Towards Retirement Security



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Foreword

Retirement protection is one of the most important social issues, affecting not only the current generation but also our future generations. The issue is complicated and multi-faceted, relating both to the responsibilities of individuals and to those of society at large. Individuals have the responsibility to save during their working years to prepare for their retirement, and society has the responsibility to provide assistance to those most in need.

There is no "one-size-fits-all" solution but the multi-pillar system recommended by the World Bank, examined in detail later in this publication, provides a sensible policy framework. Based on this framework, the Hong Kong Mandatory Provident Fund (MPF) System is designed as a second pillar system, i.e. a mandatory, privately managed, fully funded contribution system.

Participation being mandatory in nature, the MPF System entrusts individuals with the responsibility to take good care of their MPF savings, including making proper investment decisions. To enhance efficiency, MPF schemes are managed by private entities and operated through a market mechanism. The MPF System is fully funded, meaning that it possesses adequate assets to cover all current and future payment obligations and is financially sustainable.

The establishment of the MPF System was a breakthrough in the history of Hong Kong's social policy. It was established after a long debate on how to tackle retirement protection in the face of an ageing population and followed consensus in society that such a system was a good means to provide basic retirement protection.

With the arrival of its 15th anniversary, though still relatively young, the MPF System has made a significant contribution to enhancing the retirement savings of the workforce in Hong Kong.

In measuring the success of the MPF System, the statistics speak for themselves. Before the MPF System was implemented, it is estimated that only about a third of Hong Kong workers were covered by any sort of occupational retirement protection scheme. After the launch of the MPF System, as of June 2015, 85% of Hong Kong's workers (about 3.2 million) were covered by the MPF System or some other form of retirement scheme. Most of the remaining workers are not legally required to join any local retirement scheme; this group includes workers with overseas retirement schemes, employees aged below 18 or aged 65 and above, and domestic helpers. Coverage of the working population in Hong Kong is excellent by international standards.

As of June 2015, the total asset size of the MPF System had reached HK\$620 billion. The sum includes HK\$455 billion in MPF contributions (net of amounts withdrawn) and HK\$165 billion in investment returns (net of fees and charges). People who otherwise might have accumulated little or nothing for retirement now have a sum put aside to support them later in life. One of the strengths of the MPF System is that it is helping the current generation to take care of part of its own arrangements for retirement protection, rather than simply passing the burden to the next generation.

There is much room for improving the MPF System, as it is relatively young, and continuous reviews have been, and will continue to be, undertaken. It is, however, important to keep in mind that the MPF System, of itself, can never be a complete solution to all issues associated with retirement protection in Hong Kong. From the outset, it was intended that the MPF System would only provide basic retirement protection and address part of the retirement needs of the population. After all, it is only one of the pillars of retirement protection and is intended to be complementary to other sources of retirement support, such as Government social security programmes and individual savings arrangements. These different pillars need to work together to provide for total retirement savings adequacy for the population. Like many other developed economies, Hong Kong has an ageing population. How to ensure the aged will have a reasonable standard of living after retirement is a major item on the agenda of many governments. This publication provides a succinct review of the trends and developments of retirement protection systems in Hong Kong and the world, showing ways and approaches adopted by different societies to respond to the issue. I hope it will provide useful information and insight for those who are concerned with the issue of retirement protection.

> Dr David Wong Yau-kar Chairman Mandatory Provident Fund Schemes Authority

Overview

Providing income security in retirement to an ageing population is an issue of paramount importance faced by many societies. Policymakers, academics and pension experts continuously explore the best ways to enhance retirement income security for the aged on the one hand, and avoid excessive financial burden on society on the other.

Launched on 1 December 2000, the Hong Kong MPF System has now been in operation for 15 years. The MPF System represents part of Hong Kong's retirement protection arrangements. This publication is prepared with the objective of renewing the public's understanding of the MPF System, particularly its roles and responsibilities in Hong Kong's overall retirement protection framework.

This publication offers a comprehensive review of the major concepts, trends and developments of retirement protection. Its scope goes beyond the MPF System and extends to other retirement protection arrangements. Extensive reference has also been made to retirement protection arrangements in overseas countries.

