much higher. The total number of employers required to pay the CPF declined from 99,589 as at end 1998 to 85,285 at end 1999, mainly as a result of economic downturn and restructuring.

Malaysia’s Employees Provident Fund (EPF) had a membership of 9.16 million, (40.3 percent of the population), while the active contributors numbered 4.66 million (50.9 percent of the members, or 51.7 percent of the labour force) as at end 1998 (The EPF Board, 1998). The number of employers registered with the EPF was 297,792 as at end 1998.

Since August 1, 1998, certain categories of foreign workers have been covered under the EPF. This is expected to increased the number of contributors by about 0.4 to 0.5 million, or by about 10 percent. Thus, Malaysia and Singapore have moved in the opposite direction concerning coverage of foreign workers in their national provident funds.

For the other three Southeast Asian countries, data differentiating between the members and the contributors are not made available by the respective authorities. The coverage in these countries is however quite low. Thus in Indonesia at most about 10 percent of the population or around one-fifth of the labour force belongs to any formal social security organization (Leechor, 1996). In the Philippines, in 1993, the GSIS covered about 1.4 million government employees; and in 1996, the SSS had a membership of 17.8 million.
To put these numbers in perspective, in 1995, the labour force of the Philippines was 28 million, while its total population was 69 million (The World Bank, 1997, Table 4, pp. 220-221). Thus, the combined membership of the GSIS and the SSS was equivalent to 27.8 percent of the total population.

The 1990 Social Security Act of Thailand covers only those enterprises with 10 or more employees, representing about 18 percent of the labour force. There are plans to extend the coverage to all enterprises regardless of the level of employment by the end of 2001. If this is implemented, about 30 percent of the workforce of around 32 million is likely to be covered. As of December 1999, 1.12 government officers were covered by the GPF; while private sector provident funds covered 1.03 million.

The above discussion suggests that the expansion of the coverage in these countries will be dependent on the growth of wage employment in the formal sector. The level of compliance with the social security regulations also impacts on the effective coverage. Too rapid a pace of expansion of coverage to those in the informal sector may adversely impact on the financial viability. Special schemes, however, may be feasible for relatively homogenous and identifiable groups such as fishermen.

**Contribution Rates**

In Indonesia, civil servants make a total monthly contribution of eight percent of the salary, of which 3.25 percent is for a lump sum benefit of about 19 times the final salary in the event of retirement or death; and 4.75 percent for pensions. The contributions and income from them are set to cover only 22.5 percent of the total pension benefits, with the remaining 77.5 percent covered from the current budgetary revenues. Any shortfall in benefit expenditure is met from the government budget.

For the JAMSOSTEK program for the private sector employees, the contribution rate for retirement benefits is 5.7 percent of the monthly salary, of which, 3.7 percent is paid by the employer and 2.0 percent by the employee. A further contribution of 0.3 percent of the salary is for the life insurance; and about 2.0 percent for the employment accident insurance (Leechor, 1996, p. 34). While these are compulsory, the medical insurance obligation (paid...
by the employers at a rate of 3.0 percent for the single and 6.0 percent for the married employees) is waived if an employer provides comparative coverage. Enforcement of this provision is, however, quite lax.

In Malaysia, each employee (except foreign employees) mandatorily contributes 11.0 percent and employer 12.0 percent of the monthly wage (net of employers share) for a total of 23.0 percent. If this share is included, the effective contribution rate is 20.5 percent. There is no wage ceiling, but there is a ceiling on how much of the EPF contribution can an employee deduct for individual income tax purposes. The employee rate of contribution for the foreign workers is same as for others, but the contribution rate for the employers is quite nominal at a flat rate of M $5 per month. For the public sector employees, pension benefits are non-contributory.

In the Philippines, as at mid-1999, the contribution rate for the retirement, death, and disability programs of the SSS was 8.4 percent of the monthly compensation (up to a salary ceiling of P 12,000 per month), with 5.07 percent paid by the employer and 3.33 percent by the employee.

For the medicare program, the contribution rate is 2.5 percent of the monthly compensation, to be shared equally by the employer and the employee, up to a salary ceiling of P 3,000 per month. The rate and salary ceiling for the Employee’s Compensation Program are 1.0 percent (to be paid by the employer), and P 1,000 respectively.

The GSIS contribution rate for the employees is 9.0 percent for the first P10,000 of earnings a month, and 2 percent for earnings above the ceiling. The employer contributes 12 percent of all earnings. Therefore GSIS contributions total 21 percent of earnings below the ceiling plus 14 percent above the ceiling.

The contribution rate for Pag-IBIG Fund totals 4.0 per cent (shared equally between the employer and the employee), for monthly earnings between P1500 and P5000. For those earning below P1500 per month, the contribution rate is 2.0 percent. For those earning below P4000 per month, participation is however voluntary. The maximum contribution is P100 each from the employer and the employee.
Singapore has by far the highest contribution rate not only in the region but also the world. After reaching a peak of 50 percent in the mid-1980s, the contribution rate has been gradually brought down to 40 percent of the monthly wage (net of employer’s CPF contribution), with wage ceiling of $6,000 per month. In January 1999, as a measure to cope with the crisis, the CPF contribution rate was reduced to 30.0 percent, with all of the reduction coming from the employer’s share. Since April 1, 2000, the employers share has been increased to 12.0 percent, for a total rate of 32 percent (28.6 percent if employer’s share is included).

Since July 1988, a lower rate of contribution applies to those above 55 years of age. As a result, those reaching age of 55 suffer a sharp drop in income even before reaching the normal retirement age of 60. This, along with the lump-sum withdrawals (except for a stipulated small sum and balances in the Medisave Account) could act as a disincentive to continue to remain in Singapore’s labour force.

In Thailand, financing of sickness, disability, maternity, and death benefits under the Social Security Act of 1990 is on a tripartite basis, with the employer, employee, and government, each contributing at a rate of 1.5 percent of wages, for a total of 4.5 percent. There is a salary ceiling of 15,000 Baht per month on the contributions. The self-employed, included in 1995, pay their own premium, with a matching amount from the government.

For the old age pension and child allowance schemes introduced in December 1999, the actual contribution rate has been set at 2 percent (1 percent each from the employer and the employee) for 1999, 4 percent for 2000, and 6 percent from 2001. The original provision in the 1990 Act of matching government provision has been dropped. The qualifying age for pension is 55 years, and a minimum of 180 months of contribution is required.

