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Comparing Individual Retirement Accounts in Asia: Singapore, Thailand, Hong Kong and PRC

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Abstract

This paper compares the different approaches of Singapore, Thailand, Hong Kong, and China with respect to how they manage their respective defined contribution, individual retirement account systems. The four cases illustrate important differences in terms of some of the key issues in design of DC schemes; the role of government versus private sector, investment policy and individual choice, among others. They also provide a useful contrast in terms of initial conditions.

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* Reference exchange rates as of June 2005:
S$1.68 : U$1
Bt39.0 : U$1
HK$7.76: U$1
RMB8.3 : U$1

1. Introduction

This paper compares the different approaches of Singapore, Thailand, Hong Kong, and China with respect to how they manage their respective defined contribution, individual retirement account systems. The four cases illustrate important differences in terms of some of the key issues in design of DC schemes; the role of government versus private sector, investment policy and individual choice, among others. They also provide a useful contrast in terms of initial conditions.

For each of our four case countries, we begin with a review of the historical development of their retirement scheme followed by a description of their current individual account contribution and benefits structures. The domestic capital markets environment under which each system operates is also described.

Since defined contribution systems succeed only when returns are adequate, we look at how the funds are managed and the conditions under which investment policies are determined as well as the supervisory and regulatory guidelines that are in place to safeguard these funds.

For each country, we also look at the public policies towards non contributory social security safety nets which backstop the DC schemes. The purpose here is to provide a sense of how the social attitudes and public policies of each country are reflected in the level of non-contributory assistance that the government provides as a social safety net to its citizens.

Following the separate country reviews, the sixth section considers the impact that these pension funds can have on the development of capital markets. As retirement funds grow in size, they can exert tremendous influence in shaping capital markets. In fulfilling their fiduciary duties, pension authorities are in a position to demand internationally accepted standards of procedure and disclosure, and to stress the importance of good corporate governance. We refer to the existing theoretical and empirical literature and apply it to what we know about our four case countries.

The paper concludes with a comparison of the four systems, noting the effectiveness of each in light of the different political, social and capital market environments in which they operate.

2. Singapore's CPF

2.1 Historical developments leading to current CPF system

The British colonial government in Singapore implemented the Central Provident Fund in 1955 modeling it after the social welfare systems they had established in other colonies. As a self-funded system with compulsory membership and compulsory accumulation of deposits, it ensured that the British government would not be required to look after the social security needs of its colonies.

From its inception, the emphasis of the CPF scheme was to provide for old age. Following independence in 1965, the government under Lee Kuan Yew began to make changes to the scheme in response to demand and increasingly sophisticated and educated workers. The first move towards liberalization came in September 1968 when the government allowed members to finance the purchase of Housing & Development Board flats with their CPF funds. Since then, in addition to providing retirement protection, the scheme has evolved to allow members to buy health insurance, pay medical expenses, and use as tertiary education loans. The CPF has evolved in such a way as to become a source of financing for those expenses that participants would otherwise save for, namely, a home, children's education, insurance and unforeseeable medical expenses. But the basic features of the scheme have not changed since 1955; it is meant to make each member self reliant in providing for his own basic social welfare, with no redistribution among members.

With the CPF contribution rate being dictated by the government and being such a large part of individual income, it has been an economic policy instrument that the government often turns to for support of their economic objectives. For example, during periods of heavy infrastructural development and therefore need for investment financing during the decade leading up to the mid 1980s, the government increased CPF contributions to 25 percent for employers and employees, bring total contributions to 50 percent of wages. In times of economic downturn, such as during the years after the Asia financial crisis, the government has reduced employer contributions from 20 per cent to 10 per cent as a temporary measure to stimulate the economy.

The Singapore government attributes the success of CPF to its national culture of self reliance, good work ethics and family support. Singaporeans never had a social welfare system in place that provided for them. So in that sense, they never *expected* social welfare to be provided to them. Besides encouraging self-reliance, the scheme also builds on members' sense of responsibility as parents to their children, children to their parents, and even siblings to each other. For example, the Education Scheme allows members to finance their own or their children's tertiary education. Members also have the option of topping up their parents' and spouses' retirement accounts through cash deposits or transfer of savings from their own accounts. Partnership between CPF and the Housing Development Board has led to over 90 per cent of Singaporeans owning homes or properties.

2.2 Description of current CPF system

Singapore's current retirement savings systems is based on the Central Provident Fund, a mandatory savings plan that currently (as at June 2005) has 3.04 million members, of which 1.35 million are active[1], representing approximately 60 per cent of the total labor force[2]. Initially meant for the purpose of retirement savings, it has evolved to provide financing for various other aspects of a participants needs. Table 1 show the various schemes included under CPF.

Coverage

All temporary, part-time, and full time employees who are Singaporean citizens and permanent residents are required to participate in CPF. Self employed persons are required to contribute 6 per cent (below 35 years), 7 per cent (35 to below 45 years) or 8 per cent (45 years and above) to Medisave Account but contributions to the Ordinary and Special Account are not mandatory.

Contributions

Both the employer and the employee make monthly contributions based on the schedule shown in Appendix Table 2, Contribution Rates of CPF participants. Self-employed individuals are required to make contributions to their Medisave Account, which provides for the healthcare needs of their families and themselves.

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1 Active members refers to those who have had at least one contribution paid for the current or preceding three months. The total labour force includes Singaporeans, PRs and foreign workers. Foreigner workers are not required to contribute to CPF.

2 This is satisfactory coverage given that foreign workers represent 25 per cent of Singapore's labor force but are not eligible for CPF membership, and participation of the self employed is voluntary (Asher 2004).

Since July 1988, those above age 55 have made contributions at a lower rate of wages. This is designed to partly de-link wage from seniority, and to reduce the cost of hiring the elderly workers. Since 2001, the total contribution rate for those above 55 to 60 years old has been 18.5 per cent (6.0 per cent from employees and 12.5 per cent from employers), 14.5 percentage points lower than the total contribution rate of younger employees. The contribution rate decreases further for the above 60 to 65 years old group, and the above 65 years old group. The contribution rate was also lowered for those above age 50 to 55 to 27 per cent in two phases starting 2005.

CPF contributions are credited into three accounts:

- Ordinary Account - the savings can be used to buy a home, pay for CPF insurance and for investment and education
- Special Account – these savings are for old age, contingency purposes and investment in retirement-related financial products
- Medisave Account - the savings can be used for hospitalisation expenses and approved medical insurance

Assets in these accounts are paid interest rates based on the 12-month fixed deposit and month-end savings rates of the major local banks. We will discuss this further in the section on management of CPF assets. Contributions and withdrawals are exempt from taxes.

Benefits

At the age of 55, participants can withdraw their CPF savings in a lump sum after setting aside the CPF Minimum Sum in their Retirement Account, from which members receive monthly payouts starting from the statutory retirement age of 62. The mandatory CPF Minimum Sum is currently S$90,000 (as at 1 July 2005) but is planned to be increased every year by $4,000 with an adjustment for inflation, until it reaches $120,000 (in 2003's dollars) in 2013. If the participant meets the full CPF Minimum Sum, he need to set aside the Medisave Required Amount which is currently S$8,300 (as at 1 Jan 2006), to be adjusted annually to take into account inflation and cost of healthcare. (See Appendix Table 3).

2.3 Singapore's public policy on non-contributory social security safety nets

Singapore's social welfare system is said to be based on the philosophy of self reliance and 'Asia values'. This philosophy of self reliance may have been reinforced in part from the British colonial government, since the British government did not set a precedent of social welfare obligations that the new government would be obliged to continue to support. But for the most part, consensus seems to credit the Singapore government's assertive patriarchal role that has been able to encourage conformity amongst its citizens. Singapore's social welfare philosophy is clearly evident in the way that the CPF system has evolved to be all comprehensive and therefore requiring minimal public expenditure on social security outside of CPF.

Instead of providing direct financial assistance, the Singapore government focuses on policies to create an environment where individuals can take care of themselves. The basic principle of Singapore's social welfare for its citizens is that individuals take care of themselves and family members take care of each other. The role of the State is to set out the policy framework, and provide the infrastructure and resources necessary for the other sectors to play their part.

To this extent, the government has even set up a Tribunal for the Maintenance of Parents, which provides a legal channel for aged parents who are unable to maintain themselves adequately, to seek maintenance from their adult children[3]. The TMP's secretariat provides support and handles the administrative work of the Tribunal.

Public Assistance

The government's policy is focused exclusively on avoiding destitution. But if an individual should end up in such a situation, then the following programs have been created: Public Assistance Scheme, Special Grant, and Interim Financial Assistance Scheme.

The Ministry of Community Development, which is responsible for building Singapore's social services infrastructure, administers two financial assistance programs, a Public Assistance Scheme

3 The Maintenance of Parents Act was passed in 1996. Most Singaporeans assumed that any elderly person in dire enough straits to need its provisions would be too ashamed to report their children but in the first three years following the passing of the Act, over 400 cases were brought to the Tribunal.

and Special Grant, to a limited group of people who have no means of subsistence and no family member on whom they can depend. Included in this group are the aged, orphans, and those who are mentally and physically unable to work.

The Public Assistance program is meant for Singapore citizens only, while the Special Grant is for permanent residents of the State. In addition, there is an Interim Financial Assistance Scheme which provides individuals or families with short term financial help to tide them over a difficult period. The amount of assistance is pegged to the Public Assistance Scheme, is short-term, usually for a period of three months, and is subject to review. (Appendix Table 4, Singapore Public Assistance)

In 2003, 2,551 people were beneficiaries of the Public Assistance Scheme, 177 were beneficiaries of Special Grants, and 1,403 received Interim Financial Assistance. Singapore's public expenditure on assistance programs is therefore very small compared to high income countries, perhaps an indication that the self reliance social structure it has created is effective.

In addition to the paternalistic role that the government plays, Singapore's social security system undoubtedly owes its success, as least in part, to the Confucian ethics of hard work and strong family values. At the end of 2000, households consisting solely of those 65 and above make up only 2.8 per cent of total households, indicating that the elderly are living with family members. According to current projections, by 2040, the dependency ratio of those 15-60 to those over 60 in Singapore is expected to be 1.5:1 compared with the ratio of 6.4:1 in 2000. As the country moves rapidly towards an aged population, and as social values evolve owing to the modernization of society, some analysts have questioned whether these traditional values will persist and if not, whether the role of the state may have to expand.

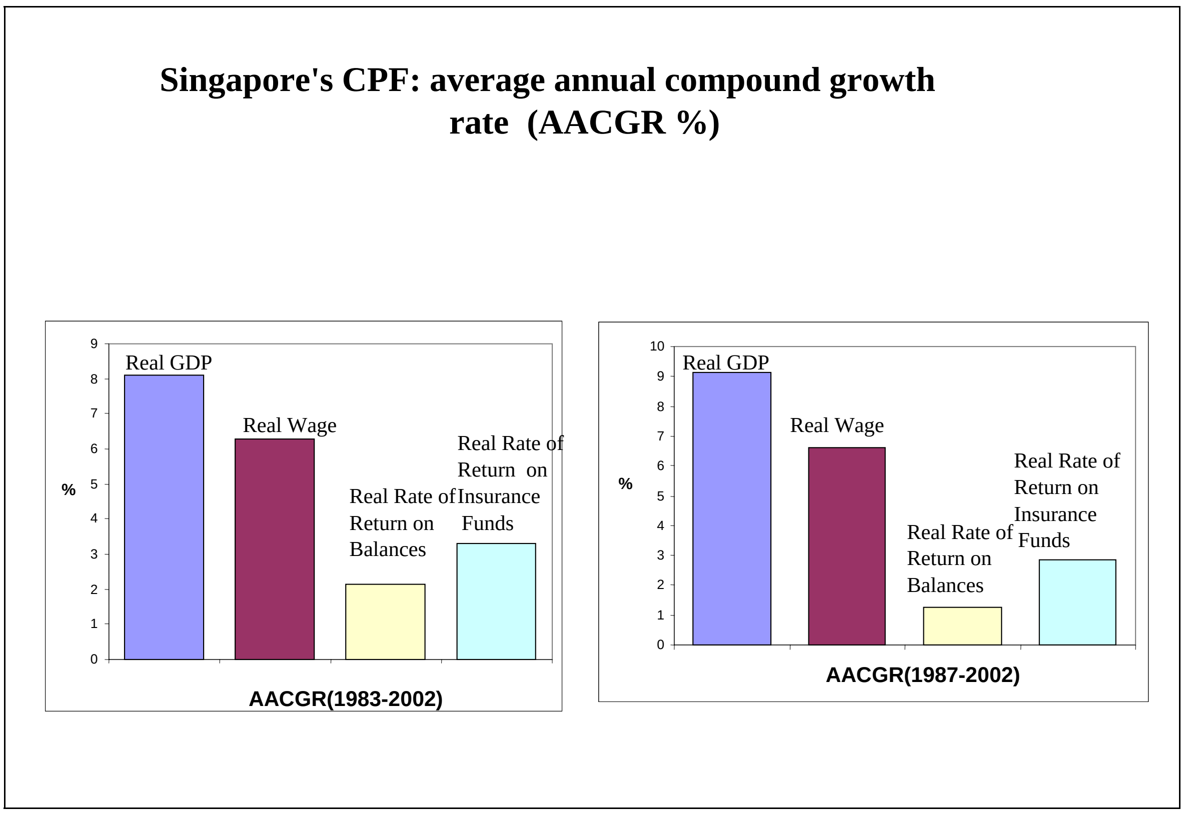
2.4 How are CPF funds managed?

As mentioned above, CPF contributions are separated into three pools:

- Ordinary Account
- Special Account
- Medisave Account

As at the end of June 2005, the balance in these three accounts totaled S$111.3bn. In addition, a Retirement Account is created when a CPF member reaches 55. The balance in this account is $5.7bn as at end of June 2005. Balances in the Ordinary Account can be left in the account to earn returns set by the CPF Board. According to the CPF Act, these funds must be invested in government bonds issued specifically to the CPF Board. The rate is determined as 80 per cent of the average of the 12 month deposit and 20 per cent of month-end savings rate of the four major local banks. A minimum return of 2.5 per cent is specified by the CPF Act (Appendix Table 5A, CPF Accounts and Balances as at the end of 2003, and Appendix Table 5B, CPFIS Investment Returns).

Figure 1 CPF returns compared, 1988-2002



Source: Asher (2004)

Other options for investing Ordinary Account funds include property and the CPF Investment Scheme which was launched in 1997 to replace the Basic and Enhanced Investment Scheme, and has evolved to provide more individual choice.

CPFIS-OA

100 per cent of ordinary account savings can be invested in fixed deposits, Singapore Government Bonds, Statutory Board Bonds, bonds guaranteed by Singapore Government, annuities, endowment insurance policies, investment-linked insurance products, unit trusts and exchange traded funds. Up to 35 per cent of investable savings can be invested in shares, property funds, corporate bonds, and up to 10 per cent of investable savings can be invested in gold. As at the end of 2003, members had withdrawn S$23.8bn, representing 30.8 per cent of the totals that can potentially be withdrawn from the Ordinary Account for participation in the CPFIS-OA account.

At one point, members can invest in unit trust at up to 50 per cent of their funds in Japan, South Korea, Hong Kong, Malaysia, Thailand, US and UK. However, that has changed as there currently no restrictions on the investments in the unit trust.

CPFIS-SA

100 per cent special account savings can be invested in fixed deposits, Singapore Government Bonds, Statutory Board Bonds(secondary market only), bonds guaranteed by Singapore Government, annuities, endowment insurance policies, selected investment-linked insurance products, selected unit trusts and selected exchange traded funds. Total balances as at end of 2003 were S$4.5bn, representing 22.6 per cent of total investable funds under the CPFIS-SA scheme. Since the balance of the Special Account is earmarked for retirement, it earns an interest rate of 4.0 per cent, 1.5 percentage points above that of the Ordinary Account.

The Medisave Account is for medical insurance and expenses only and earns a guaranteed minimum rate of 4.0 per cent return. Of the S$23.8bn invested via CPFIS-OA (as at end 2003), 59 per cent are in insurance policies, 30 per cent in equities, and 10 per cent in unit trusts. Given the small amounts invested through unit trusts, it is not surprising to find high expense ratios and large differences between offer and bid prices. The median expense ratios for CPF approved unit trusts with medium to high risks was approximately 1.9 per cent, and for higher risk unit trust, the ratio was 2.23 per cent, substantially higher than the CPF Board's 1 percent expense ratio target [CPFB did not set such a target for unit trusts included in the CPFIS]. In addition, bid offer spreads of between 5 to 7 percent are not uncommon in Singapore (Asher, 2004). These expenses in part contribute to the poor returns on investments in unit trusts (Appendix Table 5B, CPFIS Investment Returns).

CPF members investing in unit trusts through the CPFIS structure do so as retail investors. With over 30 CPF-Approved Fund Managers serving this relatively small amount of investable assets, there is no economy of scale to bring the costs down.

Privately managed pension plans

The high charges of the retail funds available being a key issue with the CPFIS, the Economic Review Committee (ERC) has proposed the introduction of privately managed pension plans, or PPPs, to provide higher long term returns on retirement savings. Eventually the initial plan for PPP was shelved because industry feedback for the "opt in" scheme means that it might not have the economies of scale that is required and there would continue to be an issue with the distribution costs. In September 2005, the government announced that it was looking into the possibility of introducing a default pension plan. While the details are still lacking, the new structure is an "opt out" scheme, and it is likely to be centrally administered and the assets are likely to be outsourced to external fund managers.