It is composed of five chapters. Chapters 1 to 3 examine the issue of retirement protection in the global arena. Chapter 1 introduces the basic concepts and frameworks relating to retirement protection arrangements, such as the rationale and objectives of setting up retirement protection systems and the multi-pillar model recommended by the World Bank. Chapter 2 traces the development of retirement protection arrangements in the world, outlining the history of growth, challenges encountered and reforms implemented. Chapter 3 focuses on second pillar retirement savings systems, analyzing their major objectives, history of growth and the driving forces behind them, trends and challenges.

Chapters 4 and 5 concentrate on the retirement protection arrangements in Hong Kong. Chapter 4 reviews the past development of retirement protection in Hong Kong, including the genesis of the MPF System. It also discusses the current state of Hong Kong's retirement protection arrangements in the context of the World Bank's multi-pillar framework and various challenges ahead. Chapter 5 is devoted to the development of the MPF System. It traces the difficulties and challenges encountered by the MPF System in early days. It also provides a detailed account of the refinements and enhancements that have been made to the MPF System as well as other efforts that are being undertaken by the Mandatory Provident Fund Schemes Authority (MPFA) with the aim of developing a savings system that Hong Kong people value.

Chapter 1 Quest for Solutions to Retirement Security

This chapter introduces the basic concepts and frameworks relating to retirement protection systems¹. It begins with a discussion of the rationale for such systems in modern societies, then examines briefly their major objectives. With the evolution of retirement protection systems over the past hundred years, a wide variety of arrangements are in operation in different countries. The World Bank promotes the use of a multi-pillar framework to provide retirement protection and that framework is highly regarded by policymakers in different countries. This chapter discusses some of the major common types of arrangements, including their primary objectives and target groups. To assess a retirement protection system, the World Bank and the Organisation for Economic Co-operation and Development (OECD) have developed certain criteria and principles to be used for the purpose. These criteria and principles are also briefly discussed.

The Need for Formal Retirement Protection Systems

There are many means that an individual may use to meet his financial needs in old age, such as voluntary personal savings and family support. These arrangements do not necessarily warrant any involvement of the government. However, since the 19th century, formal retirement protection systems set up by governments have become commonplace in different countries around the world. In this regard, what is the rationale behind governments' active role in retirement protection?

Diminishing Role of Informal Systems

The earning abilities of most people decrease when they become aged. They may no longer have sufficient financial resources to support themselves. In traditional societies, families take care of members who reach old age and children provide support to their aged parents.

¹ Pension scheme/system and retirement protection scheme/system are used interchangeably in this publication.

However, even if these informal arrangements work well, some old people may not have children to take care of them. Some families may also be too poor or unwilling to provide adequate care for the aged. With changing social values, increasing labour mobility and rapidly ageing populations, assistance from family members can no longer be regarded as a reliable and sustainable source of support to the aged (Schwarz, 2006; World Bank, 1994). The establishment of the retirement protection system in Germany by Otto von Bismarck in 1889 as well as subsequent systems in other European countries was said to be a response to the social changes caused by forces like urbanization and industrialization in these countries at the time (Feldstein & Liebman, 2002).

Individual Myopia

Instead of family support, individuals who can afford to do so may prepare for their old age by making sufficient retirement savings, probably through investment and insurance. However, some people may suffer from "myopia", and even where they can afford to do so, may not plan for their old age when they are young. By the time they begin to become aware of this issue, it may be too late for them to take remedial actions. For instance, their remaining working lives may have become too short to accumulate adequate retirement savings. Government involvement, such as mandating savings, may be necessary to address individuals' myopia (Feldstein & Liebman, 2002).

Moral Hazard

Another behavioural issue may affect the need for government involvement in retirement protection. Some people may overspend when they are young, with the expectation that society will take care of them when they are old. To deal with this moral hazard, the government may need to require mandatory participation in a retirement protection scheme for those individuals who can afford it and limit direct government transfers to those people who were poor and unable to save during their working years (Kotlikoff, 1987; Schwarz, 2006; World Bank, 1994).

