

HONG KONG'S MANDATORY PROVIDENT FUND

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The population of Hong Kong is relatively young when compared with many developed economies, but is getting older quite rapidly. Today people aged 65 and above account for about 10 percent of the population. This proportion is projected to be 13 percent by 2016 and 20 percent by 2036.¹

The Mandatory Provident Fund (MPF) Schemes Ordinance enacted in 1995 provides the legal framework for the establishment of a system of employment-based, privately managed, defined-contribution retirement savings schemes. The objective of the MPF system is to provide a formal system of retirement protection. Prior to the system, only about one-third of the 3.4 million workers, mainly civil servants and professionals, benefited from some forms of retirement benefits.

As the population gets older, there will be more retirees and fewer workers. In order to maintain the same standard of living, the economy will need to be more productive. This can be brought about by additional savings to increase the capital available to the economy in the future. The MPF system is a forced retirement saving program. A typical worker is required to contribute 10 percent of his earnings² to an investment fund. Whether the system will succeed in raising the saving rate is unclear. On the macro level, Hong Kong already has a high saving rate of more than 30 percent. There are no statistics on household savings. It is unknown how many families have a saving rate of less than 10 percent, and how many will be induced to save more. People can undo the forced saving by increased borrowing.³

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¹Demographic projections in Hong Kong are complicated by the large migration flows.

²The employer pays 5 percent of the contribution.

³In the first five years of Australia's mandatory superannuation system, workers contributed \$110 billion, but increased their borrowing by almost as much (Bishop 1998).

Much of the household savings are invested in housing and in bank accounts that have low rates of returns. Only 20 percent of the adult population invests in the stock market, and about 6 percent hold mutual funds.⁴ The MPF system will therefore boost the number of investors by three to four times, and help to enrich their financial portfolios. One study finds that \$1 of equity may be worth \$1.59 to households lacking access to the capital markets (Geanakoplos, Mitchell, and Zeldes 1998).

The MPF system started operation on December 1, 2000. Annual MPF contributions were estimated to be around \$10 billion in the initial years of operation and expand to \$60 billion when the system matures after 30 years. This source of funds would provide impetus to the further development of the capital market, particularly for the already sizable fund management industry in Hong Kong. The intermediation role of banks will be under pressure. Instead of relying on bank financing, medium-sized firms will have more access to the capital market. In 20 years, the business landscape in Hong Kong will no longer be dominated by small- and medium-sized enterprises.

This paper will describe key features of the MPF system, and focus on a number of issues: namely, the rationales behind the MPF system, MPF retirement benefits, annuitization, and the interaction between MPF and the welfare system.

Key Features of the MPF System

The MPF system is basically a forced retirement saving program. Investment funds, called MPF schemes, are set up by private companies to invest the savings. All MPF schemes must be established under trust arrangement and governed by Hong Kong law. The trust arrangement means that scheme assets will be held separately from the assets of the trustees or the investment managers. This safeguards the interest of the scheme members from unnecessary financial risks.

MPF Schemes

There are three types of MPF schemes. A *master trust scheme* is a scheme with open membership to workers of different employers and different self-employed persons. Such master trust schemes can exploit the economies of scale from pooling the contributions of small employer units together for administration and investment. This type

⁴Retail Investor Survey Report: <http://www.hksfc.org.hk/eng/pub/99survey.htm>. The number of funds available to Hong Kong is more than 1,600.

of scheme is especially suitable for small- and medium-sized enterprises. An *employer sponsored scheme* is a scheme with membership open to the employees of a single employer. This type of scheme is only practical for companies with a large number of employees. An *industry scheme* is a scheme specially established for workers in industries with high labor mobility, such as the catering and construction industries. Features are set up to minimize the costs involved in transferring accrued benefits when workers change employment within the same industry.

Investment Funds

Investment managers are appointed by the trustees of MPF schemes to make long-term investment of scheme assets. Each scheme typically offers a couple of investment funds to its members. One of the funds must be a Capital Preservation Fund, which is basically a money market fund. There are strict guidelines on the types of assets in the investment funds.⁵

Employers are mandated to choose at least one scheme for their employees.⁶ Employers therefore indirectly choose the investment managers. Employees can choose their own investment portfolio out of the funds provided by the scheme chosen by their employers.⁷

Coverage

The MPF system is meant to have broad coverage. Employers are mandated to enroll their workers in approved MPF schemes. Unless exempted, workers aged between 18 and 65 are required to join the system by enrolling in approved MPF schemes. The system includes full-time and part-time employees who have been employed for 60 days or more under an employment contract.⁸ Self-employed workers are also required to join.