2.5 Comparative maturity of Singapore's capital market and its ability to support a pension industry

Equity market

Much of Singapore's status as an Asia ex Japan financial hub is credited to the efficiency with which the Singapore Exchange operates. Via its subsidiary, Singapore Exchange Securities Trading Limited, the Exchange provides an electronic platform for trading a wide range of securities on a scripless basis. The market went through substantial volatility following the Asia crisis in 1997, and again in the aftermath of September 11 in the U.S., but has recovered strongly in terms of market capitalization and turnover in 2003. As at the end of 2003, there were 566 listings on the Main Board and the SESDAQ, with total market capitalization of U$309bn (see Appendix Table 6). SESDAQ is a secondary board for small and medium sized companies where listing requirements are less stringent than the Main Board and currently still accounts for about 1 per cent of the total market capitalization.

Fixed income

Since the Asian financial crisis, the Monetary Authority of Singapore (MAS) has focused on developing their domestic bond market. Despite the fact that the government runs a consistent fiscal surplus, it has issued Singapore Government Securities to provide investors with a risk free investment alternative, to encourage the development of skills relating to fixed income financial services in Singapore, and most importantly in order to provide a pricing benchmark for corporate debt securities. In the years since the Asian crisis, the local corporate bond market has expanded three fold in volume to U$28.8bn.

Although SGS issues extend out to 15 years, there is still little liquidity beyond 10 years since most corporations borrow in the short to medium term. Most corporations are generally well capitalized and see little danger in incurring higher rates when they roll over their short and medium term debt.

Derivatives

Over the past few years, the expansion of the derivatives market has been driven by more liberalization by the MAS. In 2002, MAS amended regulations to allow nonresidents to transact freely in the Singapore dollar FX options market. In addition to foreign exchange options, the following derivative products are traded on the Singapore Exchange:

- Short-Term Interest Rate Futures And Options On Futures
- Long-Term Interest Rate Futures And Options On Futures
- Equity Index Futures and Options on Futures
- Single Stock Futures

Considering the main board and the minor boards, and the range of derivative products available, Singapore market provides a wide range of investment options for pension asset investments.

2.6 Supervision, regulation and governance of CPF

The CPF Board is a statutory authority under the Ministry of Manpower responsible for the administration of the CPF. All twelve members of the CPF Board are appointed by the Minister of

Manpower to act as the trustee of members' contributions. In addition to the Chairman and Deputy Chairman, the Board consists of representatives appointed from the following areas:

- Two persons holding office of emolument under the Government
- Two persons representing employers
- Two persons representing employees
- Up to four other persons as the Minister may determine to be necessary

Singapore therefore does not have an independent provident fund regulator. While there is employee representation on the Board, the appointment of these members by the Minister to a board that is supposed to serve the will of the beneficiaries presents the possibility for conflicts of interest.

The CPF Board appears to administer the complex CPF system efficiently and has not been the subject of criticism. What is sometimes criticized however, is the transparency of the government's role as the intermediary for savings after it has been collected by the CPF and before the benefits are disbursed.

CPF balances are invested in government bonds, which carry lower risk but also bring relatively low returns. Since the Singapore government routinely runs a surplus, it does not need the proceeds of these bond issues for funding purposes. These funds are instead invested in external assets by the Government Investment Corporation. So while CPF members are sheltered from investment risks, the downside is that members are deprived of the opportunity to reap higher returns. On the other hand, although the actual investments in the GIC portfolio are not disclosed, given the long term nature of CPF assets, the government can maximize return by managing long term risk. It is therefore questionable whether there is a justification for not sharing these high returns from the forced savings of its citizens (Asher 2004).

Furthermore, as the balance of GIC is widely believed to be invested abroad, in addition to not benefiting from the higher returns that SGIC earns[4], CPF members also miss out on the potential

[4] Mukul Asher (2004) referenced the IMF as estimating SGIC return on investments to be approximately 10 per cent per annum during the 1990s.

benefits of having their savings invested in the domestic market, including higher levels of corporate governance and overall economic growth.

In addition to the transparency issue, CPF is also criticized as lacking overall strategic direction and therefore compromises the objective of retirement protection. Over the years, schemes with various objectives have been added to the coverage of CPF. They have usually reflected ad-hoc responses to a particular economic or social problem at a particular point in time. They are therefore not a product of an overall system-wide view. As an example, Medisave, which essentially represents mandatory savings allocated for healthcare services, was introduced in 1983 when the government wanted to increase the share of total health expenditure accounted for by individuals (Asher 2004). As discussed previously, CPF has also been used as a macroeconomic stabilization tool, raising and reducing contribution rates as necessary to stimulate or limit domestic demand. These issues raise the question of whether the CPF has evolved to have multiple objectives and if so, to what extent are they in conflict?

3. Thailand's GPF and Provident Fund

3.1 Historical development of Thailand's pension system

The first pension system in Thailand was enacted in 1902 at the wish of King Rama V to provide for the welfare of government officials after retirement. Since then, pension legislation has been amended numerous times but until recently, the beneficiaries of these laws were always civil servants and military personnel.

Original pension for central government official; the Gratuity and Pension Act of 1951

The latest system before the Government Pension Fund (GPF) was put into place was based on the Gratuity and Pension Act of 1951, which paid a generous annuity at retirement. But this was a PAYG system funded out of the central government's annual budget and became an increasing fiscal burden as the government, and the number of civil servants, grew in size. Under this scheme, the qualifying conditions for receiving pension are:

1. The retiree must have at least 25 years of service or
2. The retiree must have at least 10 years of service with the termination of service in under these following conditions: old age (over 50 years), permanent disability, and work abrogation.

However retiree who is eligible for pension would be able to otherwise choose to receive a gratuity. The qualifying conditions for receiving a gratuity are:

1. The retiree must have at least 10 years of service or
2. The retiree must have at least 1 year of service with the termination of service under these following conditions: old age (over 50 years), permanent disability, and work abrogation.

If they choose to receive pension at the flat-rate basic, the benefit is equal to last month salary times 2 per cent for every year of service accrued. If the civil servant chooses to take a gratuity they will receive lump sum payment equal the last month salary multiplied by the number of years of service.

Government Pension Fund (GPF); the first public sector defined contribution fund in Thailand

In 1996, parliament passed the Civil Servant Gratuity and Pension Fund Act which provided for the Government Pension Fund to be set up as an independent legal entity to operate with the objectives of securing the payment of gratuities (lump sum payments of retirement benefits) and pension annuities and promoting savings amongst participants. The idea of the GPF was prompted by the necessity for a financially sustainable system. The rationale was to replace over time the unfunded pay-as-you-go system which the government believes is untenable over the long-term and to allow for more prudent fiscal management. The Act also requires that no less than 20 percent of the annual amount earmarked for pension and gratuity payments allotted under the national budget be remitted to GPF's reserve account. The GPF is entrusted with the management of this reserve account.

Other mandatory pension schemes that cover workers not included in the GPF scheme include: Old Age Pension for the private sector, Provident Fund for state enterprises, and Private Teachers' Provident Fund for private school teachers and administrators. (Appendix Table 7A: Thai Pension System, and Appendix Table 7B: Thailand's Current Mandatory DB and DC Schemes).

Old Age Pension Fund (OAFP)

For the private sector, there were attempts in 1932 to establish a social security scheme as part of the national economic policy. However, that initiative was never implemented, neither was a 1954 initiative under the Social Security Act. It was the legislation of the Social Security Act of 1990 that finally laid the foundation for the current social protection for private sector. This Social Security Act was amended numerous times to increase coverage and benefits and in 1998 it was amended to include an Old Age Pension Fund scheme.

The Old Age Pension Fund operates under the Social Security Fund[5] and is regarded as the Pillar I pension for the private sector in Thailand. However, its coverage at 7.4 million is still limited given the country's total labor force of 33.4 million[6].

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5 The Social Security Fund is administered by the Social Security Office which is part of the Ministry of Labor and Social Welfare.

6 According to the National Statistical Office of Thailand, Non-agricultural workers account for 36 per cent and agricultural workers account for 64 per cent of this total.

In September 1990, the scheme initially covered employees of companies with 20 or more workers throughout the country. In September 1993, the scheme extended coverage to companies with 10 or more workers. And in April 2002, the scheme further extended coverage to companies with 1 or more workers who are at least 15 and over and not over 60 years old.

According to the Social Security Act employers and employees both contribute to the Old Age Pension Fund and the rate of contributions has gradually increased from 2 per cent (employer 1 per cent, employee 1 per cent) in 1999, to 4 per cent (employer 2 per cent, employee 2 per cent) in 2000, and to 6 per cent (employer 3 per cent, employee 3 per cent) in 2003. These contribution rates are subject to a minimum of Bt1,650 per month and a ceiling of Bt15,000 per month or Bt180,000 per year.

The contributions paid to the Social Security Fund by employers and employees are tax deductible and the benefits payable are tax exempted.

Provident Fund

The Provident Fund Act was legislated in 1987 to encourage private sector employees to save for retirement. This scheme was meant to be a pillar III voluntary defined benefits scheme much like the 401K in the U.S. where employers and employees make tax deductible contributions. In Thailand, for the most part, it has been large institutions that sponsor Provident Funds. At the end of 2003, 5,760 enterprises sponsored Provident Funds with a total of Bt287bn (U$7.2bn) in assets under management.

Contributions to the fund must be made from both employers and employees. Currently, employee's contribution must be between 2 - 15 per cent of employee's salary. For employers, the law stipulated that their contribution rate must be at least equal to or greater than those of employees. Therefore, in practice employees cannot contribute at the higher rate than the employer's contribution rate. Moreover , the contribution must also comply with the rate stated in the fund article. In the case where employers and employees wish to contribute at a rate higher than 15 per cent, they must seek for an approval from the Ministry of Finance.

As local governments moved away from the traditional defined benefits schemes for state enterprise employees, they have been required by government policy to adopt Provident Funds as a means to provide retirement benefits for their local government employees. In these instances the Provident Fund is utilized as a pillar II mandatory defined contribution scheme.

Private Teachers' Provident Fund

Private Teachers' Provident Fund is a mandatory defined contributions scheme for teachers and administrators of private schools established under the Private School Act. Employers, employees, and the government each contribute 3 per cent, 3 per cent, and 6 per cent respectively to this Fund. However, only employer and employee contributions accumulate in the individual account, while government contributions are retained and used for welfare benefits of employees and their families.

3.2 Description of the current GPF system

In 1996, the Thai parliament passed the Civil Service Gratuity and Pension Fund Act (the Act) to reform the central government retirement system by introducing a defined contribution Pillar II for the central government officials in tandem with the previous Pillar I system. Based on this Act, the Government Pension Fund ("GPF"), the first public sector defined contribution fund in Thailand was introduced in March 1997.

Coverage

Membership in GPF is voluntary for employees who entered government service prior to the Fund's March 27, 1997 inception date, but mandatory for those who entered thereafter. Eligible officials who were in government service prior to the Fund's inception were given a one-off opportunity to join the Fund and about 70 percent of the 1.5 million who were eligible at the time chose to join. These participants were then given a choice of becoming saving or non-saving members. Saving members agreed to have three percent of their monthly salary withheld and remitted to the Fund, the amount of which is matched by the government contribution. Members are currently not allowed to contribute above and beyond the mandatory three percent. In December 2004, GPF has 1.15 million members with the fund size of 247.9 billion Baht (US$ 6.2 Billion)

Under the Act, the twelve categories of government officials covered by GPF are:

1. Civil officials under the law on civil official rules
2. Judicial officials under the law on judicial official rules
3. Civil officials in a university under the law on civil official in the university rules
4. Public prosecutors under the law on public prosecutors rules
5. Teachers under the law on teacher rules
6. Ordinary parliamentary officials under the law on ordinary parliamentary official rules
7. Police officials under the law on police official rules
8. Military officials under the law on military official rules
9. Judicial officials under the law on Constitutional Court rules
10. Civil officials of the Office of the Administrative Court
11. Civil officials of the Office of the National Counter Corruption Commission
12. Civil officials of the Office of the Auditor General of Thailand

Member contribution of up to Bt300,000 per year is tax deductible.

Contributions

Contributions to GPF accrue in individual accounts managed by the GPF. The individual accounts consist of:

1. Member contributions of 3 per cent of salary
2. Government (employer) contributions of 3 per cent of salary of the member
3. Compensation contribution from the government of 2 per cent of salary[7]
4. Initial fund contributions for members who had been in service prior to March 27, 1997 based on the benefits they earned until March 27 1997.

Benefits

Those civil servants who had been in service when the GPF was established and who did not choose to join the Fund, get 100 percent of the "gratuity", or pension. For those who opted to join the Fund or who are mandatory members of the Fund, the former payment – coming out of the

7 This is to compensate for the reduced defined benefit as a result of the altered benefit calculation. Retirees who choose to receive an annuity from the original defined benefit scheme will also be entitle to these funds.

government budget – is reduced to 70 percent if they choose a pension. The benefits coming from the Fund (savings, additional fund, compensation, the initial fund – if applicable – and the returns on these) are to replace the 30 percent by which the PAYG scheme is reduced.

Under the Act, the original defined benefit calculations were revised to lower the benefits paid. Whereas the original pensions were calculated based on the last month's salary prior to retirement, the new calculations were based on the average of 60 months salary before retirement. The new calculations also capped the replacement rates at 70 per cent of the average of 60 months salaries before retirement. Therefore the pension is reduced by 12-15 per cent. However, combined with the retirement savings from GPF, the total replacement rate increases (Kanjanaphoomin, 2004).

Benefits from GPF can only be paid as a lump sum upon termination of employment or upon retirement at age 60. The Fund is not portable, and annuities are not currently an option given the lack of long term yield curve.

Tax benefits

The tax system for all types of retirement savings in Thailand nearly follows the 'EEE' regime. For GPF, this means contributions of up to Bt300,000 per individual per year are tax exempt; investment income of the fund is tax exempt; and the retirement benefits payable from the fund are tax exempt, but only if the benefits are paid in lump sum, otherwise it is taxed as income[8]. (See Appendix Table 3).

3.3 Thailand's public policy on non-contributory social security safety nets

Thailand's social security system can be roughly divided into two areas: the social welfare system and social insurance system. The social welfare system is comprised of welfare services targeted at the poor, people with disabilities, children, the elderly, women, minority mountainous tribes and others. The social insurance system is relatively new. When the Social Security Law was enacted in 1990, it included benefits for sickness, maternity, disability, death, dependent child, old age and unemployment. This law propelled the social security system for private-sector employees in Thailand into a new era (benefits for sickness, maternity, disabilities, death, dependent child, and

[8] Except the Old Age Pension, which is paid monthly but is not subject to income tax

old age are currently implemented). The social security system that covers private-sector employees did not exist until then except for workmen's accident compensation benefits which were provided to employees of business establishments with 20 or more employees.

In addition to the above, there are, for example, medical security and pension systems for public service employees, employees of national enterprises and military personnel.

Welfare policy for the elderly and children

The Department of Public Welfare of the Ministry of Labour and Social Welfare via its network of Village Welfare Assistance Centers administers a small program meant to assist those 60 and over living in villages without family care and who are economically inactive with small cash payments. Welfare facilities include homes for the elderly for those without homes or relatives.

The government provides basic necessities for neglected children, or for other children and their families in situations that prevent those children from getting basic needs. Programs include introduction of foster family and adoption systems, as well as protection and support of abused children. There are facilities for the homeless, regardless of age, to take temporary refuge and try to find relatives, who take over the responsibility of caring for them. Those without anyone to depend on are qualified to be admitted into facilities which cover basic living needs including meals and basic occupational training. The number of participants in these social welfare systems has traditionally been very low, an indication perhaps that the family and community support systems have been effective. Ultimately, families and the immediate communities continue to fulfill many welfare support functions.

Post 1997 Financial Crisis

Following the 1997 financial crisis, the financial positions of families and communities were strained and they could no longer be relied upon to be part of the support mechanism for those in need. The government focused on the immediate task of providing an adequate social safety net – to protect the unemployed, the poor and the marginalized. At the same time, it emphasized the development of information and equal access to opportunities as insurance against future calamities.

Typically, governments can combat poverty with a range of policy tools, some narrowly focused and directly beneficial targeted towards the poor, and others more indirectly. Policy tools are grouped into three categories: Opportunity (actions that enable the poor to take advantage of opportunities such as education, land reform, and tax relief), security (actions that help families cope with sudden loss of income brought on by high medical cost, unemployment, old age), and empowerment (actions that increase enable the poor to participate in public decision making). (World Bank Social Monitor, 2000). In the aftermath of the financial crisis, Thailand's approach to building its social welfare system seemed mindful of these policy tools.

Measures implemented after the crisis

In the months after the crisis, the Thai government took several decisions which signaled the priority accorded the social reform agenda. First, Parliament proceeded with passage of the new Constitution which introduced reforms to the political system. Second, in February 1998, the government endorsed revisions to the 8th National Economic and Social Development Plan to respond to the crisis through the following guidelines:

- minimizing the effects from rising unemployment through measures to alleviate unemployment in urban areas and promote employment generation in rural areas to absorb returning migrants
- assisting underprivileged groups of people and those affected by the crisis through social welfare, education and health assistance measures
- preventing and alleviating social problems, especially drug use and crimes, as well as promoting commendable social values.

The third decision at the policy level was the establishment of a new National Social Policy Committee (NSPC) in response to public demand for increased coordination of social policy and attention to the social reform agenda. NSPC is chaired by the prime minister and represented by ministers responsible for social issues, NGOs, civilian organizations, academics and a religious leader.