The contribution rate for the Government Pension Fund (GPF) is 3.0 percent each from the employee and from the government as an employer. In addition, the government does make an additional contribution for those who as a result of opting for the GPF, may find their pension benefits reduced.
Pre-retirement Withdrawals

For a given contribution rate and the wage base, any pre-retirement withdrawal reduces the amount available for financing retirement. So, those countries, with extensive pre-retirement schemes, such as Singapore, require much higher contribution rates. The wide range of schemes under the CPF include home ownership; health care expenses, including purchase of health insurance for major illnesses, organised along commercial rather than social insurance lines; permitted investments in properties, shares, and commodities; and loans for tertiary education in Singapore (Table 3). During the 1994-98 period, the retirement withdrawals averaged 69.5 percent of annual contributions (Table 2). About 80 percent of the withdrawals during this period were pre-retirement withdrawals.

In Malaysia, the individual members may withdraw before retirement for housing, approved medical expenses, and for investments through approved mutual funds (unit trust) institutions. For the 1994-98 period, withdrawals averaged 35.7 percent of the total contributions, with withdrawals at age 55 (and age 50) contributing around three-fifths to two-thirds of the total (The EBP Board 1998). Thus, the importance of housing and other pre-retirement withdrawal schemes is considerably less in Malaysia than in Singapore.

Information on pre-retirement withdrawals for Indonesia and Thailand is not available. Given the social insurance nature of the Philippine social security system, the concept of pre-retirement withdrawals is not directly applicable. However, provision of salary and other such loans to members at below market rates to members by the SSS and the GSIS does adversely impact on investment returns, and thereby reduces retirement benefits.

Tax Treatment

In a defined contribution (DC) funded arrangement, three possible flows could be taxed. These are original contribution, income accruing on investment of accumulated funds (or gains on pre-retirement withdrawals), and withdrawal at the time of retirement, whether in a lump sum or in an annuity form (Whitehouse, 1999). In most industrial countries, at least one of the flows is taxed (Davis, 1995, Table 4.1, p. 83). Thus, retirement savings are tax advantaged rather than tax exempt.
In Malaysia and Singapore, all three flows are exempt from income tax and estate duties. In Singapore, any capital gains arising from pre-retirement withdrawals are also tax exempt, though losses on these transactions are not deductible. As the income tax rates are nominally progressive (ranging from 2 to 28 percent in Singapore with ten brackets; and from 2 to 30 percent in Malaysia with nine brackets), there is an up-side-down subsidy implied. As a result, tax saving is greater for those earning higher wages. In Singapore, more than two-thirds of the labour force is outside the income tax net. No tax saving accrues to them. The pre-retirement withdrawal schemes further accentuate the up-side-down subsidy as amounts contributed to the provident fund but subsequently withdrawn rather quickly receive both income tax savings and opportunities for higher returns.

There are however some differences in the manner in which tax exemption is structured in Malaysia and Singapore. In Malaysia, an individual may claim a maximum of M$5,000 for insurance premium and contribution to approved pension funds. There is however no salary ceiling for the EPF contributions. Thus, assuming no life insurance, an individual cannot deduct the EPF contributions on annual wages above M$45,455. The individual, however, may deduct up to a maximum of M$2,000 for premium paid on education and medical insurance policies.

As maximum deduction permitted to employers in Malaysia for the EPF and other approved funds is 17 percent of the payroll. There are tax incentives available for private pension plans.

In Singapore, there is a salary ceiling of S$6,000 per month for CPF contributions. Thus, those earning above the salary ceiling do not get tax exemption, this protects government revenue base, and provides room for private pension schemes. However, gratuities, annuities, and pensions are all taxed in Singapore (Lim and Ooi, 1998). This has created a disincentive for development of alternative pension plans, and for the annuities market (Lim and Ooi, 1998).

It is also necessary to consider the tax treatment of unit trusts and funds managers. In both Malaysia and Singapore capital gains arising from the stock transactions are not taxable at an individual level. Singapore, however, has extensive set of tax incentives
(mainly in the form of reduced company income tax rates) for approved fund managers. The 1998-99 budget also provided for tax exemption on disposal gains from unit trusts to the fund management companies.

In Indonesia employer and employee contributions are deductible, subject to limits, while, retirees’ pension benefits are taxable as regular income. In addition, income of pension plan as a legal entity separate from the sponsor, is also subject to tax (Leechor, 1996, p. 13).

In the Philippines, because of the gross individual income tax (i.e. tax rates were applied to gross rather than net income of the individuals), contributions to social security and pension funds were not exempt. Benefits however were exempt. However, under the comprehensive tax reform of 1997, the individual income tax is no longer on a gross basis. Thus, beginning with 1998, both contributions and benefits have been tax exempt.

In Thailand, an individual may deduct upto B300,000 per year as pension fund contribution. Retirement benefits are fully tax-exempt.

**Investment Policies and Performance**

For any pre-funded retirement system, the investment policies and performance are of crucial importance. This is because benefits of the magic of compound interest cannot be realized unless the accumulated balances are invested in a prudent yet remunerative manner, and the fiduciary responsibility is given high priority by the authorities. It is in this manner that financial sector and capital market reforms, and corporate governance practices are interlinked with pension reforms based on pre-funding.

It is now widely accepted that financial sector weaknesses and poor corporate governance and project selection contributed significantly to the financial crisis in Southeast Asia (Claessens and Glaesner, 1997, IMF, 1999). Thus, these interlinkages are of considerable relevance to Southeast Asia. In addition, National Provident Funds and Pension Plans in Southeast Asia do not enjoy effective functional autonomy from the government. As a result, fiduciary responsibilities have not always received the importance they deserve. (Asher, 1998b).
The size of the accumulated pension and provident fund balances varies among the Southeast Asian countries. In Singapore, the CPF balances as at end 1998 were S $85.3 billion, equivalent to 60.4 percent of its 1998 GDP (Table 2). In Malaysia, the balances of all pension and provident funds as at end 1997 were M $154.3 billion, equivalent to 55.7 percent of the 1997 GDP; with the EPF accounting for 85.8 percent of the total (The EPF Board, 1998). For the EPF alone, the total investments were M $162.1 billion as at end 1999, equivalent to 54.1 percent of the 1999 GDP (Table 4). The accumulation of assets in the other three countries is relatively low. Thus, as at end 1996, the total assets of the SSS and GSIS were P143.2 billion and P101.6 billion respectively; the combined assets being equivalent to 11.2 percent of GDP. Total pension and provident fund assets in Thailand and Indonesia amounted to be less than 10.0 percent of GDP (Asher, 1998b, Leechor, 1996). As of May 1999, the GPF in Thailand has assets of B 95.5 billion (2.6 percent of GDP); while as of April 1997, 895 provident funds has assets of B 93.0 billion; and at end 1998, assets of the Social Security Organization (SSQ) were B 810 billion (around 1.8 percent of GDP).