⁵At present there are 20 approved trustees offering more than 40 master trust schemes. The total number of funds on offer is more than 400.

⁶Large employers can choose more than one scheme for their members. The Hong Kong government will choose 5 schemes for its 20,000 contract workers.

⁷Some schemes are reported to allow its members to choose their investment managers.

⁸Employers of the catering and construction sectors that have high labor mobility are required to enroll their casual workers regardless of the duration of employment.

Contributions

The mandatory contribution rate is 10 percent of an employee's relevant income,⁹ with the employer and employee each paying 5 percent.¹⁰ Self-employed persons have to contribute 5 percent of their relevant income. Mandatory contribution is subject to a floor and a ceiling. Workers earning less than \$4,000 a month do not have to contribute, but their employers have to contribute their 5 percent. Monthly income in excess of \$20,000 is exempted. Mandatory contributions are tax deductible. Both the employer and the employee can opt to make extra, voluntary contributions in addition to the mandatory contributions. Due to the current economic downturn, starting from February 2003, workers earning less than \$5,000 a month do not have to contribute to their MPF accounts, but their employers still have to contribute.

Vesting and Portability

Mandatory contributions made on behalf of a member of an MPF scheme and the investment returns will be fully and immediately vested in the scheme member. When an employee changes jobs, he can transfer his accrued benefits from his old scheme to the scheme chosen by his employer. Accrued benefits are therefore portable under the MPF system.

Preservation of Benefits

An employee cannot withdraw his accrued benefits before the retirement age, which is prescribed as 65. At retirement he can withdraw his benefits in a lump sum. Early withdrawal will be permitted when the worker attains the age of 60 and retires early, permanently departs from Hong Kong (only once in a lifetime), becomes totally incapacitated, or dies.

Mandatory Provident Fund Authority

The Mandatory Provident Fund Authority (MPFA) was set up in 1998 to regulate the operation of the MPF system. It received a \$5 billion grant from the government and is meant to be self-financing. Its main functions are to approve trustees subject to stringent criteria

⁹Employees' relevant income includes wages, salaries, leave pay, fee, commission, bonus, gratuity, perquisite or allowance, but excludes housing allowance or housing benefits.

¹⁰Workers of the catering and construction industry and those employed on a day-to-day basis for a fixed period of less than 60 days are defined as casual employees. Mandatory contributions for casual workers are made in accordance with the scale published in the *Gazette*.

prescribed in the Ordinance, to register MPF schemes that comply with the prescribed standards, and to ensure that the trustees comply with the legislative requirements.

Trustees are required to submit returns, financial statements, and auditor's reports to the MPFA on a regular basis. The Authority will monitor the compliance of enrollment and payment of contributions by employers and self-employed persons. The Authority may also conduct field inspections, special audits, and investigations, and impose sanctions on a trustee in breach of the legislation.

Safeguards

The MPF system does not provide a guarantee on the minimum rate of return of the investment of the scheme assets. But there are safeguards against losses resulting from malfeasance or illegal conduct by the trustee and its service providers. Trustees are required to have insurance cover. A Compensation Fund was also set up, with \$300 million injected by the government.¹¹ If the losses to a registered scheme resulting from malfeasance or illegal conduct cannot be totally compensated by the resources of the trustee and other service providers or their insurance, the MPFA may apply to the court to use the Compensation Fund for compensation purpose.

The Three Pillars

The World Bank (1994) study *Averting the Old-Age Crisis* is an empirical study on pension systems, drawing on the evidence from more than 100 countries. The study used two criteria to evaluate old-age programs. Good old-age programs should protect the old and they should promote economic growth, which will be beneficial to both the elderly and the young people. The study came down hard on the publicly managed unfunded, pay-as-you-go (PAYG),¹² defined-benefits pension system adopted in many countries. Such systems tend to fail on both criteria. They do not protect the poor and tend to impede economic growth.