A critical element of Thailand's response to the social impacts of the 1997 crisis is support for decentralization and community development as articulated in the 8th Plan. At the policy and program levels, the government viewed the crisis as an opportunity to advance reforms towards decentralization, better governance, community empowerment and the forging of broad development partnerships with civil society. This approach is aimed at rebuilding and consolidating social capital eroded by economic growth and to strengthen the unofficial, community-based safety net. (World Bank, Thailand Social Monitor, 1999)

Prompted by the crisis, many new community level initiatives have been supported by government as well as donors. Indicative of the type of initiatives the government has taken on is the Social Investment Fund, which was supported by the World Bank, UNDP and AusAID. The Fund finances projects at the local level to improve the access of poor communities to basic infrastructure and employment.

Also indicative of the Government's views towards social welfare is that it has not launched permanent expansion of its small-scale transfer programs for the needy. There are concerns about permanent entitlements, fiscal burdens, and the burden on employees and employers in the form of higher taxes. Beyond those reasons is perhaps a more deeply felt determination not to undermine the traditional value of self-help and self-reliance.

The 9th National Economic and Social Development Plan outlined the Thai government's development priorities for 2002-2006. The main goals of the 9th Plan included poverty alleviation, recovery with sustainability and stability, good governance, and strengthening development foundations, which are consistent with initiatives of the 8th Plan.

3.4 How are GPF funds managed?

Government Pension Fund assets are managed within the guidelines set by the Civil Service Gratuity and Pension Act and Ministerial Regulation No. 4. Accordingly, these assets are managed by the Investment Subcommittee of the Fund and outside asset managers selected by the Fund's Investment Subcommittee. Currently, 65 per cent of GPF assets are managed in house and 35 per cent is outsourced to five local fund managers. With the assistance of international consultants, the optimal portfolio is determined by the Board of Directors within the guidelines of the Act and regulations issued by the Finance Ministry.

Asset allocation

Asset allocation covers investment allocations of assets managed by the GPF fund in accordance with the classified framework of its objectives. The allocation is based on rational investment proportions which take into account all concerned factors such as risk, returns, instrument nature, and investment objectives. Asset allocation is an essential element in fund management, particular to a compulsory mega fund such as the GPF. Due to the large number of fund members with such diversified profiles, proper management of different risk return schemes within the fund investment portfolio will enhance higher return opportunities. Good asset allocation requires not only a good balance of targeted yields and acceptable levels of risk, but also a considerable awareness of the fund objectives, together with equitable concerns of members' welfare as a whole; whereas the economic environment and money & capital market conditions also require some weight. The investment ratio currently approved by the Board of Directors is 80:15:5 between fixed income instruments, equity and property, respectively.

Investment guidelines

The existing legal frameworks stipulate that the Fund must invest at least 60 per cent of its assets in low risk instruments such as bank deposits, Thai government bonds, and government guaranteed bonds. Investments in higher risk products such as common stocks, debentures and convertible debentures and warrants are limited to 40 per cent of total assets. Of the permitted higher risk products, only up to 10 per cent of total assets can be invested in common stocks and non-rated corporate debentures. GPF assets are managed in pooled funds. As at the end of 2003, GPF managed Bt214.1bn (U$5.5bn) in assets.

Alternative investments are permitted if approved by the Board of Directors, and GPF currently holds one real estate asset which houses their offices, and are shareholders in two joint ventures. But the GPF Board does not actively seek out alternative investments (Appendix Table 8, Allocation of GPF Investments).

Currently, there is no member choice and individuals have no say in how the assets are invested. Considering the fixed income bias of the securities allowable for investment under the regulation, the main concern is credit risk. This risk from interest rate fluctuations is not addressed. Whether the returns sufficiently compensate for inflation or whether the fund will preserve future purchasing power cannot be adequately addressed by the fund since it is only permitted to invest 10 per cent of total assets directly in stocks.

GPF Performance

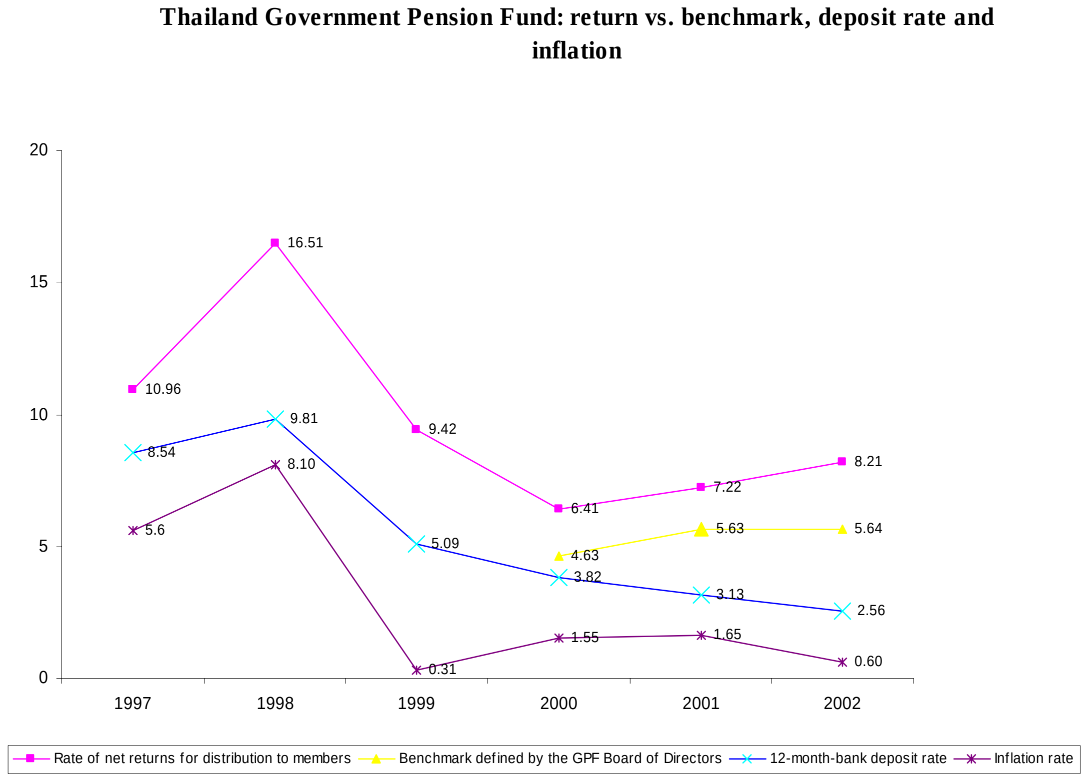
The benchmark return for GPF investments is the average 1-year savings rate of the country's five largest local banks. According to GPF statistics, the return on GPF investments has always been higher than the 12 month deposit rate as well as the benchmark set by the GPF as shown in Figure 2 below. Given the relatively low inflation rate, the real rate of return was significantly positive. Furthermore, the expense ratio of the fund at 0.25 per cent is quite low compared to that of pension accounts in some countries, which can be as high as two percent (Funke and Stadtmann, 2004).

Future amendments

Ministerial regulations are currently being reviewed for possible amendment to permit investments in international assets, and to double equity exposure. However the current condition of the Thai equity market - low free float ratio, poor transparency and questionable corporate governance a large number of the SET 50 constituents – would likely have to be considered before exposure is increased.

On the administrative side, amendments are being considered to allow members investment choice and portability as well as annuity payments rather than lump sum payments at retirement.

Figure 2 GPF returns 1997-2002



3.5 Comparative maturity of Thailand's capital market and its ability to support a pension industry

Equity market conditions

Thailand's equities market as represented by the Stock Exchange of Thailand is still in an emerging stage. The market has been quite volatile in the past decade mainly due to the Asian financial crisis, which started in Thailand. While the total market capitalization of the SET composite is relatively significant as a percentage of total GDP, this is mainly due to the large number of listings. In fact, the listings exhibit low liquidity at annual turnover of U$119bn, less than 100 per cent of market capitalization.

Furthermore, the market capitalization of SET is highly concentrated in a small number of companies: 10 per cent of all listed companies account for more than 75 per cent of the total market capitalization, and a few industries, namely banking, communications, and energy, account for over 50 per cent of the overall market (Funke, 2004).

Fund management industry

Thailand's asset management industry currently has Bt1.2tn (U$ 31 billion) under management in various types of funds, predominately fixed income funds. About 40 per cent of these assets are mutual fund, 20 per cent are provident funds, 30 per cent are Government Pension Fund and Social Securities Fund with the remaining 5 per cent in privately managed funds[9].

Since the largest institutional investors are fixed income investors, the development of the bond market post Asia financial crisis has given a boost to the asset management industry. But the industry is still constrained by a lack of risk management tools, which in turn limits the type of products they can offer.

According to the Thai Securities and Exchange Commission, regulations enabling the funds to undertake repo transactions and to undertake securities borrowing and lending are being put into place. The country is in the process of setting up a futures exchange by the end of 2004 or early 2005, which will cover equities and fixed income products.

The SEC has also implemented new licensing regulations which will allow all types of financial institutions including commercial banks, insurance companies and securities companies to apply to set up mutual fund management businesses. It is expected that the new companies will introduce new products and ideas to investors and attract some of the savings away from banks and into the capital market.

Fixed income

As is the case with most emerging markets, short term bank loans still play a relatively major part in the capital market intermediary. According to the Bank of Thailand, bills, loans and overdrafts amounted to U$119bn in 2003, substantially higher than domestic bond issues which totaled U$64.5bn in the same year. On the upside, this is a substantial improvement to the country's pre-

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9 Based on data from Thailand's Securities and Exchange Commission for year-end 2003.

Asia financial crisis conditions. With the impetus from the Asia financial crisis, the Thai fixed income market has made speedy improvements.

Prior to the financial crisis, the Thai government ran successive years of budget surpluses and had little reason to issue bonds. Also, as the Thai economy was on a privatization trend, the larger infrastructure projects were left up to the private sector finance. Without the government coming to market with sizable, periodic issues at key, the market did not have a benchmark risk free yield curve. This situation hampered the development of the Thai bond market.

When the crisis broke out, banks, foreign and domestic, stopped lending, and the inter-bank market practically seized to operate. Ultimately, the government was required to issue bonds in order to bailout these financial institutions.

The substantial amount of new government bonds coupled with the successive downtrend of interest rates have contributed to the development bond market since the Asian financial crisis. The positive side of these bailouts was the deepening of the bond market. As the result of the government issuances, yield curves were formed, which in turn enabled the market for state enterprises and corporate bonds to develop as well. And also as the result, the total market capitalization for all types of bonds grew rapidly to 2.5 trillion baht (U$ 64.5bn) at the end of 2003, 85 per cent of which is accounted for by government issuances. The developments in the bond market lead to growth in the fund management industry as well.

Since the crisis, Thai reference yield curve has been developed by using bidding yields quoted daily by 10 primary dealers at minimum value of Bt20 million. The Thai Bond Dealing Centre, a self regulated secondary bond exchange, also publishes reference yields of SOE bonds, Financial Institution Development Fund bonds, and treasury bills. The BDC has also developed a bond index to track market performance by maturities, and an Investment Grade Corporate Bond Index to track corporate bond performance.

3.6 Supervision, regulation and governance of GPF

GPF is governed by a 25 member board of directors which is comprised of twelve employee representatives, nine ex-officio members[10], three independent experts, and the Secretary General who is appointed by chairman and serves also as the Fund's chief investment officer. The Board formulates fund administration and investment policies, and ensures that the Fund is managed prudently and in accordance with the Civil Service Gratuity and Pension Fund Act.

The Board of Directors convenes monthly and generally carries out its fiduciary duties based on recommendations from three standing subcommittees on investment, member relations and audit.

With regards to the structure of the GPF board, Funke and Stadtmann (2004) noted that most of the board members have no pension scheme or finance-related background. Therefore, whenever a decision has to be made regarding the Fund, those board members must first be educated on the topics. This makes any decision making process by the board cumbersome and time consuming.

Funke and Stadtmann also referred to studies on the different aspects of pension fund governance and point out that regulatory bodies have a special duty in assuring an appropriate governance structure for mandatory pension schemes. The main aim of the implementation of the optimal governance structure is to protect the beneficiaries' rights and ensure the financial security of the scheme.

In this respect, the structure of the GPF Board that can cause agency problems. While beneficiaries are strongly represented with 12 members on the board, the nine ex officio members on the 25 member board gives significant voice to employer representatives, which might put the interests of the government and related institutions before those of the plan beneficiaries. That is, the structure of the board could hinder the GPF to act in the best interest of the plan members.

[10] Permanent Secretary of Finance, Director of the Bureau of the Budget, Secretary General of the Council of State, Secretary of the Council of the Civil Service Commission, Secretary General of the National Economic and Social Development Board, Director of the Fiscal Policy Office (Finance Ministry), Director of the Comptroller-General's Department (Finance Ministry), Governor of Bank of Thailand, and Secretary General of the Securities and Exchange Commission.

Funke concluded that the Fund provides adequate information to shareholder and thereby achieves a respectable level of transparency. The Fund also appoints independent auditing firms which audits its quarterly and annual reports.

The Investment Subcommittee is comprised of the Director of the Fiscal Policy Office as the chairman, a representative from the Bank of Thailand, four investment experts appointed by the Board, and the Fund's Secretary General. The Subcommittee is empowered by the Act to formulate criteria for the selection of external fund managers, to monitor the overall operations of the Fund, to report the outcome of investment operations and also to make investment recommendations to the Board.

As discussed above, the existing legal framework stipulates that the Fund must invest at least 60 percent of its assets in low risk instruments, up to 40 percent in higher risk instruments, of which up to 10 per cent can be in common stocks.

Given the long investment horizon of the average GPF member (90 percent of the one million members are below 50 years of age), it can be said that the current regulations limit the GPF portfolio to a higher than optimal percentage of government bonds, lower than optimal percentage of risky investments, and no international holdings.

4. Hong Kong's MPF

4.1 Historical development of Hong Kong's pension system

In 1954, the UK government issued a directive to a number of its colonies and dependent territories advising them to establish retirement benefit schemes in the form of a provident fund for their populations. Singapore and Malaysia complied by establishing the Central Provident Fund and what became the Employees' Provident Fund, respectively. Hong Kong at that point was far too preoccupied to act on the directive. Instead it was trying to cope with tens of thousands of refugees who had flooded across the border from China after the Communist victory in 1949.

Throughout the 1960s, 1970s, and 1980s, the Hong Kong government considered the provision of old age benefits but there was insufficient political will to overcome resistance from the business community, which was fixated with laissez-faire business practices. For many of the elderly in Hong Kong, their main source of income came from their children. For others in need, the government provided means-tested social security payments for individuals and families unable to support themselves. These payments were being financed from general taxation revenue. But as the traditional pattern of children supporting their parents in retirement diminished, there was more pressure on the government to assume the responsibility.

With increasing affluence in Hong Kong, many employers, especially the foreign multinationals and financial services companies, as well as the 'Hongs' and utility companies, established schemes for their own employees in the 1970s and 1980s. However, there was no regulation of retirement schemes other than certain minimum Inland Revenue requirements, which enabled both the employee and employer to obtain tax breaks. The Hong Kong government became the regulator of voluntarily established retirement schemes in 1993 with the enactment of the Occupational Retirement Schemes Ordinance (ORSO).

Following the tradition of having the private sector bear the social security burden, the Hong Kong government avoided the establishment of a state-run central provident fund as had happened in Singapore. Instead, it supported the private sector with incentives to establish retirement schemes and then played the role of regulator of the registered schemes. The objective was to register all retirement schemes under ORSO so as to provide greater assurance of payment of the retirement scheme benefits promised to employees. All employers applying to register occupational retirement schemes registered under ORSO must comply with its regulatory requirements. However, ORSO schemes are voluntary and only covered about 30 per cent of the work force, mostly those working in larger companies.

Hong Kong is also faced with the pressing social economic issue of an ageing population. People over the age of 65 currently make up 12.2 per cent of the total population, a rate second in Asia only to Japan. Even with the continuous inflow of young immigrants from the mainland, those over 65 years old will reach 27 per cent of the population by 2033.

With the aim of relieving the SAR government of the financial burden that will result from the demographic projections, the Hong Kong government decided to implement a Mandatory Provident Fund which extended compulsory coverage to all workers, although those covered by ORSO could seek exemption.

Throughout the 1960s to the early 1990s the Hong Kong Government considered various options for establishing a universal old-age benefits system, including two notable versions: a Singapore-style CPF system, and a system funded by compulsory contributions from employers and employees along the lines of the US, UK and Canadian systems. But these all met with resistance from the business community. However, as the government's responsibility for social security payments became steadily more of a burden, this burden generated the political will to adopt the Mandatory Provident Fund Schemes Ordinance which was the result of a consultancy study carried out for the government by an independent consulting firm and became law in 1995.

4.2 Description of the current MPF system

The main objective of the MPF system was to provide a cost-effective system of retirement savings for workers in Hong Kong. The main guidelines in designing the MPF system were that it should be privately managed, equitable, relatively simple and transparent, and increase the proportion of the workforce with retirement protection.

The system which commenced in December 2000 is fully funded by the private sector. Considering Hong Kong's demographic development in the next few decades, a fully funded model - and therefore one that is financially viable in the long term – was seen as the only practical option. Employers and employees share the responsibility of funding the benefits, with each party contributing 5 per cent of an employee's wages. This 10 per cent total, accumulated over the working lifetime of an employee is expected to equate to a replacement rate of 30-40 per cent.

Structure

MPF schemes are required to be set up under trust. An employer may choose to set up a segregated MPF scheme that only provides benefits for its own employees, or to participate in a master trust MPF scheme provided by a financial institution.