It may be useful to examine the investment portfolio and the rate of return credited to members accounts in various Southeast Asian countries. It is important to recognize that from an analytical point of view, a provident or a pension fund which is 100 percent invested in government bonds is akin to the Pay-As-You-Go (PAYG) system. This is because it is the future generations which will be required to service these bonds and will therefore bear the burden.

Table 4 provides a breakdown of the investments allocation by Malaysia’s EPF for the 1991-1999 period. It should be noted that the EPF has traditionally been mandated to invest only in Malaysia, though it has about 0.3 percent of the balances invested in the region.12

It is evident from the data in Table 4 that it is only since 1991 that the EPF has begun to diversify its investments. Indeed, as late of 1987, Malaysian Government Securities (MGS) accounted for 89.3 percent of total investments. While the share of MGS has declined from 73.6 percent in 1991 to 32.0 percent in 1999, the share of equities increased nearly nine-fold, from 2.1 percent in 1991 to 18.7 percent in 1999. The share of debentures
and loans (from 11 percent in 1991 to 24.6 percent in 1999), and money-market short-term investments (from 13.3 percent in 1991 to 24.4 percent in 1999) has doubled during the period.

The above diversification was made possible due to lower borrowing requirements of the government budget. However, this was made possible in past due to the privatisation of certain infrastructure and other services previously undertaken by the government. Such privatisation was used as a means of the enhancing corporate ownership share of the Bumiputeras. A significant proportion of the financing for privatization came from state controlled or guided financial institutions, including the EPF and other pension fund institutions, and was implicitly or explicitly guaranteed by the government. This in turn has created contingent liabilities for the government. The 1997 economic crisis and its effects on the financial sector and stock market values have made these contingent liabilities quite important.

Between 1961 and 1999, there were only three years (1973, 1974, and 1981) when the real rate of return was negative (Table 5). Compound Annual rate for the 1961-99 period was 3.37 percent; while for the 1987-99 period, the corresponding rate was 4.40 percent (Table 5). Thus, in spite of the 1985 recession and the 1997 economic crisis, Malaysia has been able to provide a satisfactory real rate of return to its members.

The nominal dividend rate has however become politicised. This is because opposition political parties, trade unions, and the general public perceive it to be significantly influenced by the government rather than being determined by the market forces. Moreover, whether this real rate of return corresponds to economic rate of return based on market criteria requires further analysis. There is however some evidence that the EPF and other provident and pension funds have been used by the authorities to attain a variety of public policy objectives such as participation in government-initiated and directed privatisation and infrastructure projects (Asher, 1998b, p. 13).

It should be stressed that even if the EPF (or other such organizations) obtain government guarantees on the funds loaned on non-economic criteria, the society as a whole could still need to bear the burden of poor investment decisions. This suggests that
the EPF members may still bear the burden indirectly as taxpayers. Thus, the government guarantees may not necessarily protect the members as a group.

Valdes-Prieto (1998, p. 8) has however argued that the EPF’s returns are unsatisfactory when compared to the alternatives. Thus, he notes that the real rate of return credited to members over 1971-1991 period was 2.74 percent per annum. However, the real rate of return obtainable from bank deposits plus half of the spread between bank loans and bank deposits was 4.26 percent per year, while equities earned 5.61 percent real per year. Thus, the implicit tax was at least 1.52 percentage points per year in real terms.

In the Philippines, all of the assets of the SSS and GSIS are invested domestically. In 1996, 44.3 percent of the total investments of the SSS were in government securities and bank deposits, 37.7 percent in various direct or indirect loans to members, and 18 percent in private equities and loans (Asher, 1998b). The Social Security Act of 1997 does permit the SSS to make limited investments in foreign mutual funds, but it has not yet used this authority.

Under the Estrada administration, the SSS has been investing quite aggressively in the domestic stockmarket, in some cases decisively affecting the control of the affected corporations. (Hilsenrath, 1999). While this has improved investment returns, it raises difficult issues of corporate governance and control; and of political considerations in investment decisions of social security institutions. Unless transparency and public accountability are given high priority, major political risk may arise from such aggressive practices. This in turn could burden the SSS members directly or indirectly.

According to unpublished World Bank calculations, the real rate of return on SSS investment was lower than the real return on the Philippine treasury bills by 0.59 percent annually on the average during the 1976-1995 period. However, the corresponding rate was higher by 0.38 percent annually on the average during the 1987-1995 period. Thus, there has been some improvement in the investment performance of the SSS.

Since 1992, however, benefits paid plus operating expenses of the SSS have exceeded contributions. Thus, dependence by the SSS on investment income is becoming increasingly greater.
The GSIS is much more burdened by the poor investment decisions of the Marcos era than the SSS. It is also much less transparent than the SSS. Also, unlike the SSS, its investment returns continue to be lower than the rate on the treasury bills, though it is difficult to obtain reliable and consistent data on investment policies and performance of the GSIS. The provident and pension fund assets in Indonesia are also invested domestically, primarily in bank deposits. Thus, in 1996, two thirds of the total investments of JAMSOSTEK of RP4361 billion, were in bank deposits, while less than 10 percent were in equities (Asher, 1998b). More recent investment allocation data are not available.

In Indonesia, while the employer-sponsored plans provided a real rate of return of between 6 and 8 percent during the 1988-1995 period; the return on JAMSOSTEK funds has been much lower than even the return on time deposits (Leechor, 1996). Besides, political considerations in investment decisions, a major reason is extremely high administrative costs. Thus, in 1994, these costs as a percentage of contributions were 7.0 percent for PT TASPEN, and 11.7 percent for JAMSOSTEK (Leechor, 1996). In contrast, in Malaysia, the administrative costs of the EPF in 1998 were 1.3 percent of the contributions or 2.1 percent of its gross income (The EPF Board, 1998). The administrative costs of the Social Security Organization (SSO) were about 4.5 percent of the contributions in 1998 (Jiraporn, 2000, p.10).