A comprehensive pension system has three important functions: saving, redistribution, and insurance. The PAYG system found in many countries often combines the three functions into a single program, and is often organized as a Ponzi scheme:

¹¹A levy on scheme assets will be charged to bring the Fund up to a ceiling of \$900 million. The levy rate is set at 0.03 percent per year of the accrued benefits of members.

¹²A PAYG system means that active workers pay for the pensions of the retirees.

The beauty of social insurance is that it is actuarially unsound. Everyone who reaches retirement age is given benefit privileges that far exceed anything he has paid in How is this possible? It stems from the fact that the national product is growing at compound interest and can be expected to do so for as far ahead as the eye cannot see. Always there are more youths than old folks in a growing population. More important, with real incomes growing at some three percent a year, the taxable base upon which benefits rest in any period are much greater than the taxes paid historically by the generation now retired. . . . A growing nation is the greatest Ponzi game ever contrived [Samuelson 1967: 88].

In a young and immature PAYG system, there are many workers and few pensioners. Small contributions from the workers can support substantial benefits to the retirees.¹³ The temptation to set generous benefits is irresistible. As the population gets older and the system matures, there will be fewer workers and more retirees. Higher and higher payroll taxes are needed to pay for the pension benefits. The system can become unsustainable without cutting the benefits.

A poorly designed PAYG system can impede growth by inducing people to save less, encouraging evasion and early retirement. Even though the benefit formulas are seemingly progressive, the amount of redistribution is often limited because the rich enter the labor force later and tend to live longer.¹⁴

The World Bank study suggests that the twin objectives of protecting the poor and promoting growth can best be achieved by adopting a “three-pillar” approach to provide comprehensive retirement protection.

The three pillars are

- Publicly managed, tax-financed social safety net for the old
- Mandatory, privately managed, fully funded contribution scheme
- Voluntary personal savings.

The three functions of a pension system—saving, redistribution, and insurance—are separated under the three-pillar approach. The pub-

¹³In 1940 Ida May Fuller became the first American to receive a pension under the Social Security system set up in 1937. She paid \$25 into the system and collected benefits totaling \$23,000 by the time she died in 1975 at the grand old age of 100 (Bishop 1998).

¹⁴The literature on PAYG system is huge. A good starting point is Chapter 4 of the World Bank (1994) study. A well-designed PAYG system can function well in providing redistribution and insurance, both within and across generations (Orszag and Stiglitz 1999). Diamond’s bottom line is that “a well-run defined benefit system is economically more efficient than a mixed defined contribution/defined benefit system” (Diamond 1998).

lic pillar provides redistribution and insurance, while the mandatory private and voluntary pillars play the saving role. The three pillars are meant to be complementary.

The MPF system is the second mandatory private pillar. It is fully funded so that benefits are tightly tied to contributions. This will avoid the problem of making unsustainable benefit promises, and minimizes distortions in the labor market. It should be managed by private firms to maximize the returns on investment. The track record of public investment funds is dismal.¹⁵ Private management also avoids the thorny issue of political interference in corporate affairs. It has to be mandatory because people may not be farsighted to save enough for their retirement on a voluntary basis, and may have to be supported by general tax revenue during their retirement. It has to be regulated by the government to guard against fraudulent practices.

Hong Kong has a nonstatutory Comprehensive Social Security Assistance (CSSA) Scheme, which offers means-tested basic welfare benefits to the needy. With the introduction of MPF, complemented by personal savings, Hong Kong will have in place all the three pillars for old-age protection.¹⁶ The question is how secure is the protection?

MPF Retirement Benefits

The goal of the MPF system is to accumulate a fund to support a target income for members during retirement. The target is commonly expressed as a replacement rate that gives the ratio of real benefits to real earnings at the time of a worker's retirement. Given a 10 percent contribution rate and retirement at 65, the replacement rate depends on five uncertain factors: the length of working life, the real wage growth, the real rate of return on investment, the real interest rate at retirement, and the number of years in retirement. The replacement is thus a random variable, and it is difficult to characterize its distribution. Nevertheless, it would be useful to have some idea of what the replacement rate would be under different sets of assumptions.

In order not to complicate matters, assume continuous contribution at 10 percent of income since joining the system, a 5 percent return on investment, a 5 percent interest rate, retirement at 65, and

¹⁵Pritchard (2000) reported that the real rate of returns of the Central Provident Fund in Singapore between 1987 and 1997 were estimated to be zero.