Coverage

The basic rule is that all full time and part time employees (employed for a period of not less than 60 days) and self-employed persons who are aged between 18 and 65 are required to join an MPF scheme. 'Casual' employees in the catering or construction industry employed on a day-to-day basis or for a period of less than 60 days should also join an MPF scheme.

Exemptions include:

- Domestic employees
- Self-employed hawkers
- Civil servants and school teachers who are covered by statutory pension or provident funds[11]
- Members of occupational retirement schemes which are granted exemption certificates

[11] As at the end of June 2005, Hong Kong had 156,793 civil servants. Generally speaking, those who joined the civil service before 01 June 2000 are covered under the Civil Service Pension Scheme where a retiree receives a pension of half of his final salary after 28 years of service. Currently there are 153,000 permanent and pensionable civil servants who are eligible for this Scheme. Those who joined the civil service after 01 June 2000 are covered by the Civil Service Provident Fund Scheme and are enrolled in an MPF scheme selected by the government (Gadbury, 2004)

- Non-Hong Kong residents who work in HK for less than 13 months or are covered by overseas retirement schemes
- Employees of the European Union Office of the European Commission in HK

According to Q3 2005 survey by the HKSAR Census and Statistics Department, Hong Kong's employed population of 3.4 million was made up of 3.0 million employees and 0.4 million self employed. Among this population, 66 per cent are covered under MPF schemes and 19 per cent are covered under other retirement schemes, such as Civil Service Pension Scheme and MPF Exempted ORSO schemes, 11 per cent, mostly domestic employees and employees who are aged below 18 or above 65, are not required to join any local retirement schemes. The remaining 4 per cent of the employed population are people who should have joined the MPF but have not done so.

It is the responsibility of each employer to take all practicable steps to ensure that each employee becomes a registered member of a retirement scheme. MPF schemes have the obligation to accept any eligible employee or self employed person who wishes to join the scheme, despite the minimum contributions that may be made.

Contributions

Employers are responsible for deducting an employee's 5 per cent contribution from the employee's income and remit this amount, along with the employer's own 5 per cent contribution, to the scheme's trustee.

Employees earning less than HK$5,000 per month are not required to contribute but may choose to do so, while employers must make the 5 per cent contribution regardless of the employee's decision. The maximum level of income on which the contribution is calculated is HK$20,000. Therefore, if an employee's monthly salary exceeds HK$20,000, the employer and the employee will each be required to contribute only 5 per cent of HK$20,000 for a total of HK$2,000 per month.

Tax treatment

Employer's contributions are tax deductible to the extent that they do not exceed 15 per cent of each employee's emolument. Employees and the self-employed are able to claim a tax deduction for the mandatory contributions made each month, up to a total of HK$12,000 per year.

Benefits

Mandatory contributions are fully vested immediately. Generally, MPF benefits must be preserved until retirement at age 65 or until age 60 for workers who retire early. Benefits are paid in lump sum.

Before MPF, about one-third of the workforce of 3.2 million between the ages of 18 and 65 had any form of retirement protection apart from the means-tested social security benefits. As at December 2005, five years after the introduction of MPF, this proportion has risen to around 85 per cent. This includes around 2 million members of MPF schemes, and half a million members of MPF exempted ORSO schemes, and other public sector pension plans. (See Appendix Table 3).

4.3 Hong Kong's public policy on non-contributory social security safety nets

Hong Kong's two main sources of non-contributory social security, the Comprehensive Social Security Assistance Scheme (originally Public Assistance Scheme) and the Old Age Allowances and Disability Allowances were introduced in 1971 and 1973, respectively.

At the start, as it is now, the general philosophy of social welfare in Hong Kong was based on the premise that society has an obligation to help its members overcome their personal and social problems. In particular, it recognizes the responsibility to help its disadvantaged members to attain a basic standard of living, and to implement welfare programs with recognition of the local values of self reliance and the family support system.

Inclusive of the Comprehensive Social Security Assistance Scheme and the Old Age Allowances and Disability Allowances, there are five schemes administered by the government's Social Welfare Department with the overall objective of providing for the basic and special needs of members of the community with financial or material assistance:

- Comprehensive Social Security Assistance Scheme (CSSA)
- Social Security Allowance Scheme (SSA)

- Criminal and Law Enforcement Injuries Compensation Scheme
- Traffic Accident Victims Assistance Scheme
- Emergency Relief

Comprehensive Social Security Assistance Scheme

The CSSA Scheme, which is means-tested, provides a safety net for residents of Hong Kong who cannot support themselves financially. The Scheme is designed to bring the income of such individuals and families up to a prescribed level to meet their basic needs.

When the CSSA Scheme was introduced in 1971, the basic rates covered food costs only. In 1972, the basic rates were revised to cover additional items of essential household expenditure, which included fuel and light, clothing and footwear, miscellaneous goods, transport and services, and durable goods. Over the years, apart from inflation adjustments, many improvement measures have been introduced, including introduction of special supplements and a wide range of special grants to take account of changes in social expectations and to meet special needs of different categories of recipients. The Scheme has evolved from a system providing for basic subsistence to a comprehensive safety net meeting not only the basic but also individual needs of its recipients (see Appendix Tables 9A and 9C for details.).

The cash assistance paid by CSSA is divided into three categories:

- Standard rate which assists different categories of recipient to meet their basic needs
- Long term supplements to families to care for the aged and/or disabled, and long term supplements to single parent families in recognition of the difficulties of raising a family as a single parent
- Special grants payable to the aged, disabled or those medically certified to be in ill-health

Social Security Assistance Schemes

The Social Security Allowance Scheme comprises Old Age Allowance and Disability Allowance. It provides a flat rate monthly allowance to the severely disabled and elderly

Hong Kong residents aged 65 or above to meet special needs arising from disability or old age. The Scheme is divided as follows:

- Normal Old Age Allowance (ages 65-69) (NOAA)
- Higher Old Age Allowance (ages 70 and above) (HOAA)
- Normal Disability Allowance (NDA)
- Higher Disability Allowance (HDA)[12]

Appendix Table 9B shows the monthly allowances paid by Social Security Assistance Schemes. Except for NOAA, the allowances paid under the scheme are non-means-tested. To a large extent, family assistance is considered a large part of an elderly's social security.

Portable Comprehensive Social Security Assistance

In the past, it was taken for granted that the elderly, would receive at least some financial support from their family, which along with the modest government assistance would allow them to have at least a modest living in Hong Kong. But with demographic and social changes, the government realized that it can not always rely on the family as a pillar for support of the aged. The SWD launched the Portable Comprehensive Social Security Assistance Scheme in 1997 to provide the elderly with a choice to retire in Guangdong Province, China, where the cost of living is substantially lower than Hong Kong. This would appear to be a cost effective solution to Hong Kong's old age problem. Under this Scheme, elderly recipients can continue to receive their monthly standard payment and annual long term supplements. From the commencement of the scheme in April 1997 until April 2004, there have been 5,467 PCSSA applicants. The SWD does not keep track of the number of PCSSA returnees.

A review of the scheme conducted by the Hong Kong Red Cross in 1998 indicated that the main concerns of the PCSSA recipients were about the high medical expense in Guangdong, escort services back to Hong Kong, burial fees, the right of re-securing a housing unit from the Housing Authority should they choose to return, and the remittance of benefits in the

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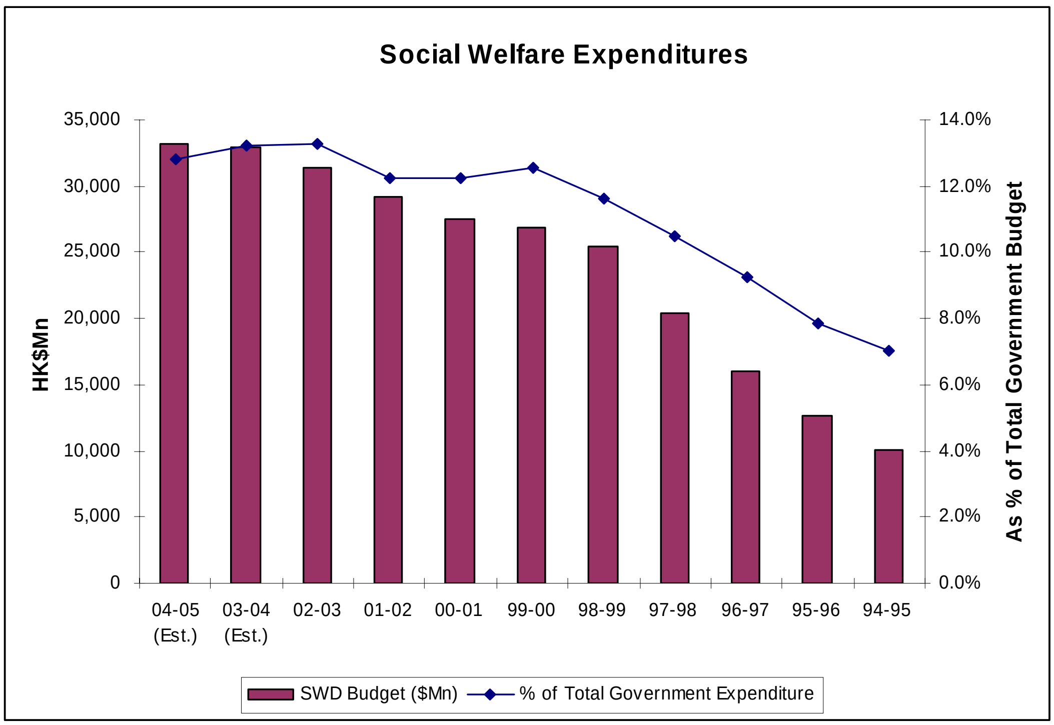
12 Higher disability is distinguished from normal disability by the level of constant attendance the individual needs.

Mainland. As these concerns are addressed, and as the aging population increases, the rate of emigration could increase substantially.

Social welfare expenditure increases

The rapid growth in CSSA caseload and expenditure may be explained by an ageing population, increased public awareness of the scheme mainly due to enhanced publicity and accessibility, changes in Hong Kong people's attitude towards social security benefits, and the increasing attractiveness of the benefit levels vis-à-vis a relatively slow growth in wages over the past few years that has served to discourage able bodied workers (Figure 3: Social Welfare Expenditures as Percentage of Total Government Budget).

Figure 3 Hong Kong's social welfare expenditure as share of budget



Source: Social Welfare Department, Hong Kong

Total social welfare spending by the Government is estimated to be 14.6 per cent of government budget in 2005/06 compared with 7 per cent in 1994/1995. Absolute spending on public assistance in terms of CSSA has increased by over 5 times in the same period. Although there are worries about the growing spending there is little discussion about reducing the budget. Instead, in dealing with the increased demand for social welfare services, the Hong Kong government has focused on reforms towards cost effectiveness, such as privatization of non statutory services and increasing subvention to NGOs.

4.4 How are MPF funds managed?

As at the end of December 2005, HK$151.4bn (U$19.5bn) have been accumulated in MPF. Under the existing legislation, MPF contributions are invested in MPFA approved schemes provided by banks, insurance companies, fund managers and trust companies. It is the employer who chooses the MPF scheme in which to enroll his employees. Although the employer may choose to consult his employees, he is not obliged to do so. Each scheme has on average 5-7 fund choices but can have as few as two or as many as 29 fund choices according to Watson Wyatt MPF Watch Survey.

There are three main types of MPF schemes: Master trust schemes, Employer sponsored schemes, and industry schemes.

Scheme types

Master trust schemes are most suitable for small and medium-sized companies. Membership in these schemes is open to employees of more than one employer, self-employed persons and persons with accrued benefits transferred from other schemes. By pooling together contributions of small employer units, master trust schemes can enjoy a high degree of efficiency in terms of scheme administration and investment, resulting in economies of scale.

Employer-sponsored schemes are usually established by large corporations. Membership in these schemes is limited to the employees of the sponsor company and its associated companies only. With such limitation in membership, it is only cost-effective to run an employer-sponsored scheme if the number of employees is large enough.

Industry schemes are specially established for employees of the catering and construction industries where there is high labor mobility. An employee who is a member of an industry scheme does not need to change schemes if he or she changes employment within the two industries, so long as his or her previous and new employers are participating in the same industry scheme.

As at 31 December 2005, the total number of all MPF schemes amounted to 46, of which 42 are Master trust schemes. (See Appendix Table 10A.)

Investment guidelines

The trustee and the investment manager have the responsibility of making decisions regarding investment of the scheme's money. In doing so, they are bound by the duties and powers in the law, the investment mandate of the fund and the rules for permissible investments set out in the regulations.

The funds of an MPF scheme may generally be invested in all fully paid-up shares listed on approved stock exchanges, debt securities and convertible debt securities that meet credit rating or listing requirements, and to a limited extent, listed warrants and certain financial derivatives. The funds may also, within limits, engage in security lending and repos (repurchase agreements) and hedging through certain financial derivatives. In this sense, various MPF funds are able to take advantage of the characteristics of different asset classes to optimize their risk and return ratio.

Although the choice of funds available in an MPF scheme are generally determined by the fund provider, every MPF scheme is required to offer members a 'capital preservation fund' or CPF, which is restricted to investing in bank deposits and high grade debt securities. Fund providers would not be allowed to charge administrative fees where the monthly return on the CPF is less than the current bank savings rate. This will ensure that fees on CPF are charged where the rate of return is in excess of a prescribed bank savings rate.

Investment regulations

At least 30 per cent of scheme assets must be denominated in Hong Kong dollars. For an employer-sponsored scheme, it may not have more than 10 per cent of its assets in shares or other securities of, or issued by, the participating employer or its associates. Furthermore, for diversification purposes, not more than 10 per cent of fund assets may be invested in securities issued by any single entity. Not more than 5 per cent of fund assets may be invested in warrants, which are commonly regarded as higher-risk securities. While derivative instruments can be acquired for hedging purposes, they must not be used to leverage the funds.

4.5 Comparative maturity of Hong Kong's capital market and its ability to support a pension industry

Equity market conditions

Hong Kong's securities market is well developed and is the second largest in Asia after Tokyo with market capitalization of U$895bn at the end of June 2005. The Hong Kong Stock Exchange, is diversified with a range of products including equity, currency and interest rate derivatives, Exchange Traded Funds (ETF), and fixed income products. The total number of listed companies was 901 at the end of June 2005 which included 75 H shares and 84 Red Chips.

Hong Kong's securities market has been increasingly internationalized. There has been a continued rise in the participation of international investors in the market. Many of the initial public offerings through the Stock Exchange are also made globally. The majority of these issuers have global operations, and their issues are almost invariably accompanied by global fund raising. A Stock Exchange survey indicated that trading by overseas investors, mostly institutions, accounted for about one third of market trading in value terms during the 12-month period from October 2003 to September 2004 the total turnover in 2003. Besides adding liquidity to the market, the presence of international investors also encourages continuous improvement in technological platforms and in corporate governance standards.

In addition to the main board, Hong Kong also launched a minor board, the Growth Enterprise Market (GEM) in November 1999 for smaller, high growth companies. Although the rise and fall of the dotcom era has weakened its impact, GEM still plays a role in broadening Hong Kong's securities market (Appendix Table 6, Stock market statistics).

Fixed income

Hong Kong's bond market has made substantial progress since the Asia financial crisis. At the end of 2004, the bond market accounted for U$78bn, or 40 per cent of GDP. The Hong Kong Monetary Authority has played the lead role in developing Hong Kong's bond infrastructure, which now includes a government yield curve out to a maturity of 10 years, a real time electronic book entry settlement system for government and corporate bonds, and a mechanism to provide repo and reverse repo facilities to primary dealers.

Over the past year, Hong Kong authorities have introduced a number of measures to foster the development of the local debt market. These included improving the debt securities clearing infrastructure, promoting Hong Kong Monetary Authority issued Exchange Fund Notes in the retail market, expanding the profits tax concession scheme, and streamlining regulations on issuing and listing debt securities. One major issue still on the agenda is the very low retail participation in the fixed income market, which authorities plan to address with plans to allow investors to buy bonds through automated teller machines, the internet and over the telephone. Currently, compared to the equity capital market, Hong Kong's debt capital market still lacks depth in the sense that there is little liquidity along the yield curve beyond the 3-5 year term.

Derivatives market

While more than 10 derivative products are traded on the Hong Kong Exchange, the most actively traded are the Hang Seng Index Futures. These instruments along with the One and Three Month HIBOR Futures and Three Year Exchange Fund Note Futures provide part of the necessary tools for portfolio restructuring and hedging.

Fund management industry

Hong Kong is widely recognized as the leading fund management centre in Asia with the largest concentration of fund managers. The industry is characterized by its international and offshore nature. According to the Fund Management Activities Survey (227 respondents) for the year end December 2004 conducted by the Securities and Futures Commission, the aggregate assets in the fund management industry amounted to HK$3,618 billion (US$465.6

billion) at the end of 2004. Of this total, about 60 per cent of funds were sourced from overseas investors and managed outside Hong Kong.

At the end of 2004 there were 1,933 authorised unit trusts and mutual funds in Hong Kong with a total of U$551bn worth of assets under management. During 2004, growth was recorded in specialised funds in which 2 exchange traded funds as well as 5 hedge funds were authorised. By the end of 2004, there were 5 exchanged traded funds and 13 hedge funds.

Over the medium to longer run, Hong Kong's fund industry will also be boosted by the implementation of the MPF scheme which is expected to bring about an increase of U$3 to 3.5bn per year into the industry and will continue doing so for the next 30 years.