In Thailand also, the provident and pension funds are required to invest in domestic assets. Thus, the Social Security Organization (SSO), and the GPF must invest at least 60 percent of its funds in low risk investments, essentially bank deposits and government securities. Both are permitted to invest maximum of 40 percent in domestic equities, certain type of debt instruments, mutual funds and other similar assets.

In practice, predominant proportion of the funds of the SSO and the GPF are invested in low risk fixed income instruments. Thus, according to the GPF’s Annual Report for 1998, 48.6 percent of the total investment of B90.8 billion was in bank deposits; and another 45.5 percent was in various debt instruments with government and public enterprise bonds predominating; and 2.5 percent in equities. Market value of equities was B2.1 billion while the acquisition cost was B2.3 billion.
This pattern of investments which does not provide for effective diversification across asset classes or across countries reflects the current state of capital markets, and governmental control over allocation of savings in Thailand.

As Thailand gains more experience with the provident and pension funds, its assets are expected to grow. The investment policies and performance would therefore need to be linked with returns in financial sector and corporate governance, and with greater functional autonomy for provident and pension funds institutions.

There are three separate pools of investible funds under the Singapore’s CPF system.

The first and the largest pool is the accumulated balances with the CPF Board. These amounted to S$ 85.3 billion in 1998 (60.4 percent of GDP) (Table 2). Under the CPF Act, these must be in essence invested in floating rate bonds issued specifically to the CPF Board to meet the statutory requirements. They are therefore not traded, and have no quoted values. Ironically, analytically this requirement transforms the CPF system into something more resembling the PAYG system.

Since 1986, the floating rate is a simple average of 12-month deposit (with a weight of 80 percent) and month-end savings rate (with a weight of 20 percent) of the four major local banks, subject to a minimum nominal rate of 2.5 percent as spelled out in the CPF Act. The rate is revised quarterly. As a matter of administrative discretion, a small portion of the CPF balances in Special and Retirement Account (currently 2 percent of the 32 percent contribution rate) receive interest rate 1.5 percent above the normal rate.

The real rate of return on CPF balances (nominal rate minus GDP deflator) averaged only 1.54 percent during the 1983-98 period; and only 0.07 percent for the 1997-98 period, the period when the floating rate was introduced (Table 6). The above rates are quite low, and therefore they negate the potential advantage of mandatory saving in financing retirement.

The requirement that the CPF Board must invest in government bonds has contributed substantially to the large internal debt of S$115.2 billion (81.6 percent of GDP) in
The government however has been running persistent large budget surpluses over the years (Asher, 1998b).

Given the large budget surpluses over considerable period, the CPF funds have not been needed to finance infrastructure or other government expenditure. The widespread belief that the CPF has financed infrastructure and actual construction of public housing (as opposed to facilitating housing mortgage for members from the demand side) is thus not supported by macroeconomic analysis.

How are the CPF funds then ultimately deployed? Essentially, the Singapore Government (through Singapore Government Corporation, SGIF, and other government-controlled agencies) invests these funds. There is, however, no transparency or public accountability concerning where these funds are invested, and what has been the investment criteria and performance. The SGIF and other relevant government investment agencies are protected from law from making any disclosure, even to the parliament. The Elected President, who is mandated to protect Singapore’s reserves, also has a limited access to the operations of these investment agencies. It is believed that the accumulated CPF balances are all most wholly invested abroad.

To the extent, the government earns higher rate of return on the CPF funds than what it pays to the member, there is an implicit tax on the CPF wealth. This tax is likely to be fairly large and regressive as low-income members are likely to have most of their non-housing wealth in the form of the CPF balances. This vividly illustrates how political risks and non-transparency can arise in individual account system.

The second pool of investible funds consists of insurance funds. These amounted to only S$2.4 billion as at end 1998 (CPF Annual Report, 1998). These are invested in fixed deposits, negotiable certificates of deposit, equities, and bonds. Out-sourcing of these funds for investment is believed to be much greater. The real rate of return on insurance funds was 2.47 percent per annum for the 1983-98 period, and 1.82 percent for the 1987-98 period (Table 6). While this is higher than the rate for the CPF balances, it is still substantially lower than the GDP growth rate or the growth of average earnings (Table 6).
The third pool funds for investment consist of pre-retirement withdrawals by members under the CPF Investment Scheme (CPFIS). As of May 1998, only about one-sixth of the members had taken advantage of this scheme, withdrawing S$12.1 billion, of which only S$0.4 billion was invested through the CPF approved Unit Trusts. Thus, individuals have chosen to invest primarily of their own, mainly in fixed deposits. The CPF authorities have not released the necessary details to undertake an analysis of the investment performance under this scheme. However, given the high administrative and investment management costs prevailing in Singapore, particularly for relatively small amount of investments per participating member, the returns are unlikely to be high. Moreover, this scheme does not enable those members with low balances to participate. In addition to the CPF, in Singapore, the Pension Fund for the eligible government employees hold a balance of S$10.5 billion as at March 31, 2000. There is also a separate retirement savings scheme called the SAVER Fund for the Armed Forces. It is designed to provide sustainability more generous benefits than those under the CPF, the details of the Fund however, are not publicly available.

It is thus clear from the above analysis of the investment policies and performance in Southeast Asian countries that substantial reforms will be needed. The reform should provide much greater weight to fiduciary responsibilities and functional autonomy of the provident and pension fund authorities, bring about greater efficiency with which mandated savings are translated into investments, as well as greater alignment of assets and liabilities structures.

**Replacement Ratios**

The replacement ratios for government employees are generally considerably higher than for others in Southeast Asia. In Indonesia, for a person with 35 years of service retirement benefits provide a rather generous replacement rate of 100 percent of final pay. The replacement rate for the JAMSOSTEK program in Indonesia for the private sector employees, is estimated to be only around 10 percent, even under the most optimistic assumptions and after 35 years of contributions.
In Malaysia, eligible public sector employees receive gratuity, and a pension which has a maximum replacement rate of 50 percent of the last drawn salary. Survivors’ and disability pensions are also provided. Thus, for both Indonesia and Malaysia, there will be substantial and continuing fiscal burden in financing public sector pensions, contribution rates are increased, benefits reduced, or a combination of the two is implemented.

There are no published data available on the replacement ratio for the EPF, but it is unlikely to be adequate. Thus in 1998, as compared to per capita income of M$11,817, the average amounts withdrawn at age 50 (one-third of the accumulated balances can be withdrawn at this age) and at age 55 were only M$17,693 and M$37,114 respectively (The EPF Board, 1998). This reflects both relatively low wages and highly unequal wage structure. As at end 1998, 63 percent of the active contributors had wages below M$1000 per month, accounting for 24.1 percent of the balances; while only 3.0 percent had wages above M$5000 per month accounting for 21.7 percent of the total balances (The EPF Board, 1998).