Information Gaps

Even those people who wish to set aside their consumption and save for retirement may not have the required knowledge about retirement planning to make informed decisions. Some studies also show that people may not make rational investment decisions. Owing to certain behavioural bias (e.g. procrastination and over-confidence), people often make sub-optimal investment decisions (Mullainathan & Thaler, 2000). Some of them may make improper investment decisions (overly aggressive or conservative), which lead to a shortage of required savings for retirement (World Bank, 1994). Against this background, governments may need to get involved either as a direct provider or as a regulator of retirement protection schemes or products.

Market Failure

Even if people have proper knowledge and a willingness to save, they need to have access to appropriate investment products which give them reasonable rates of return. This is particularly important for small investors who cannot develop a diversified portfolio of investments, which limits their ability to save for retirement (Diamond, 1977). As another example, proper annuity products are required for people to address longevity risks (Holzmann & Hinz, 2005). If such products are not available in the market or are not offered by credible organizations, the government may need to be involved either as a provider or a regulator of relevant schemes or products.

Long-Term Poverty

Some low-income individuals are unable to save during their working lives, and no incentives for personal savings are effective for them. Some people also face the risk associated with the length of working life (Diamond, 1977). Owing to various reasons (e.g. health and family), certain people may have shorter working lives than others. These people may be unable to accumulate adequate savings to finance their retirement and need others' assistance to alleviate poverty in old age.

Objectives of Retirement Protection Systems

As seen from the above discussion, people may face different problems relating to the issue of retirement protection. In response to these problems, retirement protection systems have been established to achieve a wide range of objectives. While these objectives are not necessarily mutually exclusive, they represent societal priorities. Countries may place different emphasis on each of these objectives, based on their social, economic and demographic conditions and some may not feature in the system design of some countries at all.

Protection against the Risk of Poverty in Old Age

Some people are poor all their lives and are unable to save enough for retirement. One of the major objectives of many retirement protection systems is therefore to provide resources for these people to alleviate their hardship in old age (Holzmann & Hinz, 2005). In some countries (e.g. UK), certain pension schemes (e.g. minimum guaranteed pension and means-tested basic pension) have been established with a focus to address the retirement needs of these vulnerable people.

Consumption Smoothing

Some people may have decent earnings during their working lives. They are however unable to maintain a reasonable standard of living after retirement as they may have overspent when they were young. This behaviour may be due to myopia or absence of the required information or knowledge on retirement planning. Thus, another major objective of many retirement protection systems is consumption smoothing, a process that can encourage or require people to transfer consumption from their working lives to their retired years (Barr & Diamond, 2006).

Pooling

Even if people plan and make savings for their retirement, they still face many uncertainties. One such uncertainty is how long one will live. Longevity risk is the risk of an individual outliving his or her retirement savings. Statistically, it is difficult to predict how long an individual will live, but the life expectancy of a population in general is more predictable. In principle, therefore, pooling the savings of the population under a retirement protection system and providing retirement benefits to all of them upon retirement may help protect individuals from longevity risk (Barr & Diamond, 2006). Different models can be adopted on ways to structure and deliver this type of protection either within retirement savings schemes or through external providers such as insurers.

Redistribution

Retirement protection systems can be used to redistribute incomes from the wealthier to the poorer, ensuring a more equitable income distribution. The retirement protection system may be designed in a way that the benefits/contributions ratio will be higher for the poor and lower for the wealthier. Retirement payments made to low-income retirees could be enhanced by reducing payments to high-income ones. The government could also make special transfers from its budget to low-income contributors or the unemployed (Holzmann & Hinz, 2005).

Other Objectives

In addition to these primary objectives, retirement protection systems may have secondary objectives, including economic development. The design of such systems would have an impact on different areas of the economy, such as financial and labour markets. For instance, the establishment of a mandatory privately managed scheme is considered to have a positive effect on the development of the financial markets of a country (World Bank, 1994). The design of retirement protection systems also has a bearing on the labour market. It is said that generous public pension benefits, such as those offering early retirement incentives, would reduce the labour participation rate (OECD Economics Department, 2004).

Among various objectives, protection against the risk of poverty in old age and smoothing consumption from one's working life into retirement are the core ones for the World Bank's assessment of retirement protection systems (Holzmann, Hinz, & Dorfman, 2008).

Typology of Retirement Protection Schemes

There are a wide variety of retirement protection schemes among countries. This section discusses the major classifications of them based on the OECD's taxonomy (Yermo, 2002).