However, despite the competitive environment that the retail funds industry operates in, front end and back end and management fees are still high. According to the Hong Kong Investment Funds Association, bond funds commonly charge management fees ranging from 0.5 – 1.5 per cent with front end fees of 3 – 5 per cent, while equity funds may charge management fees ranging from 1.0 - 2.0 per cent with front end fees of 5.0 – 6.0 per cent. It should be noted that the MPF funds do not generally charge front end or back end loads.

4.6 Supervision, regulation and governance of MPF

The Mandatory Provident Fund Schemes Authority (MPFA) was established to supervise, regulate and govern the MPF system. To ensure that the interests of scheme members are adequately and properly protected, the MPFA has a comprehensive approval and monitoring system, which includes:

Approval and registration criteria for service providers

Only companies and individuals that meet the criteria on capital adequacy, financial soundness, fitness and propriety as well as internal control standards can become approved trustees and fund managers. Trustees are responsible for appointing fund managers and other service providers, and ensure their compliance with the requirements, standards and guidelines of MPF. All MPF schemes must be managed under trust arrangements and governed by the law of Hong Kong. Scheme assets are held separate from the assets of trustees and other service providers.

On-going monitoring

The MPFA is empowered to regulate and monitor the operation of the MPF System and MPF trustees' compliance with statutory requirements. Trustees are required to submit returns, financial statements and internal control reports on a regular basis. The MPFA may also conduct field inspections to ensure trustees comply with requirements and enable early detection of deficiencies.

The MPFA will investigate cases of suspected non-compliance with requirements. For minor cases, the MPFA may issue warnings or impose financial penalties, and order the trustee to take remedial actions. For more serious cases, the MPFA may require a special audit to be conducted on the trustee. During the investigation, the MPFA may suspend the trustee from administration of an MPF scheme, and appoint another trustee to administer the scheme on a temporary basis. Depending on the results of the investigation, the MPFA may revoke the approval of the trustee and terminate the trustee's administration of the scheme, as well as take prosecution action for serious non-compliance with regulations.

Professional indemnity insurance

To provide scheme members with additional layers of protection, trustees are required to take out adequate insurance to indemnify scheme members for any losses of scheme assets caused by misfeasance or misconduct of the trustees or their service providers.

Compensation fund

There is also a statutory Compensation Fund set up under the MPFSO to compensate scheme members should the indemnity insurance not fully cover those losses. The Government had injected HK$600 million as the seed money of the Compensation Fund. When in need, the MPFA may apply to the court to use the Fund. As at 31 March 2005, the Fund had grown to HK$853 million (US$109 million).

Role of employers and trustees

Employers are responsible for deducting contributions from employees and remitting these contributions along with their own to the chosen trustee. The trustees are responsible for appointing investment managers, and other service providers, and for ensuring their compliance with MPF guidelines. Trustees therefore play an important role in safeguarding MPF assets. The trustee has the duty to monitor the performance of those service providers in order to fulfill its fiduciary duties with respect to the scheme. The duties of the trustee as specified by MPF legislation include:

- To secure scheme registration
- To ensure maintenance of adequate capital and professional indemnity insurance
- To maintain investment policy statements, control objectives and internal control procedures
- To ensure that the funds of the scheme are invested in different investments so as to minimize investment risks
- To act in the interest of scheme members and in accordance with the governing rules of the scheme
- To provide information to scheme members
- To receive contributions, verify mandatory contribution calculations and chase default contributions
- To process transfer and payment requests
- To keep proper accounting records and a members' register
- To prepare and lodge annual audited financial statements, scheme reports and investment reports of MPF schemes with the MPFA

5. China's Unified Pension System Pillar II

5.1 Historical development of China's pension system

Until the late 1980s, the state, via its state-owned enterprises, was responsible for providing generous pension benefits of about 80 per cent of final salary in addition to housing and transport subsidies. However, that pension program was a completely unfunded pay-as-you-go system based on current workers paying for previous generations. The system worked for as long as it did because China's dependency ratio was favorable and SOE's were financed by the state government.

China's demography indicates that as the ratio of retirees to active workers begins to deteriorate more rapidly, pension obligations, no matter who has to pay for them, will become extremely high. Also, the fundamental structure of the economy continues to shift from one that is dominated by the state sector to one where the private is generating an increasingly larger share. The government therefore recognized that in order to finance the pension responsibility, the pension system should be reformed.

China's unified pension system reform, introduced by the State Council in July 1997 with Document 26, *Decision of the State Council on Establishment of Unified Basic Old Age Insurance System for Enterprise Staff and Workers,* proposed to deal with the situation by moving the country towards a three pillar system, where the state, employers and employees would share the pension responsibility.

The biggest challenge for provinces in implementing Document 26 was making financial provisions for the existing pension debt. In addition, demographic differences between the provinces made the burden of the system uneven. Provinces with heavy concentration of SOEs that were undergoing market reform could not meet the benefit payments under social pooling. Also, permitting early retirement of SOE workers hid the unemployment problem but added an extra burden to pension obligations.

To address the challenges of implementing Document 26, the State Council issued Document 42, *The Pilot Program for Improving Urban Social Security System,* in December 2000 which included piloting the new directives in Liaoning Province.

5.2 Description of the current Unified Pension or 'three pillar' System

China current pension system which was implemented at the beginning of 1999 reflect the rules set out by Document 26, *Decision of the State Council on Establishment of Unified Basic Old Age Insurance System for Enterprise Staff and Workers.* They are broadly in line with World Bank recommendation and aim to move the pay-as-you-go system to a system constructed on the three pillar model.

Coverage

All urban employees and self employed, estimated to be approximately 180 million people, are meant to be covered under this system, but currently 116 million people are actually covered.

Contributions

Employer contributions to Pillar I are between 15 per cent to 17 per cent of employee's wages, depending on the city or province. Maximum and minimum contributions are set at 300 per cent and 60 per cent of average provincial wages. Employer contributions to Pillar II are between 3 per cent to 5 per cent of employee wages, and employee contributions to this pillar are 6 per cent to 8 per cent of wages for a total of 11 per cent.

Benefits

Workers who perform 15 years or more of consecutive service after the implementation of Document 26 will qualify for a monthly basic pension from Pillar I of 20 per cent of the average monthly wages of the city or province in which he was employed, plus a monthly pension based on the amount accumulated in their individual account divided by 120. Those with less than 15 years of service will not be eligible for this Pillar I pension, but will receive the savings accumulated in their individual accounts as a lump sum.

Total benefits will therefore be a combination of a subsistence level defined benefit, a mandatory individual account benefit based on defined contributions, and a possible supplementary pension to which both workers and companies may contribute on a voluntary basis. The system is meant to provide a predictable source of income to the retiree, insuring participants against market risk as well as longevity risk.

Tax treatment

Mandatory pension contributions, and for the most part voluntary as well, are exempt from taxes but benefits are taxed according to the personal income tax rate at the time of disbursement. Contributions and benefits for Pillar II are as shown in Appendix Table 3, Summary of individual account systems.

Document 26 directives intended for the unified system to be administered at the provincial level so that each province would be responsible for collecting the contributions, managing the contributions, and paying the benefits. However, less than three years following the implementation of Document 26 the central government realized that most provinces – especially those with heavy concentrations of state-owned enterprises - were simply unable to bear the financial burden of meeting their pension costs.

Liaoning Experiment

In July 2001, the government began piloting Document 42 in Liaoning, a province with 42 million people in the northeast, which is home to one tenth of the country's large and mid-sized state-owned enterprises (SOEs). Liaoning represents an extreme case of the pension reform problems faced by all provinces as the country move towards a market economy.

Based on Document 42, the existing pension obligations and benefits were amended. Accordingly, employer contributions were increased to 19 per cent to 27 per cent of the employee's wages depending of city or province in which it operates, and all the contributions went to funding Pillar I. Benefits at retirement from Pillar I were increased to 30 per cent of average city or provincial wages at the time of retirement. Employee contributions of 8 per cent of wages accumulated in individual accounts, and benefits from this pillar is estimated to be 28 per cent of wages at time of retirement[13] (Appendix Table 11, Summary of contributions and benefits based on Document 42).

Liaoning is required to report its experience to the central government and will serve as a reference for building a new social security system in the rest of the country. The Liaoning Experiment is planned to be repeated in Jilin and Heilongjiang provinces commencing in the latter half of 2004. If these experiments are successful in the sense that contributions to the individual accounts are managed in segregated accounts, they would be a great boost to the confidence and determination of the central government to implement Document 42 nationwide.

Under the reforms, retirees no longer get their pensions from their former enterprises. Instead, their pensions are paid by the city or province regardless of whether the SOE that employed them can afford to or not. A large part of the funding shortage will be met by the central government through the National Social Security Fund during the three-year period of the experiment.

Enterprise Annuities

State Council Document 42 also introduced the rules for a voluntary Enterprise Annuities (EA). The MOLSS has recently released Trial Measures for Enterprise Annuities that sets the preliminary guidelines for establishing and managing EAs.

According to the Document, EA is a defined contribution with funded, individual accounts. Both employers and employees can contribute to the fund, but employees are not required to do so. Contributions by the employer are expected to be tax deductible up to 4 per cent. Distributions will be taxed on employer contributions and investment earnings.

The Ministry of Labor and Social Security as well as influential industry bodies are keen on promoting this Pillar III for various reasons. MOLSS's goal is to see enterprise pensions providing for 30 per cent of a retiree's cash flow. Contrary to the redistribution concept of

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13 The 28 per cent replacement rate is based on assumptions of 35 years service, and investment returns equal to rate of wage increase. Lump sum after 35 years is divided by 120 to get monthly pension.

Pillar I which subsidizes lower wages earners with higher wages earners, Pillar III rewards higher wage earners with subsidy via tax exempt contributions. EA is also an opportunity to bring replacement rate back up to the 80 per cent level that it was pre-reform.

But most importantly, by promoting and supporting the development of Pillar III, the government is evermore shifting the responsibility for retirement towards individuals and employers. And in doing so, the risk of a collapse in retirement social security is reduced in the event that Pillar I or even Pillar II collapses.

Rural Pension

Following studies of social insurance conditions and needs in the rural areas in 1986, the Ministry of Civil Affairs decided to initiate pension reform as the first step toward providing rural social security. The MCA introduced a voluntary pension insurance scheme in 1991, which has been tried on an experimental basis in over 2,000 counties since 1993. The MOLSS took over the administration of this scheme after it was created in 1998 to oversee the country's social security policy formulation and implementation. According to the MOLSS, at the end of 2003 there were about 5.4 million participants in the scheme.

5.3 China's public policy on non-contributory social security safety nets

When the Communist Party of China (CPC) came to power in 1949, it sought to create an equal, classless society by confiscating the assets of capitalist and landlords, and providing for the needs of its citizens through a comprehensive social security system. To deal with the disparity between standard of living of rural and urban population when it came into power, the CPC implemented a household registration system to prevent the large rural and mainly poor population from moving to wealthier urban areas. Since then, separate social security policies have been implemented in rural and urban areas.

To the extent that social insurance is in place, it is only in urban areas. As for non-contributory social welfare or safety net, that too is focused on urban dwellers. Policy directions from the past two National People's Congresses have clearly been to build social security in cities.

Rural social security

Around 70 per cent of China's population live in rural areas and, due to migration of the young workforce towards urban opportunities, an increasingly higher percentage of those in rural areas are elderly. The tradition of reliance on the extended family for financial security in old age has held up fairly strongly in rural China so the basic social welfare system the government has in place has not yet been stretched. The assistance that the Ministry of Civil Affairs (MCA) does offer are targeted towards the elderly, orphans, the very poor living in remote provinces, and former military personnel.

One of the better known assistance programs administered by the MCA is the 'five guarantees' provided to orphans, the disabled and elderly with no family and no earning power. The benefits of the 'five guarantees' include food, shelter, medical care, burial for the elderly, and education for orphans. For 2003, this assistance amounted to just under RMB900 per person. About 5 per cent of rural elderly are covered by this system.

The MCA also administers the Minimum Living Allowance program ('di bao') predominately targeted towards the very poor living in villages in central and western provinces, as well as an assistance program for former military personnel and disabled veterans who resettle back in rural areas.

Old age sanitariums set up by the MCA in rural areas are becoming increasingly common. The number of people in need of this basic welfare is expected to increase rapidly in coming years as the one child policy takes effect and this is part of the reason the MCA has taken initiative for the voluntary pension contributions which was briefly discussed above.

Urban social security

For the decades after 1949, the government, first through the All China Federation of Trade Unions and, after the Cultural Revolution, through the State Owned Enterprises provided for social insurance from their own funds. This insurance included all cases of incapacity, old age, accidents, illness, death, and maternal care. However, since 1978 when the country set its course on reform towards a market economy, the SOEs have not been able to sustain this social security burden.

For urban former SOE employers, they will continue to depend on social insurance and collect pension if the SOE is still in existence and is able to make payments. For those who are not covered by social insurance, social welfare is provided by MCA.

As the government carried out its decision to reform the economic structure in 1997 following the 15th Party Congress, many SOEs were shut down and unemployment soared. The Chinese government adopted a "two guarantees" policy administered through Ministry of Labour and Social Security (MOLSS) for urban workers who have been affected by restructuring of the state owned enterprises.

The first is a guarantee of the basic livelihood of a laid-off worker by giving him an allowance for basic living expenses with the funds coming predominately from the government budget. Second, reemployment centers were set up to provide reemployment guidance. If they have not found jobs after three years, they would be considered unemployed and would receive unemployment insurance for two years. At the end of the two-year period, if they still haven't been reemployed, they can apply for the means tested subsistence allowance provided by the Ministry of Civil Affairs under the Minimum Living Allowance scheme.

While the MCA administers the Minimum Living Allowance in urban and rural areas beneficiaries are predominately urban residents. As at end of 2003, 22.5 million urban residents were receiving the Minimum Living Allowance. The number of rural residents receiving Minimum Living Allowance is still low at 3.6 million as the system has not been implemented into many rural districts (Appendix Table 12: Ministry of Civil Affairs Minimum Living Allowance Scheme expenditures and coverage).

5.4 How are individual account funds managed?

Under provisions of the State Council, all of the accumulated pension assets in the mandatory accounts are managed at a provincial level. Contributions for Pillars I and II are managed by the same provincial organization but recorded in separate accounts, and investment options for both Pillars are limited to bank deposits or domestic treasury bonds.

This may be the safest guard against capital losses, but these investments do not offer protection against inflation.

Pillar I is currently accepted as a PAYG system, but one that the government would eventually like plan to have funded. It is the intention of the State Council to build fully funded Pillar II mandatory individual accounts but the reality is that many provinces have used Pillar II assets to cover shortfalls in Pillar I. Currently, there may be a total of approximately U$15bn in Pillar I and Pillar II accounts combined. But these funds are presumably invested in cash as they represent the required reserves equal to two months of Pillar I obligations[14].

Investment of Pillar II assets

One most significant point of Document 42 is the mandatory full funding of Pillar II individual account, and the management of individual accounts to be segregated from the administration of PAYG system. These new points have been successfully implemented in Liaoning Province in so far as the individual contributions are going into individual accounts and these accounts are managed separately from Pillar I funds. However, given the current regulatory constraints that limit Pillar II funds to government bonds and bank deposits, fully funding this pillar is actuarially impossible. That is, contributions invested in the current permissible assets cannot beat inflation. Also, the pension to be paid at retirement is calculated based on the assumption of a 120-month or 10-year post retirement longevity, which is not rational given the retirement age for women is 55 and for men is 60 (in practice, some organization encourage female employees to retire at 40 and male employees to retire at 50 years old), and the average life expectancy is about 72 years.

The Liaoning Experiment is expected to be extended to two other northeast provinces, Jilin and Heilongjiang, starting July 2004. Their success will likely lead to Document 42 being implemented in other regions, or possibly nationwide.

14 The provinces are expected to have Pillar I "funded" to the extent of at least two months pension payments – some provinces have more than this.

Pillar III Enterprise Annuities[15]

State Council Document 42 also introduced the concept of a voluntary Enterprise Annuity (EA) as the approach to financing Pillar III. EA has already been implemented by organizations in Liaoning Province. Pursuant to Document 42, the Ministry of Labor and Social Security has recently announced Trial Measures for Enterprise Annuities to commence nationwide on May 01 2004. This document sets out the regulatory environment under which EA should be established. The matter of tax exemption on contributions and benefits has also not been mentioned but tax exemption of up to 4 per cent of payroll is expected to be adopted as an incentive to corporations to set up these schemes.

Enterprise Annuity is a defined contribution system with funded, individual accounts. Both employers and employees can make voluntary contributions to the fund, but employees are not required to do so.

The Pillar III Enterprise Annuity are recognized as having the best chance to have the regulatory freedom to invest in meaningful financial products that can earn returns commensurate with long term market growth. The latest rules setting out the basic parameters for enterprise pension investment as follows:

- up to 30 per cent of assets can be invested in equities and insurance products, and funds, with stock investments limited to 20 per cent of assets
- no less than 20 per cent of assets can be placed in liquid investments such as demand deposits, central bank bills, short term repurchase agreements and money-market funds
- no more than 50 per cent of assets can be invested in fixed income securities, but at least 20 per cent much be maintained in government treasury bonds.

In order to earn the returns to provide for an acceptable replacement rate to retirees (30 per cent), funds necessarily have to be invested in higher risk/return assets classes. Allowing enterprise annuity assets to be invested in equities, the first departure from guaranteed nominal returns of bank deposits and government bonds, is certainly a major step forward. With the latest change, enterprise annuity assets will gain diversification from investments

15 As voluntary contributions from employees are not required, EA can also be seen as part of Pillar II, where the retirement benefit is funded by the employer.

into three asset classes - money market, fixed income, and equities. Including other asset classes such as real estate and direct investments is unrealistic as those markets have even less liquidity and transparency. The most viable options for further investment diversification will most probably come from new products such as Exchange Traded Funds (ETF) or derivatives for purpose of hedging portfolio risk.