Replacement ratios in the Philippines appear to be fairly high. Thus, according to the official figures, for the SSS, the average replacement rate for a sample retirees during the 1990s was around 60 percent, while for the GSIS, it was around 70 percent.

The challenge will be to continue to provide such replacement rates given the precarious financial situation of the social security institutions and of public finances and to widen social security coverage. The Philippine government does guarantee the retirement benefits, and therefore it has a large contingent liability which needs to be taken into account in assessing its fiscal position.

In the Philippines, occupational pension plans typically pay a lumpsum, calculated at around 1.5 times the members' final salary times years of service.

In Singapore, the policymakers and the general public both now accept that the CPF system is unlikely to be adequate in meeting the retirement needs for a significant proportion of the population. In the 1987 Annual Report of the CPF Board, it was stated that the CPF, with 40 years of contribution, is likely to provide a replacement rate of only between 20 to 40 percent. No details of how these rates were estimated were given. Parametric changes
being contemplated, such as raising the contribution rates to higher interest bearing Special
and Retirement account, increasing the withdrawal age, increasing the cash component of
the minimum sum, and mandatory self-employed to contribute to the Special and Retirement
Account as recommended by the government committee (Republic of Singapore, 1999) are
unlikely to have significant impact on the low replacement rates.

In spite of high contribution rates, and rapid economic growth for about three
decades, median balance for active contributors as at end-1997 was between S$ 50,000
and S$ 60,000, even if pre-retirement withdrawals under housing and investment schemes
are included. The cash balances would be much lower. The median balance is around two
years of mean wage.

Simulation studies by actuarial firm Watson Wyatt Worldwide in 1996 have shown
that assuming the typical use of the CPF, low, middle, and high earner single individuals
would need to contribute additional 18.7 percent, 32.6 percent, and 46.6 percent of their
monthly income to meet the benchmark replacement rate equal to two-thirds of final income
(Turner, 1996). Since the contribution rate is already 30.0 percent, additional contributions of
this magnitude are not realistic.

Virtual absence of the tax-financed first pillar, lack of inflation and longevity
protection, and decision to not cover those above 75 years of age under the commercial-
type health insurance for major illnesses, all compound the social adequacy problem in
Singapore. Thus, what is required a fundamental re-think rather than marginal parametric
changes if the social security objectives are to be fulfilled in Singapore.

In Thailand, the old age pension scheme is designed to provide a replacement rate of
30 percent of the average wage over the last 60 months for a person who contributes for at
least 30 years. Those contributing for the minimum period of 180 months will receive
replacement rate of 15 percent. Under the law, no pension will be payable until the year
2014.

Before 1993, the government employees received fairly generous pension, with
replacement rate around 70 percent of the last drawn salary. The replacement rate under the
new government pension arrangements remains unclear at this stage, but is expected to be
comparable to the old system. In addition, those receiving pensions are also eligible to receive survivors’ benefits and non-contributory medical benefits until death.

**Distribution of Accumulated Funds**

This is relevant primarily for the defined-contribution (DC) plans in which a member accumulates the funds over time. In Southeast Asia, the general practice is for lumpsum withdrawal as annuity markets are neither well developed nor well understood by the general population. Neither inflation nor longevity protection is provided under the defined-benefit (DC) plans in Southeast Asia. Those under the DB schemes, particularly government employees, do enjoy such protection however.

In such countries as Malaysia and Singapore, withdrawal age is not the official retirement age. There are indications that the authorities in Malaysia are concerned that the lump sum withdrawals are not being utilised in a prudent manner, particularly by those in the middle and lower income groups. The EPF in Malaysia is considering permitting the members to voluntarily opt for annuity method of withdrawal. The cost and the details of the scheme however are yet to be announced.

Singapore has partially tackled this problem by requiring a minimum sum to be left with the CPF Board (though, a significant proportion of it is in the form of pledge of property rather than cash balances) from which only prescribed periodic withdrawals can be made. Singapore has also required additional amount to be retained with the CPF for medical care. In Indonesia and Thailand, the DC plans permit lump sum withdrawal.

The cost of providing annuities, lack of depth of capital markets, and in some countries, political resistance hinder a shift towards periodic withdrawals of accumulated funds.

**III. REFORM DIRECTIONS**

The previous sections have established a strong case for reforming the current social security systems in Southeast Asia; and for not regarding social security needs as
essentially a private concern, but as a major public policy issue. The analysis has also demonstrated that the actual economic and social impact of the social security system may indeed be quite different that what its formal characteristics may suggest; and that political economy and ideological considerations have significant impact on social security systems.

There is however no blueprint for social security reform which countries can adopt. Such reform involves a complex process and requires sustained political commitment. Its design, pace, sequence, regulatory regimes, and interlinkages with reforms in other sectors, such as financial and capital markets, may indeed vary from country to country depending on initial conditions, economic and social structures, institutional philosophy, regulatory capacities, and political commitment. Nevertheless, general suggestions concerning social security reform directions in Southeast Asia may be appropriate.

First, it is essential that social security reform is approached in a systemic rather than the current ad hoc manner. This may involve re-examining the appropriateness of the current mix of financing methods. In some countries, such as Singapore, this may lead to a reduction in the near exclusive reliance on mandatory savings and on family to finance old age, and increased role for the tax financed first pillar; and for social risk pooling. In others, such as the Philippines, this may involve greater reliance on the mandatory savings method and correspondingly reduced reliance on partially funded PAYG system.

Second, with the exception of Singapore, urgent steps are needed to ensure actuarial and fiscal sustainability of Defined Benefit (DB), largely non-contributory pension plans (and health benefits) for government employees and armed forces personnel. Excessive fiscal burden of such pension benefits could seriously hamper budgetary allocations for social safety nets and other expenditure for the current as well as future generations.

Third, it is evident that without reforms in investment policies and performance of provident and pension funds, social security systems in Southeast Asia will not be able to provide adequate replacement rate in a sustainable manner for the current and future retirees.
At a broader level, the Southeast Asian countries would need to better resolve the tension between using these funds to assist in achieving government’s economic, political and social objectives on the one hand and their fiduciary responsibilities towards the members of the funds on the other. Given the organic view of the state held in many of the Southeast Asian countries, resolving the tension would not be easy.