Public vs. Private Pension Schemes²

<u>Public pension schemes</u>: These schemes are managed by the government. Public pension schemes are traditionally pay-as-you-go (PAYG) schemes. For PAYG schemes, benefits are paid to current retirees from contributions from current workers and / or government revenues, and no funding is normally set aside to meet future liabilities. Some countries however have partial pre-funding of public pension liabilities, for instance, by building up large reserves (World Bank, 1994).

<u>Private pension schemes</u>: These schemes are managed by institutions other than the government. Private pension schemes may be administered directly by a private sector employer acting as the plan sponsor, a private pension fund provider or other service providers. These schemes are usually funded schemes. In some countries, private pension schemes include those for public sector employees (OECD, 2005).

Funded vs. Unfunded Pension Schemes

<u>Funded pension schemes</u>: These schemes have dedicated assets to pay for future pension claims. For fully funded schemes, the accumulated assets are able to or expected to be able to afford all of the future pension benefits payable to members.

<u>Unfunded pension schemes</u>: Unfunded schemes are also known as PAYG schemes. These schemes generally do not have dedicated assets to pay for future pension claims. Pension benefits are usually funded by the contributions of current workers. According to some overseas experience, if the contributions made into an unfunded scheme are unable to support the payout of benefits, the government may have to bail out the scheme. Unlike funded schemes, unfunded schemes relax the constraint that the benefits received by any generation must be matched by its own contributions (Barr & Diamond, 2006).

Defined Benefit vs. Defined Contribution Pension Schemes

<u>Defined benefit (DB) schemes</u>: Under DB schemes, an employee's pension benefit entitlement is determined by a formula which takes into account years of service for the employer and, in most cases, wages or salary (Bodie, Marcus, & Merton, 1988). The benefit of a DB scheme is "defined" as the formula to calculate the benefit entitlement is defined. Many public pension schemes are DB schemes but globally, fewer and fewer private pension schemes are DB schemes.

Defined contribution (DC) schemes: Under DC schemes, contributions made in respect of an employee are used to purchase investment assets, which are accumulated in the employee's account as are the returns generated by these assets. Benefits to the employee are based solely on the amount contributed to the scheme in respect of the employee plus the investment return thereon (Barr & Diamond, 2006). DC schemes are therefore traditionally fully funded schemes. Contributions made by employees under a DC scheme are "defined" as the formula for calculating contributions to be made in respect of employees is defined. However, unlike DB schemes, the benefits to be paid to employees in DC schemes are not known in advance.

There is also a variant type of DC schemes known as notional DC (NDC) schemes whereas the traditional type may be referred to as a financial DC (FDC) scheme. Under an FDC scheme, contributions made to individual accounts are invested in market assets chosen by employees (e.g. investment funds). Under an NDC scheme, contributions are not invested in the market assets chosen by employees. Instead, they are recorded in employees' accounts which earn a rate of return set by the government, rather than market returns. Normally, employees' contributions made to an NDC scheme are used to pay the benefits of current retirees. In this sense, NDC schemes are by nature PAYG schemes (Palmer, 2006; World Bank, 2005).

Occupational vs. Personal Pension Schemes

<u>Occupational pension schemes</u>: Enrolment in these schemes is based on an employment relationship. In some countries, occupational schemes may be established by employers, groups of employers (e.g.

² Some pension systems may exhibit some features of a public pension scheme and a private pension scheme at the same time.

industry bodies) and labour associations (e.g. a trade union). In other countries, employers may select one or more pension fund providers for employees' choice. Generally, the employer is responsible for making contributions to occupational pension schemes, but employees may also be required to contribute. Participation in these schemes may be mandatory or voluntary (OECD, 2005).

<u>Personal pension schemes</u>: Enrolment in these schemes is not based on an employment relationship. Individuals select and enrol in the scheme by themselves. Employers may however sometimes make contributions to personal pension plans. Some personal schemes may have restricted membership (e.g. members of a particular trade association) (OECD, 2005).