¹⁶The history of the adoption of the MPF system is interesting and is discussed in Lui (1998). The Hong Kong government did toy with a PAYG system in late 1993, but the proposal was dropped in 1995, and the MPF was adopted.

15 years in retirement. Table 1 gives the real retirement benefits under these assumptions. Three scenarios are given, assuming a 1 percent, 2 percent, and 3 percent real wage growth.¹⁷ Two measures are used to gauge the level of retirement benefits. The second column gives the number of monthly salary accumulated by age 65, while the third is the replacement rate defined as monthly pension benefits as multiples of final salary.

Ambitious Coverage

A couple of points can be drawn from Table 1. The logic of compounding means that it is better to start saving early. The replacement rate declines with real wage growth, other things being the same. Obviously, a higher real wage growth is better than a lower one. Hence, focusing on the replacement rate and ignoring the level of retirement benefits can be misleading. The replacement rates for workers older than 50 are lower than 20 percent. These workers cannot count on the 10 percent mandatory savings alone to provide them with a decent retirement income. They must draw on other forms of support during their retirement.

Even though it is beneficial to start saving early, it does not make economic sense to coerce young workers to save for their retirement. Their earnings are low. They are often liquidity constrained, and may even be debtors. To the extent that they save at all, rather than worrying about life after retirement, they have more pressing concerns, like saving for their marriage or for the down payment on their home. The 10 percent mandatory contribution rate would mean that they have to borrow money at high interest rates, or to postpone their plans, like getting married or having their first child. Both effects are counterproductive to retirement protection. The median age of the first marriage for men is 30, and for women 27. The total fertility rate was 951 per 1,000 women in 1999, which is among the lowest in the world. A further drop in the marriage age will reduce the number of births, which will then reduce the number of workers 20 years down the road.¹⁸ It is better to let young workers, say less than 30, opt out of the MPF system.

¹⁷The real wage grew at a trend rate of 1.04 percent between June 1987 and June 2000, while real payroll increased by 3.1 percent a year between 1994 and 2000. Payroll covers wages, bonuses, and other cash payments.

¹⁸Technically, the aged-dependency ratio, commonly defined as the ratio of the population over age 65 to the population of working age, 15 to 64, will worsen. The ratio is a key factor driving retirement costs.

TABLE 1
REAL MPF RETIREMENT BENEFITS

| Scenario: 1 Percent Real Wage Growth | | |
|---|---|---|
| Age of Entry | No. of Monthly Salaries Accumulated by Age 65 | Monthly Pension Benefits as Multiples of Final Salary |
| 18 | 160.0 | 1.26 |
| 20 | 146.3 | 1.14 |
| 25 | 115.0 | 0.90 |
| 30 | 89.3 | 0.70 |
| 35 | 68.1 | 0.53 |
| 40 | 50.6 | 0.40 |
| 45 | 36.2 | 0.28 |
| 50 | 24.4 | 0.19 |
| 55 | 14.6 | 0.11 |
| 60 | 6.61 | 0.05 |
| Scenario: 2 Percent Real Wage Growth | | |
| Age of Entry | No. of Monthly Salaries Accumulated by Age 65 | Monthly Pension Benefits as Multiples of Final Salary |
| 18 | 120.1 | 0.94 |
| 20 | 111.0 | 0.87 |
| 25 | 90.5 | 0.71 |
| 30 | 72.7 | 0.57 |
| 35 | 57.3 | 0.45 |
| 40 | 44.0 | 0.34 |
| 45 | 32.5 | 0.25 |
| 50 | 22.5 | 0.18 |
| 55 | 13.9 | 0.11 |
| 60 | 6.45 | 0.05 |
| Scenario: 3 Percent Real Wage Growth | | |
| Age of Entry | No. of Monthly Salaries Accumulated by Age 65 | Monthly Pension Benefits as Multiples of Final Salary |
| 18 | 91.6 | 0.72 |
| 20 | 85.8 | 0.67 |
| 25 | 72.2 | 0.56 |
| 30 | 59.9 | 0.47 |
| 35 | 48.7 | 0.38 |
| 40 | 38.5 | 0.30 |
| 45 | 29.2 | 0.23 |
| 50 | 20.8 | 0.16 |
| 55 | 13.2 | 0.10 |
| 60 | 6.29 | 0.05 |

Fees

One major criticism against a defined-contribution system with individual accounts is that it has high administrative fees (Diamond 1993). An annual management fee of 1 percent can reduce the value of accumulated benefits by 19.6 percent after a 40-year work career, when compared with no fees (Diamond 1999). The point is that a high administrative fee can reduce accumulated benefits substantially.