Greater transparency, public accountability, autonomy for the provident and pension funds, and enforcing internationally comparable accounting and disclosure standards could however help in negotiating the conflict. These measures could also assist in ending the implicit tax on members levied in countries such as Singapore.

The investment policies of provident and pension funds would also need to be made consistent with the requirements of globalization. This may involve making provision for country and asset risk diversification; and for introducing greater competition in the management of funds. This can be simultaneously done at both the individual level (as Singapore has done), and at the institutional level through extensive contracting out to the fund managers. The transaction costs of fund management would need to be closely monitored. Appropriate regulatory and disclosure requirements; and educational campaigns for the individual investors would also need to be essential elements of such an approach to management of funds.

The policymakers may also consider minimizing contingent liabilities arising from the guarantees on government-directed loans and investments made by the provident and pension fund authorities. This is a particularly significant issue for Malaysia and Indonesia.

In some countries, such as Indonesia and the Philippines, substantially reducing administrative costs of provident and pension funds, increasing efficiency, and improving compliance, are essential for improving investment performance.

Fourth, the Southeast Asian countries need to review the policies concerning withdrawal of accumulated balances. At present, Indonesia, Malaysia, and Thailand all permit lump sum withdrawal; while Singapore requires a small portion to be withdrawn on a periodic basic while the rest can be withdrawn in a lump sum. This arrangement may result in inadequate provision during the old age, or increased fiscal burden, if the accumulated
balances are spent too quickly. Thus, some form of periodic withdrawal, including possible
group annuities, needs to be given serious consideration.

Fifth, social security needs of the migrant labour needs to be given greater
consideration than has been the case in Southeast Asia. This may require regional
cooperation among the Southeast Asian countries.

Sixth, the Southeast Asian countries may also consider integrating health care
reforms with pension reforms. Health benefits are already an important component of the
formal social security systems in these countries; and the need to apply economic analysis
to the health care sector, albeit in a discriminating manner, has become quite apparent.

As Southeast Asian countries embark on social security reform, they may consider
drawing on the considerable experience with such reform in the rest of the world, particularly
in Latin America. The art of lesson drawing is however a difficult one. There is no substitute
for careful assessment of the initial starting point, needs, and capacities of a country in
devising appropriate reform strategy. Sustained political commitment will also be essential
in any credible social security reform.
ENDNOTES

* On April 17, 2000, US$ 1 was equivalent to RP. 7730 (Indonesia); RM 3.80 (Malaysia); P 41.225 (Philippines); S$ 1.7060 (Singapore); and B 37.945 (Thailand).

Source: Asian Wall Street Journal, April 18, 2000, p.27.

1. The replacement rate refers to the proportion of the last drawn salary (or other similar benchmark) which a person can expect to have available during retirement. For a middle income earner, a replacement rate of around 75 percent is considered adequate for financial security. The rate is somewhat higher for below average earners, and lower for higher income earners. It should be stressed that adequate replacement rate needs to be achieved from a mix of sources, such as pensions or annuities, other capital income, labor income, flow of services form assets such as housing, family and community support, etc. it is therefore inappropriate to set a policy target of achieving the necessary replacement rate from only one source or scheme.

2. In the present context, international competitiveness may be defined as the ability of a country to retain and attract foreign investment, as well as professional and technical manpower. Globalization and associated technological changes have increased the importance of international competitiveness as factor supply elasticity for a given location has increased considerably.

3. For an examination of the trends in growth rates, poverty levels, and inequality in East Asia for the 1965-90 period, see Rao (1999). During this period, annual growth rate of per capita GDP in the five Southeast countries covered in the paper ranged between 4.0 percent and 7.5 percent (Rao, 1999, Table 3, p. 1030).

4. The term “contagion” refers to the process by which financial turmoil in one country spreads to other countries in the region and, in some cases, beyond (IMF, 1999, p.66). See Rajan (1999) for an account the contagion effect in Southeast Asia during the 1999 crisis.

5. In 1998, except for Singapore, other Southeast Asian countries registered negative growth, with real GDP in Indonesia, Thailand and Malaysia declining by a substantial 13.7 percent, 8.0 percent, and 6.8 percent respectively (IMF, 1999, pp. 140 and 146-147). While there was modest recovery in 1999, and this trend is expected to continue for the year 2000, the recovery remains fragile. Moreover, the recovery has reduced the urgency of the requisite structural reforms in financial sector, legal institutions, and in fiscal policies. For a comprehensive record of the East Asian crisis, including discussion by various experts, see the following home page: http://www.stern.nyu.edu/~nroubini/asia/AsiaHomepage.html.

6. The age at which withdrawal of accumulated funds is permitted does not coincide with the age of retirement in several Southeast Asian Countries such as Indonesia, Malaysia, and Singapore.

7. While the Malaysians currently working in Singapore are excluded from the CPF, those from West Malaysia who have contributed in the past, cannot withdraw their CPF balances until age 55, unless they can demonstrate that they are leaving Singapore and Malaysia permanently. In sharp contrast, those from East Malaysia are permitted to withdraw their CPF balances when they leave Singapore. The 1997 economic crisis has enhanced the importance of this issue as requests by the Malaysian government to alter the present arrangements have not been accepted by Singapore to-date i.e. April 2000. This has become another irritant in the bilateral relations between the two countries, particularly as Singapore has even refused to
release the relevant data on the number and balances of Malaysians with the CPF to the
Malaysians authorities.

8. The contribution rate, including the employer's contribution, is reduced from 27.3
percent for those below 55 years of age to 15.0 percent for those between 56 and 60
years of age, a reduction of 45 percent. The real reduction is even higher as lower
CPF contribution reduces income tax savings arising from the tax-exempt nature of
the contributions. The disparity in the two rates increases with age.

9. As a measure to cope with the crisis, the rate has been reduced to 1.0 percent from
each of the three parties. It was envisaged that when the old age pension and family
allowances incorporated in the 1990 Act are implemented, a further contribution of
3.0 percent wages from each of the three parties, for a total of 9.0 percent, will be
required. Under the 1990 Act, the unemployment benefits were to be financed by a
contribution of 5.0 percent from each party, for a total of 15 percent. Thus, if all
provisions of the 1990 Act were implemented, the contribution rate in Thailand will be
28.5 percent (Hagemann, 1993, p. 9). Even before the 1997 economic crisis, this is
clearly an unsustainable and non-competitive rate. The crisis rules out an early
prospect of implementing the unemployment benefits provisions of the 1990 Act.