Multi-Pillar Framework Recommended by the World Bank

Overall Framework

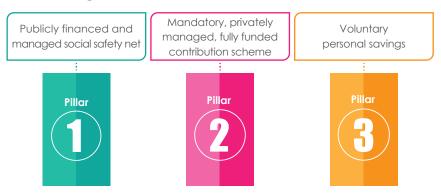
With reference to the retirement protection systems in many countries, the World Bank recommended a three-pillar approach in 1994 to address the issue of old-age protection (World Bank, 1994). The three pillars, as proposed at that time, comprised:

<u>Pillar One</u>: a publicly financed and managed social safety net;

<u>**Pillar Two:</u>** a mandatory, privately managed, fully funded contribution scheme; and</u>

Pillar Three: voluntary personal savings.

Figure 1.1 World Bank's Three-Pillar Framework

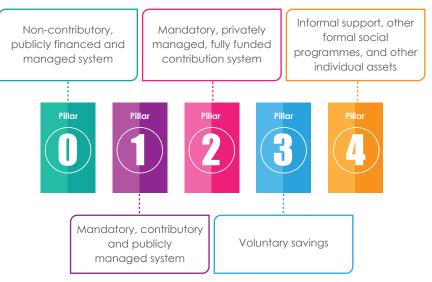


According to the framework recommended by the World Bank, the three pillars have different primary objectives. The first pillar has the primary objective of alleviating old-age poverty through redistribution of income. The second pillar serves the function of enhancing consumption smoothing or saving for retirement of the working population. The third pillar aims to provide additional protection for people who want more income and insurance in their old age (World Bank, 1994).

In 2005, in the light of operational experience, the World Bank expanded the three-pillar framework into a five-pillar framework (Holzmann & Hinz, 2005). The five pillars are:

- <u>**Pillar Zero:**</u> a non-contributory, publicly financed and managed system that provides a minimal level of protection for retirement;
- **<u>Pillar One</u>**: a mandatory, contributory and publicly managed system;
- **<u>Pillar Two</u>**: a mandatory, privately managed, fully funded contribution system;
- Pillar Three: voluntary savings (e.g. personal savings and insurance); and
- **<u>Pillar Four:</u>** informal support (e.g. family support), other formal social programmes (e.g. health care and housing), and other individual assets (e.g. home ownership).

Figure 1.2 World Bank's Five - Pillar Framework



Objectives of Each Pillar

According to the World Bank, the two core objectives of retirement protection systems are: protection against the risk of poverty in old age and smoothing consumption from one's working life into retirement (Holzmann, Hinz, & Dorfman, 2008). In this regard, depending on the actual design of the pillar, certain pillars are better suited to achieve a particular objective than others.

Serving as the basic pension, the zero pillar should meet the objective of protection against old-age poverty by providing a minimal level of retirement protection. It is normally in the form of a universal flat-rate benefit or general social assistance financed by government revenue. It ensures that people with low lifetime incomes are provided with basic protection in old age (Holzmann, Hinz, & Dorfman, 2008).

The first pillar is typically a PAYG, public pension scheme. It primarily addresses the risks of myopia, low earnings, inappropriate retirement planning, etc. Depending on the design of the system, the first pillar can achieve both the objectives of old-age poverty protection and consumption smoothing (Holzmann, Hinz, & Dorfman, 2008).

The second pillar is a mandatory and privately managed pension scheme. Its primary objective is consumption smoothing, helping the working people to save for retirement. Second pillar systems may provide minimum pension benefits to eligible members (i.e. those members whose savings in this pillar are below a prescribed amount). In this respect, the second pillar may also play the role of protection against old-age poverty.

Voluntary in nature, the third pillar complements the formal pension systems and enables people to accumulate a higher level of savings in retirement. Since the fourth pillar encompasses a wide range of formal and informal programmes, its objectives cover both old-age poverty protection and consumption smoothing (Holzmann & Hinz, 2005).