Under the MPF system, trustees are free to set their fees. They are only required to make the fees and their structures transparent. There are different types of fees, like front load, bid-offer spread, administrative and investment management fees. At present, in the initial launch phase when schemes are competing for members, most of the fees are waived, and fees are quoted in terms of percentage of net assets under management.¹⁹ The fees have dropped since February, and now range from 1 to 2 percent. Large employers can negotiate better rates for their members.

The current fees are lower than the fees commonly charged for mutual funds offered in Hong Kong. Whether the fees will rise when the industry settles in a couple of years is something to watch out for. The industry has economies of scale and scope. It is predicted that the market will eventually support only six companies. With reduced competitive pressure, each remaining trust might want to take advantage of their market power by raising fees.

Risks

Under the MPF system, the workers have to shoulder the risks associated with fund accumulation. The ultimate benefits will depend on the growth in their earnings, on the returns earned on the portfolio held in their account, and on the length of their working lives. The risks involved can be quite substantial. Uncertainties about future economic conditions can cause realized benefits to fall one-third below the planned target, or to be twice as high as the target (see Thompson 1998). The actual year to retire can also be crucial. Retiring when the asset markets are depressed can hurt badly.

In addition to the risks during the accumulating processes, workers also face risks when they annuitize their accumulated benefits. The risks involved in the annuitization process are interest and mortality risks. For a given accumulation, workers who retire when real interest

¹⁹This implies cross-subsidization of low-income contributors, because of the consideration for the fixed-costs component of the fund schemes.

rates are low will receive a smaller real annuity than those who retire when real interest rates are high. This risk can be hedged by increasing the weights of long-term bonds in the investment portfolio when approaching retirement.

The mortality risk refers to the length of life after retirement. Mortality improvements have been uneven over decades in the past, and projections for the future are highly controversial. As mortality rates fall, a given accumulated retirement fund has to be spread over a longer time, thus shrinking the replacement rate. Take the case of Japan. Between 1953 and 1990, life expectancy at age 65 for Japanese men increased from 11.8 years to 16.7 years. This 40 percent improvement in life expectancy would reduce the retirement benefit by about 30 percent (Thompson 1998).

To assess the risks involved under the MPF system, workers will need expert pension advice. Complicated computation is needed to tell a given worker what saving rate is needed to have a probability of say 95 percent in attaining any given replacement rate at retirement. The MPF Authority can consider providing such a useful service to the public at its Web site.

Knowing the risks is one thing, preparing for them is another matter. Insurance is not available for many of the risks inherent in the MPF system. Workers have to insure against the risks themselves. Prudence dictates a higher saving rate than the mandatory 10 percent.²⁰

Annuitization

The MPF system provides a structure for accumulation in individual accounts, but none for the provision of retirement income flows. The system permits retirees to take their accumulated benefits as a lump sum. This arrangement is laudable in allowing retirees maximal freedom to decide on how to withdraw their retirement benefits accrued under the system, which is rather odd. The rationale for having a forced saving program is that some people are myopic. This lack of foresight suggests that people would consume too rapidly out of their lump sum withdrawals, resulting in low incomes and poverty among the very old, thus defeating the very purpose of setting up the MPF system in the first place. Furthermore, given the current welfare program for the aged, people with only a modest nest egg

²⁰The additional saving can be invested in one's children. The family has played the role of risk sharing for a long time. The investment in children, though also risky, can have a very high rate of return.

would have a powerful incentive to consume rapidly so as to be eligible for the public pension programs. To guard against myopic and opportunistic behavior, the Chilean pension system does not allow for lump sum withdrawal; accumulated benefits have to be used to purchase an indexed annuity or to be drawn down periodically subject to a maximal rate of withdrawal (OECD 1997).