The 1st batch of approved EA participants include 5 trustee companies, 11 administrators, 6 custodian banks, and 15 funds management companies.

5.5 Comparative maturity of China's capital market and its ability to support a pension industry

Equity market conditions

China's stock market is currently the third largest in Asia following Japan and Hong Kong, with 1,261 listed companies listed in Shenzhen and Shanghai and U$458tn market capitalization as at the end of 2003. A second board was launched in June this year in Shenzhen to list small cap companies.

Despite its size as the third largest in Asia, China's stock market is still immature with poor disclosure of information, over-speculative activities, strong policy influences, and scarcity of products, all of which help push prices to over 40 times earnings on average. However, China's entry into WTO has prompted a new phase of stock market reform.

China has committed to allowing joint venture securities houses and fund managers to operate in the country as part of the WTO agreement. Another major step forward is permitting foreign investors to invest in the domestic market, including A shares, government bonds and corporate bonds, through the Qualified Foreign Institutional Investor (QFII) system. So far 13 foreign institutions have been approved to invest close to U$2.0bn into the China market.

While benefits of that these new steps towards liberalizing the securities market are indisputable, there will also be an impact in terms of stiffer competition for local securities houses and perhaps increased volatility in the stock market.

The China Securities Regulatory Commission, the securities industry regulator, is therefore set to play a balancing act, to press ahead with stock market reform on the one hand, and to control the pace of reform on the other.

In line with further reform to deepen the market, the following are just some of the developments to look out for over the coming few years:

- unification of the two A-share markets
- merger of A shares and B shares
- establishment of a financial futures market
- liberalization of pension and insurance investments
- rapid growth of open-ended funds

Fixed Income Market

Like its equity market, China's fixed income market is one of the largest in Asia in absolute value, but still small as percentage of GDP. The bond market is dominated by government issues which are distributed through commercial banks and policy banks, as well as brokerages. Individual investors hold about 60 per cent of these issues. As a result of a deliberate policy to channel investor savings into T-bills rather than enterprise bonds, corporate debt issues are still limited. Limited progress has been made on opening up a secondary debt market.

Based on 2002 data, the size of the PRC domestic bond market was about U$412bn, consisting of T-bonds (U$200bn), Financial Institutions bonds (U$201bn), and Enterprise bonds (U$10bn). About two thirds of the bonds are traded through the inter-bank market, with the other one third trading on the Shanghai Stock Exchange and Shenzhen Stock Exchange. Although the bond market is large in absolute amount, at 33 per cent of GDP, it is still at an early stage of development in terms of regulatory framework, market infrastructure and efficiency.

Several initiatives are now underway to modernize government bond markets in the PRC. Reforms include the following areas: (i) issuance and distribution, (ii) market integration, (iii) expanding investor based and strengthening bond market intermediaries, (iv) creation of interest rate benchmarks, (v) clearing and settlements, and (vi) debt management strategy. Several technical assistance programs funded by the World Bank and ADB assist these initiatives.

Since October 2003, Chinese domestic securities companies have been allowed to issue corporate bonds to the general public through listing on the Shenzhen or Shanghai exchange, or to qualified institutional investors via private placements.

Investment Funds Industry

The fund management industry started after the promulgation of the Investment Law in 1997. The government hopes that fund managers along with other financial institutions will bring long term stability to the volatile equity markets and foster improved corporate governance. The fund management industry is also seen as a means of channelling China's vast savings pools, estimated at U$1.3tn, via institutional funds into capital markets.

From initially five in 1998, there are currently close to 50 licensed fund management companies in China, mostly operating in Shenzhen and Shanghai, with some in Beijing and Guangzhou respectively. These fund management firms managed about 125 investment funds in China, which included 54 closed-end funds and 71 open-end funds. The total assets under management in these funds are still small at RMB240bn (U$29bn) and are still used as punting vehicles by many investors, but the industry is growing rapidly.

QFII

The roughly U$2.0bn approved inflow is small in comparison to the overall capitalization of the two exchanges in China. But QFII approval is expected to continue and will have an increasing influence on market depth. International demand for Chinese securities will increase the capacity of the local market to absorb a wider range of instruments and create an outside source of pressure for market efficiency in terms of corporate governance and infrastructure development.

Given the current market conditions, regulators necessarily have to take caution in allowing pension assets to be invested outside of bank deposits and treasuries. China's equities and fixed income markets and the fund management industry are emerging and growing. They are far from efficient as is evident in the high multiples and the level of speculation. However, they do provide the basic structure for pension asset investment. Missing are financial futures market and other financial derivative products that can aid portfolio managers in managing the risk of the pension assets under their trust.

5.6 Supervision, regulation and governance of individual account funds

The Ministry of Labour and Social Security (MOLSS) oversees the administration of both the mandatory pooled pension and mandatory individual pension assets. The Ministry on the national level sets and implements policy directions while the provincial and country bureaus and offices are responsible for collection and payment of funds. Document 26 clearly specifies that individual contributions are to be recorded in the individual account and should be kept separately from other assets. However, as discussed above, for the most part, the individual accounts are empty as the assets are inappropriately being used to meet current pooled pension obligations. This is due to lack of a regulatory framework to monitor the asset management and distribution process.

Potential transfer of management of Pillar II

There is currently unconfirmed discussions on possibly transferring the management of individual account assets from Liaoning, where Document 42 was piloted in 2001, and Jilin and Heilongjiang provinces, where Document 46 is expected to be piloted in 2004, to the National Social Security Fund[16]. If this is actually the case, it would most likely set the trend for the remaining 28 provinces, municipalities and autonomous regions to follow suit.

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[16] The State Council established the National Council for Social Security in 2000 to administer the National Social Security Fund. The purpose of the Fund is to cover pensions where local governments fall short. The Fund currently has U$16bn under management.

The asset classes that the NSSF may invest in are broader than bank deposits and government bonds in which mandatory individual account assets are currently invested, and in that sense, a transfer of asset management responsibility to the NSSF would be a major step forward for individual asset investment return prospects.

Regulatory and supervisory framework of NSSF

Given this possibility of the NSSF managing Pillar II individual account assets, we provide some further details on the regulatory environment that the NSSF operates in.

The NSSF board is composed of 15 members appointed by the State Council:

- five government representatives from MOF, MOLSS, and trade union
- five regional representatives
- five representatives from the central government

The board has three committees for investment, risk management, and expert appraisal. NSSF is only permitted to manage bank deposits and primary issues of treasury bonds. It has obtained a special license from the CSRC as a strategic investor and can therefore make direct investment into unlisted shares. It does not have a license to invest in the secondary market, and therefore out sources the management of securities that are traded in the secondary market.

The NSSF currently engages two custodians, Bank of China and Bank of Communications, which provide the payment and settlement operations of investment managers. NSSF rely on daily report from custodian banks on external investment managers' daily investment positions to monitor risk, performance and regulatory compliance. However, there is no system in place to detect erroneous reporting, which is an issue especially due to the lack of experience of domestic banks in the custody business (ADB, 2003).

Outsourcing: manager selection process

NSSF currently engages eight fund managers to manage assets that are invested in equities, corporate bonds and T-bond repo contracts. Investment managers for NSSF funds must be approved by the CSRC based on criteria as set out by the Provisional Methods on the Management of Investment by National Social Security Fund, which includes:

- Must be registered in PRC and approved by the CSRC, and other investment management organizations as approved by the State Council
- Must maintain net assets of RMB50 million
- Have at least two years of operating history, with prudent management and distinguished reputation
- Have appropriate professional investment managers engaged in managing NSSF assets
- Have effective risk control system in place, with independent compliance department

From those fund managers approved by the CSRC for managing NSSF assets, an NSSF selection committee that includes independent experts recommends a list of candidates based on objective criteria as set by the NSSF Council, and via an open, competitive process. The NSSF Council then selects the fund managers based on the committee's recommendations.

The NSSF is developing a comprehensive risk management and performance evaluation framework combined with an on-and-off site monitoring and supervision framework for external fund managers and custodians and has engaged the ADB for further technical assistance on this front (ADB, 2003). This will help NSSF monitor compliance of investment managers in the short run, evaluate and select better investment managers in the medium run, and control volatility on risk-adjusted returns for NSSF in the long run.[17] The government has requested further support from the ADB to strengthen the institutional capability of NSSF by establishing a sound risk management framework supported by an efficient management information system to prudently manage external investment managers and custodians, and to examine the soundness of allocating non-tradable state shares to NSSF.

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[17] According to the ADB TAR: PRC 34096-03, the NSSF investment department monitors day-to-day compliance of investment managers and, jointly with the legal and compliance department, evaluates the performance of investment managers, focusing on overall risk management. The finance and accounting department monitors and evaluates custodian banks' performance.

Although China adopted the Trust Law in 2001, investment funds have not yet been created under trust, and the NSSF is not yet structured as a trust. External investment managers are engaged through contracts rather than through trusts.

6. Impact of individual account pension funds on development of capital markets

Numerous studies have been done by economists to verify the positive link between pension reform and capital market development. Walker and LeFort (2000) synthesized the findings of these studies and discussed the validity of these findings. In this section, we provide an overview of the findings that have been accepted as valid, and relate them to capital market developments in our focus countries – Singapore, Thailand, Hong Kong and China.

Walker and LeFort found that empirical evidence does seem consistent with the claims by pension reform advocates, that pension reform creates demand for new financial instruments that facilitates long term savings and foster capital market development, increases professionalism in the investment management process, and improves transparency and corporate governance.

When significant amounts of funds accumulate, there are natural incentives to creating new financial instruments, including long term instruments. Since most defined contribution schemes include the alternative of purchasing an annuity at the retirement, there will be incentives to creating longer-term instruments and derivatives that help match the maturity structures of assets and liabilities.

Managing increasing volumes of funds justifies increasing levels of specialization and professional, well educated management. This process of specialization and professionalization of pension fund management industry also implies a "spillover effect" onto other related agents such as investment bankers, financial services managers and also regulatory authorities.

The accumulation of relatively large amounts of investable wealth by pension funds puts them in a position to push authorities and the private sector to develop transparent and quality financial instruments in which pension funds can invest. As a result, the required information disclosure by institutions issuing such instruments increases. On corporate governance, the view is that as important minority shareholders, pension fund managers can potentially become important representatives of minority shareholders' interests.

Taking the impact of pension funds on capital markets a step further, fully funded pension systems may lead to decrease in cost of capital. First, due to the overall development of the capital market, the direct costs of issuing securities are likely to be lower, which implies a reduction in cost of capital. Second, the time horizon of pension funds is expected to be longer than that of individuals or firms that buy financial instruments. This means that even if total savings do not increase after pension reform, the average maturity of the financial securities would be lengthened. In other words, the required liquidity premium should be lower. However, this cycle of pension funds improving efficiency of capital markets, which reduces long term cost of capital, which supports long term growth all must start with a large enough portion of pension funds being invested in the local market. Appendix Table 13 shows a summary of governance and investment policies of individual account systems in our focus countries.

Singapore

CPF assets have had little notable affect on the capital market since assets are predominately invested in non marketable government bonds. As the government has consistently run budget surpluses, proceeds of these issuances are handed over to Singapore Government Investment Corporation, which, it is widely believed, invest the funds in overseas markets.

Of the sum that is invested through CPFIS, only S$7bn are invested directed in equity shares and less than S$3bn in unit trusts, together representing just under 2 per cent of Singapore's total stock market capitalization. As such, CPF has not been able to demand structural changes to the capital market.

However, the higher standards set by the CPF Board for selecting quality CPFIS fund managers, revising CPFIS investment guidelines to be consistent with global best practice, and raising disclosure standards of CPFIS unit trusts can theoretically improve the quality of the investment management industry.

In 1998, shortly following the introduction of CPFIS, investment guidelines for CPF unit trusts were revised to give fund managers greater flexibility to diversify investment portfolios and reduce investment risks, in effect, aligning CPF unit trust investment restrictions with global best practices. Disclosure standards for CPFIS unit trusts were also raised so that CPF members are adequately informed of the returns and risks associated with their investments, and can compare the performance charges of different unit trust. This allows members to make better informed decisions. Specifically, a series of risk categories were introduced to help novice investors put together appropriate investment portfolios. Also, procedures for selecting fund managers and unit trusts they offer under CPFIS were established. This increased choice of quality fund managers and products available to members, and gave comfort to members that CPF unit trusts would be supported by prudent quality controls. The CPF Board engaged an independent investment consultant to set up systems to vet prospective managers and unit trusts for inclusion under CPFIS, focusing on their investment skills and experience, and to classify trusts under CPFIS according to their risk/ return profiles (GFIA, 2003).

The main substantive difference between CPFIS unit trusts and non-CPFIS unit trusts is a higher standard of oversight of the manager's skills in managing the former, and the transparency of ongoing performance. Since unit trusts included under CPFIS may also accept non CPF cash investments, CPFIS unit trusts are in effect competing with non CPFIS unit trust for assets. In doing so, it can be assumed that non CPFIS would step up to the level of professionalism and transparency offered by CPFIS unit trusts in order to compete effectively for assets under management.

Thailand

GPF is one of the few institutional investors in the Thai market. But as at the end of 2003, its total assets under management was approximately U$5.5bn which is a small percentage of the country's total market capitalization. Furthermore, the GPF is limited to holding at least 60 per cent of its assets in low risk securities such as government or government guaranteed bonds, and up to 10 per cent in equities. Its influence in the capital market is therefore still limited.

Nevertheless, as one of the few and one of the largest institutional investors in the country, the corporate governance rating system the GPF Board has in place can be an effective tool to guide the corporations in which they invest in the right direction.

Based on interviews with corporate management, the GPF gives annual corporate governance ratings to those companies in which they have either equity or fixed income investment. These companies are rated on a scale of 1 to 4 based on their level of transparency and information disclosure. Those companies that fall below 2.8 are considered uninvestable and will be taken out of the GPF investable universe. The CPF also have an internal Department of Corporate Governance and Compliance which deals with internal and external corporate governance issues including coordinating proxy voting.

While its size is small relative to the total market, given the low free float of Thai companies, the GPF can possibly make a noticeable difference as an active minority shareholder through the corporate governance rating system as well as through its active proxy voting. The GPF has also formed an institutional alliance with the Social Security Office which manages the mandatory defined benefits contributions for private sector employees, asset management firms, life insurance firms and the SEC to focus on the corporate governance issues. This alliance brings together the largest institutional investors in the country and if it is actively coordinate would clearly have a positive impact on capital market developments.

Hong Kong

Since 1993, savings from ORSO, the Occupational Retirement Scheme Ordinance, have provide a strong institutional base of retirement savings funds for investment managers and have created an incentive for managers to develop a range of institutional, private client and retail products and services. The growth of MPF assets, expected to be at U$3bn to U$3.5bn per year for the next 30-40 years can have even deeper effects given the substantial pool of assets that will accumulate once the system matures.

In anticipation of the decumulation phase of MPF, the Hong Kong Investment Funds Association is recommending the development of an annuities market to give members a choice of buying an annuity instead of receiving a lump sum payout at retirement (Gadbury, 2003). This concept of MPF balances being paid as a monthly retirement income rather than a lump sum represents opportunities for the investment industry to develop annuities products. Currently, the annuity market in Hong Kong is not well developed partly because there are no pools of retirement assets that need to be converted into an income stream and partly because a reliable long term yield curve based on which they can be priced does not exist. The handful of annuity type products that are offered in Hong Kong are priced off of the US dollar yield curve which is sensible only as long as the Hong Kong – US dollar peg continues.

Since annuity products are priced based on the post retirement lifespan of an investor – approximately 20 years in Hong Kong's case – and the yield curve for that term, they can theoretically be expected to create a demand-pull for further development of Hong Kong's bond market so that there is liquidity along the yield curve out to 20 years.

The latest regulations have placed emphasis on the transparency of information available to investors. The regulation having a major impact on companies in Hong Kong has been the compliance with new accounting and disclosure requirements for employee benefits in accordance with SSAP34. In addition, the MPFA's Code on Disclosure for MPF Investment Funds, which was issued on 30 June 2004, introduces new standards on the disclosure of information on MPF Investment funds for MPF trustees and service providers to comply.

The new disclosure regime set out in the Code focuses on providing clear and useful information on MPF funds to help scheme members make informed investment decisions. The requirements of the Code are being implemented in phases. Scheme members are to be provided with a fee table using standard terminology and format in all offering documents, at least two fund fact sheets a year on the details of the MPF funds, minimum content such as fund expense ratio, and on-going cost illustrations showing fees and charges.

In the long run, whilst higher levels of information disclosure may involve higher fund administrative costs, the objective is that fees and charges will be kept in check by improved transparency. But to the extent that they are implemented, they will have a spillover effect on the investment fund industry, leading to improved disclosures for non MPF investment products, especially those for the retail market.

Also, MPF has brought to focus the concept of retirement savings and the risks of not being adequately protected to many individuals who may not have paid much attention previously. The increased awareness to the need for retirement protection is expected to lead to further voluntary long term savings in the form of additional MPF contributions, independent equities investments, or supplemental insurance protection, all of which play a role in further deepening the market.

China

China's capital market in general and the pension asset management industry in particular are currently developing rapidly and in tandem. Foreign institutions' entry into the China market after the country's accession to the WTO is increasing competition and raising standards of operation to international levels in the financial services industry. Local companies are therefore rapidly reinventing themselves in order to compete effectively.