Table 1.1 Primary Objectives of Different Pillars

Pillar	Objectives
0	Old-age poverty protection
1	Old-age poverty protection and consumption smoothing
2	Consumption smoothing and old-age poverty protection through provision of minimum pension
3	Consumption smoothing
4	Old-age poverty protection and consumption smoothing

Source: Adapted from Holzmann, Hinz, & Dorfman (2008)

Target Groups of Retirement Protection Systems

According to the framework recommended by the World Bank, the target groups of retirement protection systems could be divided into the following three categories (Holzmann & Hinz, 2005; Hu & Stewart, 2009):

- a. <u>Lifetime poor</u>: They do not or are unable to participate in employment in a sustained manner, and are therefore not properly protected by employment-related retirement protection schemes. Neither do they have any personal savings to finance their retirement expenses. When they get old and are unable to work in a full-time capacity, they will face the problem of old-age poverty.
- b. Informal sector workers: They are generally low-income groups, including certain self-employed persons, domestic employees and casual workers. Many of them may not have access to retirement protection schemes offered by employers. Broken employment history may also undermine their accumulation of savings in occupational retirement protection schemes.
- c. <u>Formal sector workers</u>: They are mainly regular employees. Compared with the workers in the informal sector, those of the formal sector are often enrolled properly in private and public retirement protection schemes.

An essential feature of the multi-pillar framework is that certain pillars are better suited to address the needs of target groups. For instance, the zero pillar is well suited to address the need of the lifetime poor for basic income support as they are not covered or adequately covered by the first or second pillars. The first or second pillars are primarily targeted at the formal sector workers who accumulate retirement savings through making contributions to the private and public retirement protection schemes during their working life (Holzmann, Hinz, & Dorfman, 2008). Under a multi-pillar system, therefore, each pillar could complement the others to cater for the needs of different target groups.

Table 1.2 Target Groups of Different Pillars

Pillar		Target groups	
	Lifetime poor	Informal sector	Formal sector
0	Н	М	L
1			н
2			н
3	L	н	н
4	н	н	м

Note: The relative importance of each pillar for each target group is indicated by three levels: high (H), medium (M) and low (L).

Source: Adapted from Holzmann, Hinz, & Dorfman (2008)

Evaluation of Retirement Protection Systems

Since there is a wide variety of retirement protection systems in the world, it is a complicated task to compare and assess the performance or effectiveness of each of them. In this regard, the World Bank has developed a policy framework to evaluate the design of retirement protection systems, the primary criteria of which are listed as follows (Holzmann, Hinz, & Dorfman, 2008):

- **a.** Adequacy: The system can provide benefits sufficient to prevent old-age poverty and a reliable means to smooth consumption for the vast majority of the population.
- **b.** Affordability: The system is within the financial capacity of individuals and society and does not have untenable fiscal consequences.
- **c.** Sustainability: The system is financially sound and can be maintained over a foreseeable horizon.
- **d.** Equitability: The system can provide income redistribution from the rich to the poor, and this redistribution is consistent with societal preferences.
- e. Predictability: The system can provide predictable benefits if (i) the benefit formula of DB schemes is specified by law and is not subject to the discretion of policymakers; (ii) the formula of DB schemes is designed to protect individuals from inflation and wage adjustments prior to retirement or the investment policy of DC schemes can protect members from material effects on benefits from asset price adjustments prior to retirement; and (iii) the benefit is indexed during retirement so as to protect members from inflation risk.
- **f.** Robustness: The system has the capacity to withstand major shocks, including those related to economic, demographic and political changes.

In evaluating retirement protection systems, the OECD adopts the following set of principles, and some of them are different from those adopted by the World Bank (OECD, 2012) :

- a. Coverage of the system, including both mandatory (public and private) and voluntary (private) schemes.
- **b.** Adequacy of retirement benefits from both public and private schemes to maintain a decent standard of living in old age.
- c. Financial sustainability and affordability of retirement protection systems to taxpayers and parties making contributions.
- d. Work incentives: minimizing the distortions of the system on individuals' willingness to participate in the labour market and encouraging people to work longer.
- e. Administrative efficiency: keeping the cost of scheme administration, such as collection of contributions, payment of benefits and investment management, as low as possible.
- f. Diversification of retirement savings across different pillar systems, providers or administrators (public and private) and modes of financing (PAYG and funded), and measures to ensure security of benefits in the face of different risks and uncertainties (e.g. solvency risk for DB schemes).