It is understandable that the government has taken a minimalist approach to the withdrawal of retirement benefits. Lump sum withdrawal is the simplest option, and accords well with the notion that the retirement benefits are owned by the retirees who should have the freedom to dispose of their accumulated funds as they see fit. If retirees want to purchase an annuity, they can do so in the market. Annuities provided by the market tend to be expensive, due to the adverse selection problem.²¹ Left to their own devices, people do not take much advantage of annuities. The current individual annuity market in Hong Kong is extremely tiny, with only 247 annuity policies in 1998.²²

The demand for annuity products in Hong Kong will grow in the future, and the market will supply such products to meet the demand.²³ An important issue is whether products will be available to protect against inflation. It is unlikely that the market will provide indexed annuities because of the lack of indexed bonds dominated in local currency. As a small open economy with its currency linked to the U.S. dollar, the Hong Kong government can do little about inflation.²⁴ The government would not voluntarily want to bear any inflation risk by issuing indexed bonds.

Instead of buying nominal fixed annuities, retirees can buy variable annuities as a partial guard against inflation. The underlying assets of variable annuities are securities that act as hedges against inflation.²⁵

²¹Actuarially fair annuities are nonexistent. Poterba and Warshawsky (1999) found that for a 65-year old male annuity buyer in the United States, the expected present discounted value of the benefits of a typical policy available in 1998 was approximately 85 percent of the purchase price.

²²In contrast, in 1998 the number of individual life insurance policies is 3,781,201 which is more than half of the size of the population in Hong Kong.

²³The growth of defined contribution pension plans in the United States has spurred the development of the annuity market (Poterba 1997).

²⁴Between 1981 and 1999, the inflation rate averaged 7.2 percent, with a standard deviation of 3.8 percent.

²⁵The underlying securities tend to rise in value with the nominal price level. The payout of a variable annuity is higher when inflation rate goes up. According to Poterba (1997), variable annuities grew rapidly in recent years in the United States.

Instead of bearing inflation risk, buyers of variable annuities have to shoulder investment risk. There is no free lunch.

The market will attempt to screen out bad risks. It is likely that a substantial number of retirees will be priced out of the annuity market, and run the risk of outliving their retirement funds. The policy question is whether to require all retirees to buy an annuity and to coerce insurance companies to use a single life table for all members of a retiring cohort. Government intervention is needed to overcome the problem of adverse selection, thus resulting in a more efficient pooling of mortality risks. For insurance products, group choice is always cheaper than individual choice. Good risks will then be asked to subsidize the bad risks. For example, treating men and women in the same risk class will on average redistribute from men to women. Whether such redistribution is called for is a value judgment that the government might be asked to make in the future.

MPF and CSSA

The MPF system will do little for workers whose lifetime earnings are low, and for those who have long spells of unemployment. The current stance of the government seems to be that a tiny nest egg for such workers is better than nothing, and that the current CSSA programs for the aged poor will continue to provide a safety net. This assessment of the peaceful coexistence of the two systems needs to be reexamined. The old-age CSSA program can undermine the MPF system for low- and medium-income workers.

Currently, a person aged 60 or above can collect \$4,000 each month from CSSA, subject to income and asset tests. A poor worker near the point of eligibility for CSSA has little to lose and much to gain from holding a high-risk portfolio. The government has legislated every MPF scheme to offer a money market fund to its members. The aim is to provide a relatively low-risk investment vehicle for low-income workers. Based on economic consideration alone, a low-income worker will be ill-advised to choose a low-risk investment portfolio.

The option to withdraw accumulated retirement benefits in a lump sum also provides for opportunistic behavior. Suppose a worker retires with \$100,000 saved up in his retirement account. What is the best way to dispose of this sum of money? A cynical economist would advise the worker to live like a king for a short while or to give his children a handsome gift, and then rely on the welfare system to take care of him for the rest of his life. The public will not take kindly to this kind of behavior.

Means-tested welfare programs can also create a major disincentive for low- and middle-income workers to save on top of their mandatory contributions for their retirement. It also discourages older workers to continue working after attaining the retirement age. It can also be inequitable. Suppose two workers, A and B, have the same lifetime earnings. Worker A does not save for retirement and consumes all his disposable income, while worker B saves by investing in his children. Worker B's children would wind up supporting the retirement of both A and B. This is patently unfair.

Every redistribution program has disincentive effects. The question is whether the MPF system and the current old-age welfare program can coexist. Given the obvious disincentive effects, and likely opportunistic behavior, public support for the old-age CSSA program may dwindle in the distant future, and the government has to revamp the system.