10. The Singapore government has a 100 percent home ownership goal. Nearly, 90
percent of the households occupy, most of them as owners, flats built by a
government agency. The ownership rights on the flats are, however, incomplete.
This is because of various restrictions on resale, and because the land on which
these flats are built is leased (usually for 99 years) by the state. The state owns
about 85 percent of the land, a significant proportion of which was acquired during
the 1970s and the 1980s at much below market prices under Draconian Land
Acquisition Act of 1996. So the home ownership in Singapore essentially consists of
usership rights. Nevertheless, possession of these rights provides an important flow
of housing services in old age, and marketability of these rights potentially permits
individuals to indirectly consume a past of home equity during their retirement years.

11. The catastrophic health insurance scheme, called the Medishield Scheme, is not
mandatory; the premium is on an individual rather than family basis and is solely
based on age; and, it does not provide coverage to those above 75 years of age,
among the most vulnerable groups in the society. As at end 1999, about one-third of
the population was not covered by the catastrophic health insurance scheme.

12. The EPF was given permission to invest abroad, on a case-by-case basis just prior
to the 1997 economic crisis. It has made preparations to investment M $1 billion (0.6
percent of its total 1999 investments), but has postponed the implementation until
Malaysia lifts its capital controls, and makes its currency fully convertible again. Even
then, the EPF is expected to proceed quite cautiously.
REFERENCES


The CPF Board, Annual Report, Singapore, various years.


The EPF Board, Annual Report, Kuala Lumpur, various years.


<table>
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<th>Country</th>
<th>Average Annual Rate of Population Growth</th>
<th>Average Annual Rate of Labour Force Growth</th>
<th>Total Fertility Rate (TFR)</th>
<th>Proportion of Population above 60&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Elderly Dependency Ratio (EDR)&lt;sup&gt;b&lt;/sup&gt;</th>
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Note:  
<sup>a</sup> TFR is the average number of births per woman in the population. A TFR of 2.1 maintains a stable population, assuming no net migration takes place. TFR of slightly above 2 is needed to account for women who may die before reaching the fertility age.
<sup>b</sup> EDR is defined as persons 60 years and above/persons 15-59.
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<td><strong>Contributors as % of GNS</strong></td>
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<td>52334.3</td>
<td>57649.0</td>
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<td>68.9</td>
<td>75.9</td>
<td>71.7</td>
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<td>70.1</td>
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<tr>
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<td>6.2</td>
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<tr>
<td>Real Rate of Return</td>
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<td>4.9</td>
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</tr>
<tr>
<td>Real rate of return*</td>
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<td>N.A</td>
<td>4.7</td>
<td>6.4</td>
<td>5.1</td>
<td>6.2</td>
<td>7.6</td>
<td>4.1</td>
<td>6.6</td>
<td>5.1</td>
<td>9.4</td>
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<td>3.8</td>
<td>4.3</td>
<td>1.3</td>
<td>4.9</td>
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<td>N.A</td>
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<td>4.1</td>
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<td>-0.2</td>
<td>1.2</td>
<td>2.9</td>
<td>-0.1</td>
<td>6.4</td>
<td></td>
</tr>
</tbody>
</table>

Note: N.A : Not Available
a. The housing schemes are: Approved Housing scheme introduced in 1968, and Approved Residential Property Scheme, introduced in 1981.
b. Under Section 15, the main withdrawals are for retirement, death, disability, and leaving Singapore and West Malaysia permanently.
c. The Medical Schemes are: Medisave Scheme introduced in 1984, and the Medishield Scheme introduced in 1990.
d. The (Others) category mainly includes various pre-retirement investment schemes, and loans for financing tertiary education in Singapore.
e. The high proportion of withdrawals for this category was due to the partial divestment of Singapore Telecom, a government telephone monopoly.
f. The implicit interest rate is calculated as follows: Total Interest amount credited to members as shown in the CPF Board’s Annual Reports, divided by the average of the beginning and the ending balances of the CPF members during the year.
g. The real rate of return is estimated as the difference between the implicit interest rate and the GDP deflator.
h. Finances of Insurance Schemes listed in Table 1 are kept separately from the members' CPF Balances, and their investment performance is shown separately in the Annual Reports of the CPF Board.

Sources: Calculated from: CPF Annual reports, various years; Republic of Singapore, Department of Statistics, Yearbook of Statistics, various years. Monetary Authority of Singapore, Annual Report, various issues.
# TABLE 3

## Various Schemes Under Singapore’s CPF System

<table>
<thead>
<tr>
<th>Type</th>
<th>Scheme</th>
<th>Year Introduced</th>
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</thead>
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<tr>
<td>Home ownership</td>
<td>Approved Housing Scheme</td>
<td>1968</td>
</tr>
<tr>
<td></td>
<td>Approved Residential Property Scheme</td>
<td>1981</td>
</tr>
<tr>
<td>Investment</td>
<td>Singapore Bus Services (1978) Ltd Share Scheme</td>
<td>1978</td>
</tr>
<tr>
<td></td>
<td>Approved Investment Scheme (AIS)</td>
<td>1986&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>CPF Investment Scheme (CPFIS)- replacing AIS</td>
<td>1997&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Approved Non-Residential Properties Scheme (ANRPS)</td>
<td>1986</td>
</tr>
<tr>
<td></td>
<td>Share-Ownership Top-Up Scheme (SOTUS)</td>
<td>1993</td>
</tr>
<tr>
<td>Insurance</td>
<td>Home Protection Insurance Scheme</td>
<td>1982</td>
</tr>
<tr>
<td></td>
<td>Dependents’ Protection insurance Scheme</td>
<td>1989</td>
</tr>
<tr>
<td></td>
<td>Medishield Scheme</td>
<td>1990</td>
</tr>
<tr>
<td>Others</td>
<td>Company Welfarism through Employers’ Contribution (COWEC) Scheme&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1984</td>
</tr>
<tr>
<td></td>
<td>Medisave Scheme</td>
<td>1984&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Minimum Sum Scheme</td>
<td>1987</td>
</tr>
<tr>
<td></td>
<td>Topping-up of the Minimum Sum Scheme</td>
<td>1987</td>
</tr>
<tr>
<td></td>
<td>Financing of Tertiary Education in Singapore</td>
<td>1989</td>
</tr>
<tr>
<td></td>
<td>CPF Top-up Scheme</td>
<td>1995</td>
</tr>
</tbody>
</table>

---

<sup>a</sup> From October, 1993, divided into the Basic and Enhanced investment schemes.