Table 1.3 Principles and Criteria Adopted by World Bank andOECD to Evaluate Retirement Protection Systems

Principles/Criteria	World Bank	OECD
Adequacy	✓	 ✓
Affordability	 Image: A second s	
Sustainability	 Image: A start of the start of	
Equitability	 Image: A second s	
Predictability	 Image: A start of the start of	
Robustness	 Image: A set of the set of the	
Coverage		~
Work incentives		 ✓
Administrative efficiency		 ✓
Diversification and security		 ✓

Conclusion

Retirement protection systems are important social programmes in every society. With the diminishing role of informal support (e.g. assistance from family) as well as various constraints encountered by individuals in planning for retirement, governments are increasingly involved in the issue of retirement protection of individuals. The core objectives of retirement protection systems are to protect against the risk of old-age poverty and smooth individuals' consumption from their working lives to their retired years. There are different means to achieve these objectives, which may include putting in place public retirement protection schemes, private retirement protection schemes or both. Participation in these schemes may be mandatory or voluntary. For better diversification and efficiency, the World Bank recommends a multi-pillar framework, emphasizing the importance of the complementary role of each pillar. Since one pillar may achieve a particular objective and serve a particular target group better than other pillars, the implementation of a multi-pillar framework would be best suited to providing a comprehensive retirement protection solution to the population as a whole.

Chapter 2 Progress with Adjustments in a Changing World

While retirement protection is a modern concept, its roots can be traced back to the Roman Empire more than 2 000 years ago. This chapter provides an overview of the historical development of retirement protection. In addition to the origin of retirement protection systems, this chapter also discusses the rise of modern systems, including the one pioneered by German Chancellor Otto von Bismarck as well as the rapid expansion of such systems after World War II. Since the 1980s, in face of various challenges, reforms of retirement protection systems have been carried out in different parts of the world. This chapter examines the driving forces as well as general trends of these reforms.

The Origin of Retirement Protection Systems

The origin of retirement protection systems can be traced back to the ancient Roman Empire, which offered retirement benefits to its military personnel. Benefits were initially offered on an ad-hoc basis. In 13 BC, Augustus, the founder of the Roman Empire, created a pension scheme from which veteran legionnaires were able to receive pension benefits upon the completion of 16 years in a legion and four years in the military reserves. Benefits were paid from general revenues. In 5 AD, Augustus established a special fund for the pension payments which was financed through a 5% tax on inheritances and a 1% tax on all transactions conducted through auctions. Pension benefits were roughly equivalent to 75% of a labourer's annual earnings (Clark, Craig, & Wilson, 2003).

The British and Spanish governments started to provide pension benefits to their military veterans in the 17th century, and a naval pension was set up in the US in 1787. Initially on a discretionary and individual basis, a formal civil service pension system was introduced for customs officials in the UK in 1712. In 1810, the foundation of the civil service pension scheme was legislated by the British Parliament (Palacios & Whitehouse, 2006).

One of the earliest attempts by a government to guarantee a minimum standard of living for civilians was the Poor Laws of 1597 and 1601 in the UK. Under the law, each local authority had to be responsible for

collecting funds through a poor rate (i.e. a tax on property) and for allocating poor relief to eligible individuals (Blake, 2003).

Towards the end of the 19th century, large private-sector companies started to introduce occupational pension schemes for their employees. The earliest private-sector schemes were related to the large employers in major industries, including railway companies, gas companies, banks, insurers and manufacturers. In the UK, one of the earliest private-sector occupational pension schemes was the Gas Light and Coke Company Superannuation Fund, which was provided for salaried staff in 1842 and extended to manual workers in 1870. Railway companies in the UK established pension schemes for employees starting from the middle of the 19th century. By the early 20th century, about 30 pension schemes covering 90 000 salaried staff had been established by independent railway companies (Blake, 2003). In the US, the American Express Company established the first private pension scheme in the US in 1875 (Seburn, 1991).

The Rise of Modern Retirement Protection Systems

The development of retirement protection systems in different countries always hinges on their local circumstances. In the international arena therefore, such systems were not developed along a single institutional model (Arza & Johnson, 2006). Despite this, in the development of modern systems, some paths (i.e. systems sharing common institutional characteristics) do exist. While there are many different classifications of such paths, a popular one is the Bismarckian and Beveridgean dichotomy (Cremer & Pestieau, 2003; Ebbinghaus & Gronwald, 2011; Schludi, 2005; Werding, 2003).