Waiting for the system to unravel and then searching for remedies will be costly. The government can take a proactive approach. One solution is advance funding. The government can commit to phase out the old-age CSSA programs after say, 20 years, and start making top-up contributions for low-income workers now. In the first quarter, there are about 390,000 workers earning less than \$5,000 a month. The government can top up the MPF accounts of those workers by say, \$3,000 a year. This will cost the treasury \$1.2 billion a year. This is a nontrivial sum of money, and would account for about 10 percent of the total MPF contributions, which are estimated to be \$10 billion in the first year of operation of the system.

The top-up contributions are not spending, but are savings for future obligations under the current CSSA system. The difficulties are how to define the cutoff point for making top-up contributions, and to decide on the level of the top-up. Whether the government can really commit to phase out the current old-age CSSA program is uncertain. But the major hurdle for advance funding for future welfare obligations is to convince policymakers that there is really a need for policy initiative.

Conclusion

The MPF system has many good features. The government is relegated to play the regulatory role, leaving investment decisions to the private sector. The system will help the development of the capital market, and is designed to have minimal adverse effects on the labor market.

The coverage of the system may be too ambitious. Young workers

are often liquidity constrained, and have other pressing needs. Forcing them to save for retirement would be counterproductive. It is worth considering letting them opt out of the system.

The MPF is a minimalist saving program for retirement. Its focus is on saving for the long term. It has no minimum guarantee on the investment returns, no annuity option, and allows for a lump sum withdrawal. The system does not cater for redistribution and insurance. Workers have to bear all the risks involved in accumulation and annuitization. Private markets are relied upon for investment and insurance. Prudence dictates the purchase of life and disability insurance, as well as saving more than the mandatory rate.

CSSA provides a safety net to the needy, but its old-age program offers disincentives to low- and medium-income workers, and encourages opportunistic behavior. The old-age CSSA program may unravel due to the lack of public support. The government may want to consider advance funding of its CSSA old-age obligations.

References

- Bishop, M. (1998) "Social Insurance: Retiring the State Pension." *The Economist* (24 October): S10-S16.
- Diamond, P. (1993) "Privatization of Social Security: Lessons from Chile." NBER Working Paper 4510. Cambridge, Mass.: National Bureau of Economic Research.
- _____ (1998) "The Economics of Social Security Reform." NBER Working Paper 6719. Cambridge, Mass.: National Bureau of Economic Research.
- _____ (1999) "Administrative Costs and Equilibrium Charges with Individual Accounts." NBER Working Paper 7050. Cambridge, Mass.: National Bureau of Economic Research.
- Geanakoplos, J., Mitchell, O. S., and Zeldes, S. P. (1998) "Would a Privatized Social Security System Really Pay a Higher Rate of Return?" In R. D. Arnold, M. J. Graetz, and A. H. Munnell (eds.) *Framing the Social Security Debate: Values, Politics, and Economics*. Washington: Brookings Institution Press.
- Lui, F. T. (1998) *Retirement Protection: A Plan for Hong Kong*. Hong Kong: City University Press.
- OECD (1997) "The Chilean Pension System." Aging Working Papers, AWP 5.6.
- Orszag, P., and Stiglitz, J. E. (1999) "Rethinking Pension Reform: Ten Myths About Social Security Systems." World Bank Working Paper. Washington: The World Bank.
- Poterba, J. M. (1997) "The History of Annuities in the United States." NBER Working Paper 6001. Cambridge, Mass.: National Bureau of Economic Research.
- Proterba, J. M., and Warshawsky, M. J. (1999) "The Costs of Annuitizing

- Retirement Payouts from Individual Accounts.” NBER Working Paper 6918. Cambridge, Mass.: National Bureau of Economic Research.
- Pritchard, S. (2000) “Pension Flaws Emerge.” *South China Morning Post*, 25 August.
- Samuelson, P. (1967) “Social Security.” *Newsweek* (13 February): 88.
- Thompson, L. H. (1998) “Predictability of Individual Pensions.” OECD Aging Working Papers, AWP 3.5.
- World Bank (1994) *Averting the Old-Age Crisis: Policies to Protect the Old and Promote Growth*. New York: Oxford University Press.