<sup>b</sup> From January 1, 1997, CPFIS replaced the Approved Investment Scheme, thus eliminating distinction between the Basic and Enhanced investment schemes.

<sup>c</sup> From 1’st January 1999, there will be no more new contributions to the COWEC fund. The scheme is therefore effectively discontinued.

<sup>d</sup> From 1993, self-employed persons must contribute to the Medisave scheme.
### TABLE 4

**MALAYSIA, EPF: STOCK OF INVESTMENTS BY TYPE, 1991-1999**

(Amounts in million M$)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Share</td>
<td>Amount</td>
<td>Share</td>
<td>Amount</td>
<td>Share</td>
<td>Amount</td>
<td>Share</td>
<td>Amount</td>
</tr>
<tr>
<td>Total - All investments (at cost price)</td>
<td>51,997</td>
<td>100.0</td>
<td>60,863</td>
<td>100.0</td>
<td>71,529</td>
<td>100.0</td>
<td>83,309</td>
<td>100.0</td>
<td>96,600</td>
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<tr>
<td>Malaysian Government Securities (MGS)</td>
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<td>73.6</td>
<td>39,637</td>
<td>65.1</td>
<td>39,265</td>
<td>54.9</td>
<td>40,271</td>
<td>48.3</td>
<td>39,150</td>
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<td>Debentures and Loans&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5,695</td>
<td>11.0</td>
<td>7,553</td>
<td>12.4</td>
<td>6,248</td>
<td>12.1</td>
<td>12,080</td>
<td>14.5</td>
<td>17,132</td>
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<tr>
<td>Equities&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1,102</td>
<td>2.1</td>
<td>1,607</td>
<td>2.6</td>
<td>2,964</td>
<td>4.1</td>
<td>8,817</td>
<td>10.6</td>
<td>11,487</td>
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<tr>
<td>Money Market, including fixed and short-term deposits with banks</td>
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<td>13.3</td>
<td>12,065</td>
<td>19.8</td>
<td>20,390</td>
<td>28.5</td>
<td>21,805</td>
<td>26.2</td>
<td>28,491</td>
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<td>Others&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>_</td>
<td>1.6</td>
<td>_</td>
<td>285</td>
<td>0.4</td>
<td>336</td>
<td>0.4</td>
<td>340</td>
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</table>

**Notes:**

a. Bank Negara's 1996 Annual Report (Table 3.18, p. 113) puts loans and debentures investments as at end-1996 at M$15,510 million and corporate securities, i.e., equities at M$26,698 million. The share of equities is thus much greater according to Bank Negara. If correct, stock market decline would imply greater unrealized losses by the EPF.

b. Given the decline of 52 percent in the Malaysian stockmarket capitalization value in local currency between the beginning of 1997 and December 30, 1997, the market value is likely to be lower.

c. Mainly property investments.

d. It appears that the diminution in value of EPF investment.

Source: Calculated from the data supplied by the EPF.
TABLE 5
MALAYSIA: NOMINAL AND REAL RATES OF DIVIDEND ON EPF BALANCES, 1961-1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Nominal Dividend Rate (%)</th>
<th>Inflation Rate (CPI) (%)</th>
<th>Real Rate of Dividend (%)</th>
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AACGR (%) (1961-99) 6.89 3.45 3.37
AACGR (%) (1983-99) 7.87 3.03 4.87
AACGR (%) (1987-99) 7.68 3.34 4.40

AACGR : Average Annual Compound Growth Rate. Calculated from the formula r=((1+rA)^(1/t))-1 where rA = aggregate return over t years (Annual rates are aggregated by taking their product for t years)

Note: Defined as the difference between the nominal dividend rate and the inflation rate as measured by the ‘Consumer Price Index’ (CPI).

Source: Calculated from the data supplied by The EPF Board.
TABLE 6
Singapore’s CPF : AACGR\textsuperscript{a} for selected Indicators for 1983-99 period

<table>
<thead>
<tr>
<th>Indicator</th>
<th>AACGR (%)</th>
<th>AACGR (%)[1987-99]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Members</td>
<td>2.94</td>
<td>2.98</td>
</tr>
<tr>
<td>2. Contributors</td>
<td>1.82</td>
<td>2.27</td>
</tr>
<tr>
<td>3. Contributions</td>
<td>6.78</td>
<td>9.23</td>
</tr>
<tr>
<td>4. Withdrawals</td>
<td>13.37</td>
<td>9.51</td>
</tr>
<tr>
<td>5. Balances</td>
<td>9.91</td>
<td>9.24</td>
</tr>
<tr>
<td>6. Implicit Nominal Rate on Balances</td>
<td>4.05\textsuperscript{b}</td>
<td>3.42\textsuperscript{c}</td>
</tr>
<tr>
<td>7. GDP deflator</td>
<td>2.48\textsuperscript{b}</td>
<td>2.80</td>
</tr>
<tr>
<td>8. <strong>Real Rate of Return On Balances</strong></td>
<td><strong>1.70\textsuperscript{b}</strong></td>
<td><strong>0.47\textsuperscript{c}</strong></td>
</tr>
<tr>
<td>9. Implicit rate of return on Insurance Funds</td>
<td>5.20\textsuperscript{d}</td>
<td>5.15\textsuperscript{c}</td>
</tr>
<tr>
<td>10. <strong>Real rate of return on Insurance Funds</strong></td>
<td><strong>2.87\textsuperscript{d}</strong></td>
<td><strong>2.23\textsuperscript{c}</strong></td>
</tr>
</tbody>
</table>

**Memorandum Items**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13. GDP (Nominal)</td>
<td>8.91</td>
<td>10.62</td>
</tr>
<tr>
<td>14. GDP (Real)</td>
<td>8.09</td>
<td>9.35</td>
</tr>
<tr>
<td>15. Monthly Earnings</td>
<td>7.04</td>
<td>7.53</td>
</tr>
</tbody>
</table>

\textsuperscript{a} AACGR : Average Annual Compound Growth Rate. Calculated from the formula \( r = \frac{(1+r_A)^{1/t}}{1} \) where \( r_A \) = aggregate return over \( t \) years (Annual rates are aggregated by taking their product for \( t \) years).

\textsuperscript{b} For 1983 - 1998 period.

\textsuperscript{c} For 1987 - 1998 period.

\textsuperscript{d} For 1985-1998 period.

Source : Calculated from the data in Tables.