But the anticipation of reform and the actual reform in the pension sector is undoubtedly also creating the demand for improvements in certain areas of the market such as fund management services, corporate governance, and human resource development. In this respect, it is actually the Pillar III voluntary individual account, or enterprise annuity, assets that are creating the demand for change. Pillar II mandatory individual account assets are still under the administration of the MOLSS. At this point, the most obvious impact that enterprise annuity will have on the capital market is in the way it increases the competitive landscape and force companies to upgrade their level of professionalism in the pension service industry. In doing so, they are raising the level of professionalism in the financial services industry as a whole.

The provisional regulations issued by the Ministry of Labour and Social Security to serve as guidelines for enterprise annuity permits up to 30 per cent of assets to be invested in stocks and equity instruments, up to 50 per cent in fixed income, and at least 20 per cent in liquid investments[18]. These guidelines also specify that enterprise annuity assets must be set up under trust and can be managed by fund management companies, the fund management

[18] Ministry of Labour and Social Security Documents 20 *Trial Measures for Enterprise Annuities*, and Document 23 *Trial Measures for the Management of Enterprise Annuity Funds.*

subsidiary of securities companies or insurance companies, and trust companies. This opens the competition to a very large number of potentials.

Pension service providers must be approved by the relevant regulatory body that oversees their respective financial sector and the MOLSS[19]. . Given the qualitative requirements , such as 'sound corporate governance structure' or 'staff who are qualified to engage in the enterprise annuity funds business', companies are putting efforts towards elevating their internal corporate governance and professionalism through joint ventures, strategic partnerships, or including foreign experts on their advisory boards.

19 In addition to the MOLSS this includes China Insurance Regulatory Commission which regulates the insurance industry, China Securities Regulatory Commission which regulates the securities and fund management industry, and China Banking Regulatory Commission which regulates the banking industry.

7. Conclusion: Overall comparison of the four systems

In measuring the effectiveness of the individual mandatory pension systems in Singapore, Thailand, Hong Kong and China, we look to the extent of their coverage of the total workforce, the governance of the system, and the impact of each system on the development of their respective capital markets.

Singapore

All temporary, part-time, and full time employees who are Singaporean citizens and permanent residents are covered under the CPF system. Although foreign workers make up 25 per cent of the Singaporean work force, the assumption is that these workers will return to their homelands for retirement and there is not a need to include them under the CPF system.

The main issue with CPF is the strict control of the CPF Board over the investment and administration of the funds, which limits investment options and leads to lower replacement rates, and also limits CPF's impact on the capital market.

The lack of transparency in the way the government invests CPF balances and the lack of an overall strategic objective of the CPF puts into question whether the system is really in the best interest of members.

Furthermore, highly unequal wage structure, high rate of pre-retirement withdrawals, low returns credited to members, and high transactions costs of investments all contribute to the low balances and low replacement rates of CPF (3, CPF average annual compound growth rate). In the case of Singapore's one-tier system, low replacement rate may become more of a serious problem than anticipated if social attitudes of the younger generations change given there is no pillar I to rely on for subsistence income.

Thus, CPF savings alone may not be enough for retirement, though this depends largely on an individual's retirement lifestyle needs. On the other hand, according to CPF Board, CPF savings are only meant for basic retirement needs. If a member contributes regularly from the time he starts working, by the time he retires he should have enough cash for a life annuity to provide a monthly retirement income of 20 per cent to 40 per cent of his last take-home pay, reserved Medisave for healthcare needs, and paid fully for a property that matches your income. It is assumed that individuals will have private savings and/or family support to supplement his CPF.

Thailand

Coverage of the GPF only extends to 1.2 million civil service employees, about 4 per cent of the country's total labor force of 33.4 million people.

While the appointment of government officials to the 25 member board and the expertise of these officials has come into question, the structure of the GPF Board with nine employee representatives and three outside experts does give the representation to the beneficiaries common in developed countries. There is also an apparent focus on internal and external corporate governance issues as is evident by the subcommittee on corporate governance which is composed of members of the Board. This subcommittee drafts guidelines on internal and external corporate governance, and meets quarterly to review relevant issues. The content of the guidelines include best practices for the GPF Board, the committees, and management; disclosure, audit and transparency practices of the GPF; member rights and equal treatments; and accountability to and participation of beneficiaries.

As with the CPF, GPF investment restrictions also limit the amount of funds that can be invested into the capital market to promote development. Unlike Singapore, Thailand's market has low liquidity and low free float, which also brings into question the prudence of allowing a much higher percent of assets into the local market.

While the Fund of U$5.5bn is small by regional standards and is less than 5 per cent of the total market capitalization, it is the largest institutional investor in the Thai market. Its corporate governance ratings system whereby it rates companies on its transparency and disclosure will have further impact on corporate behavior as the Fund grows in size and as a larger percentage of the Fund is allocated to equities and corporate bonds.

A number of amendments to the currently investment guidelines are being considered by the Board, including investment in oversea markets and to give participants the right to choose their investments.

Hong Kong

MPF is comprehensive in the sense that it includes all workers including the self employed who are not covered by other schemes, with the exception of predominately domestic employees and those who are above 65 or below 18, domestic employees, self-employed hawkers etc..

The regulatory structure of MPF is in accordance with Hong Kong government's traditional laissez faire practice. The primary regulator responsible for the overall administration of the system is the Mandatory Provident Fund Schemes Authority. The MPFA's role is to ensure industry participants' compliance with MPF legislation including ensuring that trustees and other service providers meet their respective professional responsibilities and that persons covered by the MPF system comply with MPF requirements.

The MPF investment guidelines allow for the construction of optimal investment portfolios for investors with various investment horizons. The only major restriction that may put the benefit of members secondary is the rule that requires 30 per cent exposure to Hong Kong dollar. While this will work to the benefit of the local market, it is not necessarily in the best interest of members. However, since currency derivatives are permitted, scheme providers can avoid this restriction by simply hedging foreign currencies exposures back to Hong Kong dollars.

Since its introduction in 2000, the MPF has accumulated HK$151.4bn (U$19.5bn) in assets. With approximately 22 per cent of those assets invested in local equities market, it is still too early to see its effect on Hong Kong's market. It should also be mentioned that MPF was introduced during a deflationary period in Hong Kong and the poor performance of local stock market is believed to have discouraged member choice of Hong Kong equities. Also, allocations to Hong Kong equities in balanced funds in the years since MPF inception were most likely at a lower end of the normal range. Therefore, the allocation of 22 per cent of assets to the local equities market may not be a good indication of levels in the future.

China

Pillar II of the Unified Pension System is meant to cover close to 180 million urban workers but actually covers only 116 million. The larger majority of the rural workers are assumed to be able to maintain a livelihood in retirement with support from their family and the land they cultivate.

According to Document 26, the Ministry of Labour and Social Security is responsible for the administration of Pillar II individual accounts and the Ministry of Finance is responsible for ensuring the security of the account assets.

With regards to the administration of the system, Document 26 stipulates that collection and payment of funds should be separated. In safeguarding the assets, Document 26 requires the entire fund to be used to purchase government bonds and deposits. Investment in other financial undertakings is strictly prohibited. The Document also states that social insurance fund supervisory bodies would be set up and refined, and that local finance and audit departments would be strengthened to ensure the security of the funds. However, empty individual accounts in many provinces across the country indicates that the assets that should have accumulated in individual accounts have been misused, in many instances, to pay for Pillar I obligations.

The government recognized the failures in the current administrative system and has piloted amendments to Document 26 in Liaoning province. The results from the pilot indicate that administrative systems can be successfully implemented to assure the collection and accumulation of assets in the individual accounts. However, it is still unclear whether or how the accumulated assets can be invested outside of government bonds and deposits to keep up with inflation. The main issues that must be considered are: if the assets were to be invested outside of government bonds and deposits, would they be managed on a provincial level or by the central government; would the assets be managed in-house or would they be outsourced; and is the Chinese equity market a prudent investment choice given its volatility and lack of transparency.

The current administrative system of the individual account is obviously not efficient. Even if assets were to accumulate, the current investment restrictions also prevent these funds from being invested in a way that foster capital market development. Fortunately, the government recognizes the shortcomings of the current system and is expected to implement amendments.

Conclusion

In conclusion, the coverage the Singapore and Hong Kong systems are extensive and broadly captures their respective labour forces. In Thailand, while the GPF only covers a small percentage of the workforce, it has successfully provided for the group that it was meant to provide for. China's Unified Pension System currently only covers 116 million out of 180 million urban workforce, but this compliance rate is expected to increase as administration of the system is amended.

In terms of the governance structure of the systems, Singapore's CPF Board efficiently administers the collection and distribution of the Fund, but the government lacks transparency in its handling of CPF assets. This lack of transparency in how CPF assets are invested along with the government's use of the CPF as an economic policy tool also brings into question whether the interest of CPF members is put first. The GPF Board has all the features of a sound governing structure. The only point that calls attention is the appointment of the large number of government officials to the Board. Hong Kong's MPFA set the guidelines and ensure compliance with the guidelines. But the administrative and fiduciary responsibilities fall to employers and financial service providers. This system functions efficiently mainly because Hong Kong is a developed market where the private sector has the expertise to operate with minimal regulatory oversight.

In terms of impact on capital markets, each of these individual account systems is still too new and/or does not have a large enough allocation to corporate issuances to make a difference either by demanding for improved corporate governance practices as an influential minority shareholder or as a source of long term capital. The positive side is that all these systems are evolving, some more speedily than others, to loosen investment restrictions, introduce more asset classes, and move towards greater investor choice rather than less.

Even the Singapore system, the most established system in the region, has been making amendments to provide member choice, and is now studying new ways to provide member choice at lower expenses, which is expected to encourage more members to participate in the market. Thailand's GPF with a six year history is still relatively new. But it has so far put a structure in place that focuses on keeping pace with international best practices and is considering cross border investments as well as investor choice. And given the current state of China's Pillar II system it will most likely go through the most drastic change in the coming years.

8. Appendix Tables

Table 1.

Various schemes under Singapore's CPF system

Retirement Protection	Description
CPF Minimum Sum Scheme	The CPF Minimum Sum can be used to buy a life annuity which provides life-long income, put in an approved bank, or left in a Retirement Account with the CPF Board. The CPF Minimum Sum Scheme (MSS) is meant for individuals to maintain a basic living post retirement. The mandatory CPF Minimum Sum as at 1 July 2005 is S$90,000 but is planned to be increased every year by $4,000 with an adjustment for inflation, until it reaches $120,000 (in today's dollars) in 2013.
Topping-Up of the CPF Minimum Sum	Individuals may top up their parents' or spouse's Retirement Accounts through cash deposits or transfers of CPF savings. Individuals may also top up their own or their grandparents' Retirement Accounts with non-CPF cash. This non-CPF cash top-up is tax exempt up to S$7,000 per year. To qualify for tax relief for cash top-ups for spouses, the spouse must earn $2,000 or less in the preceding year.
Minimum Sum Plus Scheme	The Minimum Sum Plus Scheme (MSPS) allows members to use their CPF savings beyond the Minimum Sum to buy approved life annuities or to deposit the savings with any approved bank.
Healthcare	
Medisave	Medisave can be used to pay for members or their dependants' hospital expenses. Dependants refer to spouse, children, parents and grandparents. It can also be used to buy MediShield for the member and his dependants and to pay for certain outpatient treatment expenses such as Hepatitis B vaccination and renal dialysis. With Medisave, Singaporeans can afford to pay for their basic healthcare as Medisave takes care of medical expenses even during retirement. Members are required to set aside the Medisave Minimum Sum before making CPF withdrawals upon retirement. From 1 July 2005, the current Medisave Minimum Sum of S$27,000 will be adjusted every year, to take into account inflation of healthcare costs.
MediShield	MediShield is a catastrophic medical insurance scheme giving the member and his dependants financial protection against the costs of treatment of prolonged or serious illnesses. Premiums start from as low as $30 yearly. The maximum entry age is 75 years old and the maximum coverage age is 85 years. MediShield has deductible and co-insurance features. MediShield reimbursements are based on the assured amounts and there are also claim limits per policy year and per lifetime. Medisave and/or cash can be used to pay for the part of the bill not covered by MediShield.
MediShield Plus	MediShield Plus is for members who want a higher coverage and is designed to meet a significant portion of the hospital charges.

Home Ownership	The CPF housing schemes have turned Singapore into a nation of homeowners. Today, 9 out of 10 Singapore families own the homes they live in. Under the Public Housing Scheme, members can use CPF funds to buy homes from the Housing & Development Board (HDB) Under the Residential Properties Scheme, members can use CPF funds to buy residential properties in Singapore, built on freehold land or leasehold land with at least 30 years remaining, subject that the remaining lease covers the purchaser until s/he is at least 80 years old.
Family Protection	
Home Protection Scheme	This scheme protects members and their family from losing their homes should the insured member become permanently incapacitated or die before the housing loan is settled. CPF Board will pay the outstanding loan based on the amount insured. All members using CPF savings to pay their housing loan installments under the Public Housing Scheme must be insured.
Dependants' Protection Scheme	The Dependants' Protection Scheme (DPS), an optional term-life insurance scheme, provides members and their families with financial help upon permanent physical/mental incapacitation or death of the insured member. Yearly premiums range from S$36 to S$260, depending on age. Coverage is up to 60 years old with a maximum sum assured of S$46,000.
Asset Enhancement	
CPF Investment Scheme - Ordinary Account (CPFIS-OA)	Participants may choose to invest a defined amount of their CPF Ordinary Account assets into a range of instruments with risk exposures greater than CPF deposits.
CPF Investment Scheme - Special Account (CPFIS-SA)	Participants may choose to invest a defined amount of their CPF Special Account assets into a range of instruments with risk exposures greater than CPF deposits.
Education Scheme	The CPF Education Scheme is a loan scheme which helps members finance their children’s or their own full-time basic tertiary education (degree/diploma courses) at prescribed institutions in Singapore.

Source: CPF

Table 2.

Contribution rates by CPF participants

Age group	Employer's contribution (per cent of salary)	Employee's contribution (per cent of salary)	Total Contribution (per cent of salary)	Ordinary Account	Special Account	Medisave Account
	Based on minimum of S$750 and maximum of S$5,000 per month salary. The maximum contribution rates will be lowered to S$4,500 per month as at 1 Jan 2006.					
35 years & below	13	20	33	22	5	6
Above 35 to 45 years	13	20	33	20	6	7
Above 45 to 50 years	13	20	33	18	7	8
Above 50 to 55 years	11[1] 9	19 18	30 27	15 12	7 7	8 8
Above 55 to 60 years	6	12.5	18.5	10.5	0	8
Above 60 to 65 years	3.5	7.5	11	2.5	0	8.5
Above 65 years	3.5	5	8.5	0	0	8.5

Source: CPF

Note: The first rows refers the contributions from 1 Jan 2005, the second row refers to the rates as at 1 Jan 2006

Table 3.

Summary of individual account systems:

	Singapore Central Provident Fund	Thailand Government Provident Fund	Hong Kong Mandatory Provident Fund	PRC China Unified Pension System (Pillar II)
Coverage	All temporary, part-time, and full time employees who are Singaporean citizens and permanent residents. Self-employed persons in Singapore are required to contribute 6 per cent to Medisave Account, but contributions to the Ordinary Account are not mandatory.	All employees of the Royal Thai Government. Currently includes over 1.2 million	Employees and the self-employed from ages 18 to 65 are required to join an MPF schemes.	All urban employees and self employed
Contribution rates	CPF contribution rates as at Jan 01 2005: Employee Age / Employer Rate / Employee Rate 35 & below 13 per cent 20 per cent Above 35 – 45 13 per cent 20 per cent Above 45 – 50 13 per cent 20 per cent Above 50 – 55 11 per cent 19 per cent Above 55 – 60 6 per cent 12.5 per cent Above 60 – 65 3.5 per cent 7.5 per cent Above 65 3.5 per cent 5 per cent Percentage contributions are based on the minimum and maximum incomes of S$750 and S$5,000, respectively.	The Government and employees each contribute 3 per cent of monthly salary. Member contributions are limited to the lower of Bt300,000 (U$7,300) or 3 per cent of wages per year. An additional contribution of 2 per cent of participant's monthly salary is made by government to each participant to compensate for the reduced defined benefit resulting from the switch from defined benefits system. Contributions and benefits are tax exempt.	Employers and employees both contribute 5 per cent of employee's monthly income. Percentage contribution is subject to the minimum and maximum incomes of HK5,000 and HK20,000, respectively. Employees earning less than HK5,000 are exempt from contributions but their employers have to contribute 5 per cent of their income. Contributions and withdrawals by employees at retirement are tax exempt.	Employers contribute between 3 to 5 per cent of monthly wages. Employees contribute 6-8 per cent of monthly wages. Total contributions equal 11 per cent of monthly wages. Maximum and minimum contributions are set at 300 per cent and 60 per cent, respectively, of average city or provincial wages.

	Contributions and withdrawals are tax exempt. These total contributions are credited to three accounts for the employee: • Ordinary Account, which can be used for retirement, buying a home, buying CPF insurance, investment and education • Special Account, which is reserved for old age and contingencies • Medisave Account, which can be used to pay hospital bills and approved medical insurance.			
Retirement benefits	Benefits can be withdrawn after age 55. Must defer withdrawal of the Minimum Sum of S$90,000 (1 July 2005) until reaching the statutory retirement age of 62. The minimum sum amount will be adjusted until it reaches S$120,000 (in 2003$) in 2013.	Benefits can be withdrawn starting age 50 (statutory retirement age is 60). Benefits are paid in lump sum.	Benefits are withdrawn at retirement age or at 65 for men and women. Benefits are paid in lump- sum.	Benefits are paid as monthly annuity.
Options for investing accumulated contributions	CPF balances are invested in Government bonds. Members could also choose to invest their full ordinary account in : • Fixed deposits • Singapore Government bonds • Statutory Board bonds • Bonds guaranteed by Singapore Government • Deferred annuities • Endowment insurance policies • Investment-linked insurance products	The Civil Service Gratuity and Pension Act stipulates that: • at least 60 per cent of contributions must be invested in low risk instruments such as bank deposits, Thai government bonds and government guaranteed bonds • 40 per cent can be invested in higher risk products such as debentures, convertible debentures and warrants. Investments in equities and	Employees invest in approved schemes selected by their employers. Schemes generally include five to seven investment fund options including a capital preservation fund which is required. Schemes typically include: • Capital preservation fund • 3-4 lifestyle funds such as growth fund and balanced fund	Government bonds and deposits

	• Unit trusts • Exchange Traded Funds • Fund management accounts • Up to 35 per cent of investable savings can be invested in shares and corporate bonds • Up to 10 per cent of investable savings can be invested in gold Full special account savings can be invested in: • Fixed deposits • Singapore Government bonds • Statutory Board bonds (secondary market only) • Bonds guaranteed by Singapore Government • Deferred Annuities • Endowment insurance policies • Selected low risk investment linked insurance products • Selected low risk unit trusts • Selected Exchange Traded Funds	non-rated corporate debentures are limited to up to 10 per cent of total assets.	• Money market fund	
Intended Replacement rate	20-40 per cent	30 per cent	30 per cent	38 per cent*

*The 38 per cent replacement rate is based on assumptions of 35 years service, and investment returns equal to rate of wage increase. Lump sum after 35 years is divided by 120 to get monthly pension.
Source: Stirling Finance Limited

Table 4.

Singapore Public Assistance Scheme: 2003

Household Type	Monthly Public Assistance Allowance S$
1 Person 1 Adult 1 Child	 260 260
2 Persons • 2 Adults • 1 Adult, 1 Child • 2 Children	 445 535 535
3 Persons • 3 Adults • 2 Adults, 1 Child • 1 Adult, 2 Children • 3 Children	 510 600 675 675
4 Persons • 4 Adults • 3 Adults, 1 Child • 2 Adults, 2 Children • 1 Adults, 3 Child • 4 Children	 590 680 755 825 825 (maximum)
5 Persons and above	825
Singapore average monthly wages 2003	S$3,213
Total no. of Public Assistance Scheme recipients	2,551
Singapore's total population	4.3 million

Source: Singapore Statistics Bureau and Ministry of Community Development Services

Table 5A.

CPF accounts and balances as at end of June 2005

	S$bn Accumulated	per cent Return
Ordinary Account	59.0	2.5
• CPFIS-OA	24.1	
Special Account	19.0	4.0
• CPFIS-SA	4.7	
Medisave Account	33.2	4.0

Source: CPF

Table 5B.

CPFIS investment and returns as at 31 March 2004

Investment Scheme	Instrument	Number of Members	Amount Invested (S$ million)	Unrealised Profit/(Losses) (per cent)
CPFIS-OA	Insurance policies	415,300	14,327	n.a.
	Shares	272,900	6,974	(29.17)
	Unit trusts	126,600	2,571	(6.58)
	Fixed deposits	2,400	49	n.a.
	Bonds	1,700	43	6.72
	Exchange Traded Funds	600	14	11.40
	Gold	1,500	8	31.79
	Property Funds	800	7	25.82
	Corporate Bonds	Less than 100	0.2	18.28
CPFIS-SA	Insurance policies	357,500	3,790	n.a.
	Unit trusts	78,400	732	(0.97)
	Fixed deposits	9,600	5	n.a.
	Bonds	Less than 100	0.04	13.57

These represent returns on amount invested at various times before 31 March 2004, and still held by members as 31 March 2004.
Source: CPF

Table 6.

Stock market statistics

	Singapore 2003	**Thailand 2003**	**Hong Kong 2004**	**China 2003**
GDP	U$94.7bn	U$150.0bn	U$194bn	U$1,419bn
Market Capitalization of Main Board	U$308.9bn*	U$122.8bn	U$853bn	U$458bn (free float of U$174bn)
• as per cent of GDP	325 per cent	81.8 per cent	440 per cent	32 per cent
• Number of listings	566*	524	1,971**	1,541***
• Annual turnover value	U$96.4bn*	U$119bn	U$508bn	U$279bn****

*Includes the Main Board and SESDAQ
**Includes 892 ordinary shares, 4 preferred shares, 895 warrants, 9 equities linked instruments, 10 unit trusts, 161 debt instruments
***Includes 1,261 A shares, 111 B shares, 54 closed-end fund, 111 fixed income products
****Estimate
Source: Stock Exchange of Thailand, Shanghai Stock Exchange, Shenzhen Stock Exchange, Singapore Exchange, Hong Kong Exchanges and Clearing

Table 7A.

Thai pension system

<table>
<tr><th colspan="2" rowspan="2"></th><th colspan="2">Mandatory Defined Benefits</th><th colspan="2">Mandatory Defined Contributions</th></tr>
<tr><th>Pension</th><th>Lump sum</th><th>Pension</th><th>Lump sum</th></tr>
<tr><td rowspan="6">PUBLIC SECTOR</td><td>Central Government Officials</td><td colspan="2">Original Pension</td><td>-</td><td>GPF</td></tr>
<tr><td>Central Government Regular Employees</td><td></td><td>Original Pension</td><td></td><td>Provident Fund</td></tr>
<tr><td>Central Government Temporary Employees</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Local Government Officials</td><td colspan="2">Original Pension</td><td>-</td><td>-</td></tr>
<tr><td>Government-related Organization Employees</td><td>-</td><td>-</td><td>-</td><td>Provident Fund*</td></tr>
<tr><td>State Enterprise Employees</td><td colspan="4">Either Original Pension or Provident Fund**</td></tr>
<tr><td rowspan="5">PRIVATE SECTOR</td><td>Salary-type Employees</td><td colspan="2">Old-Age Pension</td><td>-</td><td>-</td></tr>
<tr><td>Wages-type Employees</td><td colspan="2">Old-Age Pension</td><td>-</td><td>-</td></tr>
<tr><td>Self-employed</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Informal sector</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Teacher and headmaster in Private School</td><td>-</td><td>-</td><td>-</td><td>Private Teachers’ Provident Fund</td></tr>
</table>

Source: GPF

* by government policy

** due to some state enterprises had replaced the original pension with provident fund

Table 7B.

Summary of Thailand's current mandatory defined benefit and defined contribution schemes

Type	Coverage	Contributions	Benefits
Old Age Pension Fund Mandatory defined benefit	Private sector employees of enterprises with one or more employees 7.4 million participants as at end of 2003	Employer: 3 per cent of wages Employee: 3 per cent of wages Contributions are subject to a minimum of Bt1,650 and maximum of Bt15,000 per month. All contributions are tax exempt.	For employees who have made contributions for 180 months, benefits of 15 per cent of average wage of the last sixty months of earning are paid as an annuity starting at the age of 55. For employees who have made contributions for over 180 months, benefits of 15 per cent plus 1 per cent per additional twelve months of contributions above 180 months are paid starting at the age of 55. For employees who have made contributions for less than 180 months, benefits are paid in lump sum at retirement. Lump sum benefit payments are tax exempt. Pension payments are taxed as income.
Provident Fund Mandatory defined contribution	Covers state enterprise, government related enterprise employees, and some central government employees At end of 2003, 294,979 employees were covered	Employer: match contributions made by employee Employee: 2 – 5 per cent of wages All contributions are tax exempt.	Lump sum at retirement or resignation from post based on contributions. Benefits are tax exempt.
Pension Fund as defined by The Gratuity and Pension Act of 1951 Defined benefit	Covers central government officials who started employment before 27 March 1997	Central government budget	Pension: for those with at least 25 years of service or 10 year of service and over 50 years old or is permanently disabled, monthly benefits are calculated as the last month of salary times 2 per cent times number of years of service. Lump sum: for those with at least l0 years of service,

			or at least 1 year of service and is over 50 years old or permanently disabled, lump sum payments are made based on last months salary times number of years of service. Lump sum benefit payments are tax exempt. Pension payments are taxed as income.
Government Provident Fund Mandatory defined contribution	GPF covers government officials who started employment after 27 March 1997, and those eligible for the DB scheme but who prefer to switch to this DC scheme.	Employer: 3 per cent Employee: 3 per cent Employee contributions of up to Bt300,000 (U$7,000) per year are tax exempt.	Lump sum at retirement based on contributions. Benefits are tax exempt.
Private Teachers' Provident Fund Mandatory defined contribution	Covers teachers and administrators of private schools As at end of 2003 127,034 teachers and administrators were covered	Employers: 3 per cent of wages Employees: 3 per cent of wages All contributions are tax exempt.	Lump sum paid at retirement or on resignation after vesting period of 5 years of service. Benefits are tax exempt.

Source: GPF

Table 8.

Asset Allocation as at December 2004

Asset class	As percent of total GPF assets
Thai Fixed Income	75.79 per cent
Thai Equity	14.92 per cent
Property	3.35 per cent
Global Fixed Income	3.23 per cent
Alternative investments	2,71 per cent
Total assets under management as at end of 2002: US$4bn Total assets under management as at end of 2003: US$5.5bn Total assets under management as at end of 2004: US$ 6.17bn	

Source: GPF

Table 9A.

Comprehensive Social Security Assistance: level of allowance per month (HK$) as at 1 October 2005

Standard Rates				
	Single person	Family member		
Elderly person aged 60 or above				
Able-bodied/50 per cent disabled	2,270	2,140		
100 per cent disabled	2,750	2,430		
Requiring constant attendance	3,870	3,545		
Ill-health/Disabled adult aged under 60				
Ill-health/50 per cent disabled	1,920	1,745		
100 per cent disabled	2,400	2,075		
Requiring constant attendance	3,515	3,190		
Disabled child				
50 per cent disabled	2,560	2,230		
100 per cent disabled	3,040	2,715		
Requiring constant attendance	4,150	3,835		
		In family of not more than:		
		2 able-bodied adults/children	3 able-bodied adults/children	4 able-bodied adults/children
Able-bodied adult aged under 60				
Single parent/Family caretaker	n.a.	1,745	1,575	1,395
Other adult	1,605	1,430	1,290	1,145
Able-bodied child	1,920	1,595	1,435	1,275
Long-term supplement				
• Single person	1,425			
• Family comprising 2 to 4 members who are old, disabled or medically certified to be in ill-health	2,855			
• Family comprising 5 or more members who are old, disabled or medically certified to be in ill-health	3,825			
• Single parent supplement	HK$225 per month			
• Community living supplement	HK$100 per month (with effect from 1 November 2005)			
Average monthly salary	HK$10,511			

Source: Social Welfare Department and Census and Statistics Department, Hong Kong

Table 9B.

Social Security Allowance Scheme: level of allowance per month (HK$) as at 1 October 2005

Higher Disability Allowance	2,240
Normal Disability Allowance	1,120
Higher Old Age Allowance	705
Normal Old Age Allowance	625

Source: Social Welfare Department, Hong Kong

Table 9C.

Comprehensive Social Security Assistance and Social Security Assistance: no. of cases and total costs

	No. of cases		Payments HK$ million	
	2001/2002	2002/2003	2001/2002	2002/2003
CSSA	247,192	271,893	14,405	16,131
Higher Disability Allowance*	15,206	14,489	417	417
Normal Disability Allowance*	87,961	90,793	1,242	1,290
Higher Old Age Allowance**	340,920	348,012	2,700	2,768
Normal Old Age Allowance**	117,121	106,921	881	806
Other	8,253	7,842	153	162
Total			19,798	21,574
Hong Kong population	6.9 million			

*Higher Disability is distinguished from Normal Disability by the level of constant attendance the individual needs.
** Higher Old Age are for those who aged between 70 or above, whereas Normal Old Age are for those who aged 65-69 and are having an income and assets below the prescribed limits.
Source: Social Welfare Department, Hong Kong

Table 10A.

MPF investment choices as at end of December 2005:

MPF Schemes	46
Approved Constituent Funds	332
By Fund Type	
• Balanced Fund	141
• Equity Fund	81
• Capital Preservation Fund	46
• Guaranteed Fund	36
• Bond Fund	18
• Money Market Fund	10
By Sponsoring Scheme*	
• Master Trust Schemes	42
• Industry Schemes	2
• Employer Sponsored Schemes	2

*Providers include banks, insurance companies, fund managers and trust companies
Source: Mandatory Provident Fund Schemes Authority

Table 10B.

Asset allocation of approved constituent funds as at end of December 2005:

By Fund Type	Net Asset Value (HK$ million)**	Cash & Deposits (per cent)	Debt Securities (per cent)	Equities (per cent)
Capital Preservation Fund	21,960	86	14	--
Money Market Fund	1,018	38	62	--
Guaranteed Fund	21,302	21	64	15
Bond Fund	1,846	4	96	--
Balanced Fund	78,020	7	21	72
Equity Fund	27,214	3	--	97
Overall	151,360	20	23	57

Source: Mandatory Provident Fund Schemes Authority

Table 11.

Summary of contributions and benefits based on Document 42

	Pillar I	Pillar II	Pillar III
Type	Mandatory Defined benefit Pool at the city level Pay-as-you-go	Mandatory defined contribution Individual account Fully funded	Voluntary Fully funded
Contributions	Employer contributes between 19 and 27 per cent of wages (depending on city)	Employee contributes 8 per cent of wages	Variable Possible tax deduction for employer contributions of up to 4 per cent
Benefits	Up to 30 per cent of average city wages at time of retirement	28 per cent replacement rate*	Lump sum or annuity

*The 28 per cent replacement rate is based on assumptions of 35 years service, and investment returns equal to rate of wage increase. Lump sum after 35 years is divided by 120 to get monthly pension.
Source: Stirling Finance Limited

Table 12.

Ministry of Civil Affairs expenditures (RMB Bn) and Minimum Living Allowance Scheme coverage (million)

	1999	2000	2001	2002	2003
Ministry of Civil Affairs Total Program Expenditures	19.5	23.0	28.5	39.2	49.9
Minimum Living Allowance Scheme	**n.a.**	**n.a.**	**n.a.**	**16.7**	**15.3**
Compensations for bereavement, disability and other personal misfortunes	n.a.	n.a.	n.a.	8.4	8.8
Military retirees	n.a.	n.a.	n.a.	4.9	5.9
Social Welfare	n.a.	n.a.	n.a.	n.a.	7.9
Disaster Relief	n.a.	n.a.	n.a.	4.0	5.3
Other	n.a.	n.a.	n.a.	5.0	6.7
Program Expenditures as per cent of National Budget	1.5	1.5	1.5	1.8	2.0
Minimum Living Allowance Scheme (no. of persons urban covered, million)	*2.7*	*4.0*	*11.7*	*20.6*	*22.5*
PRC population based on 2000 census	*1.29bn*				

Source: Ministry of Civil Affairs, National Bureau of Statistics of China

Table 13.

Summary of governance and investment policies of individual account systems

	Singapore's CPF	**Thailand's GPF**	**Hong Kong's MPF**	**China's Pillar II**
Who acts as fiduciary	Central Provident Fund Board	GPF Board	Trustees	Ministry of Labour and Social Security, and Ministry of Finance
How are fiduciaries appointed	Minster of Manpower appoints the 12 member Board which includes: • Chairman • Deputy Chairman • Two persons holding office of emolument under the Government • Two persons representing employers • Two persons representing employees • Up to four other persons as the Minister may determine to be necessary	The 25 member Board consists of: • Permanent Secretary of Finance who serves as chairman of the board of directors • 9 ex officio members as appointed by the Minister of Finance • 12 employee representatives elected by the groups they represent • 3 expert members elected by other ex officio and representative members	Trustees are appointed by the employer	n.a.
Are annual external audits required	No.	Yes. At least annually	Yes. Annually	No.
What share of portfolio is managed externally	Balances beyond the Minimum Sum in the Ordinary Account and the Special Account can be managed externally.	30 per cent	100 per cent	0 per cent
Are manager selection and	Yes. Fund manager approval and monitoring	--	Yes	n.a.

monitoring criteria explicit and objective	process devised with assistance from independent asset management consultant.			
Statutory asset class restrictions	Balances of CPF, with the exceptions of amounts allowable for CPFIS, are invested in Singapore government bonds.	No more than 40 per cent of total portfolio may be invested in risky instruments such as common stocks, corporate bonds, and non government guaranteed bonds. No more than 10 per cent may be invested in common stocks or non-rated corporate bonds. No international investments	Total amount invested in securities issued by any one person may in general not exceed 10 per cent of the funds total assets	100 per cent investment in cash and T-bonds
Statutory mandates	As indicated above.	At least 60 per cent of the total portfolio must be invested in low risk instruments such as deposits, government and state guaranteed enterprise bonds.	Funds must have at least 30 per cent exposure to in Hong Kong Dollars.	As indicated above.
Minimum for government bonds	As indicated above	As indicated above	None	
Shareholder voice policy	Yes, through CPFIS investments	No	Yes, through choice of funds	None

Source: Stirling Finance Limited

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This paper compares the different approaches of Singapore, Thailand, Hong Kong, and China with respect to how they manage their respective defined contribution, individual retirement account systems. The four cases illustrate important differences in terms of some of the key issues in design of DC schemes; the role of government versus private sector, investment policy and individual choice, among others. They also provide a useful contrast in terms of initial conditions.

HUMAN DEVELOPMENT NETWORK