Bismarck's Social Insurance

The retirement protection system established by Chancellor Otto von Bismarck in Germany in 1889 is often considered as the first formal mandatory public retirement protection system in the world. In a sense, Bismarck's was not the first mandatory system. As early as 1844, Belgium introduced a compulsory sickness, invalidity, old age, widows' and orphans' insurance scheme for seamen. However, the scheme targeted only a small sector of society, which could not be compared to the large scheme established by Bismarck covering about 40% of workers at its inception (Arza & Johnson, 2006).

The pension system and other social programmes introduced by Bismarck are considered as a means to counter social unrest and rally the support of the urban working-class to the government. It is also argued that the emergence of retirement protection schemes in the late 19th century and the first half of the 20th century in economically advanced countries could be attributed to social and economic factors such as industrialization, urbanization, increases in life expectancy and political developments such as the formation of nation states (Feldstein & Liebman, 2002).

The retirement protection system introduced by Bismarck was a mandatory, contributory system for blue-collar and lower-paid white-collar workers. Both employers and employees were required to make contributions. The government added a small flat-rate subsidy, and earnings-related benefits were paid to contributors when reaching the age of 70. At the outset, pension benefits were set at a below-subsistence level, amounting to only 18% of the average wage. Very few workers were expected to receive benefits for many years as the male life expectancy at birth was less than 45 years at that time. Since employees were not required to retire in order to receive the pension benefits, the scheme could be viewed as a form of wage subsidy for older workers (Arza & Johnson, 2006; Börsch-Supan & Wilke, 2004; Zviniene & Schwarz, 2014). In 1891, 11.5 million workers out of a total population of 49 million in Germany were covered in the retirement protection system. In 1911, a separate but similar scheme was set up for white-collar employees. In 1925, 17.5 million workers were covered out of a total population of 62 million in Germany (Cutler & Johnson, 2001).

The original retirement protection system established by Bismarck was a funded one. The system was subsequently converted into a de facto PAYG system when most funds were invested in government bonds between the two world wars. In 1957, the retirement protection system in the Federal Republic of Germany was converted formally into a PAYG one (Börsch-Supan & Wilke, 2004). Over time, pension benefits have also become much more generous than the original scheme.

The retirement protection system established by Bismarck had great influence around the world. Bismarckian systems were set up in Austria, Belgium, Greece, Italy, Luxembourg, Portugal and Spain (Werding, 2003). Austria introduced a compulsory pension system for industrial workers in 1906 and, from 1907, the system was also applied to Hungary. Italy introduced a similar retirement protection system in the interwar period for blue-collar workers in 1919 and for white-collar workers in 1939 (Ebbinghaus & Gronwald, 2011; Thane, 2006).

With gradual evolution, the Bismarckian retirement protection systems have the following major features (Ebbinghaus & Gronwald, 2011; Gern, 2002; Werding, 2003):

- Membership is compulsory for workers. Different retirement protection schemes might be offered to various categories of workers (e.g. blue-collar and white-collar) and different industries (e.g. agriculture, mining and public sector).
- Benefit entitlements are linked to a worker's contributions, which are related to his earnings. Generally, more contributions would attract a higher level of benefits.
- It aims at ensuring a substantial replacement rate, providing a major source of retirement income for retired workers.
- It is designed as a DB system.

Beveridge's Basic Pension

Another popular model for public retirement protection systems is Beveridge's basic pension. The Beveridgean system is named after William Henry Beveridge, a British economist, who presented a report entitled "Social Insurance and Allied Services" to the British Parliament in 1942. Among others, the report contained a proposal for the provision of a basic pension universally (Blake, 2003).

The key features of the Beveridgean retirement protection system were that the government only provided a universal flat-rate minimum benefit, sufficient to cover basic needs of retirees only. In Beveridge's original proposal, the basic pension system should be fully funded through contributions from employees. For various reasons, however, the basic pension system adopted in the UK turned out to be a PAYG one. The Beveridgean system is regarded as "contributory" as entitlement to benefits requires satisfaction of certain conditions on individuals' contribution history. However, since benefits received from this system depend very little on an individual's years of contribution or actual amount of contributions, this system may not be considered as contributory in the usual sense (Bozio, Crawford, & Tetlow, 2010).

The basic pension system proposed by Beveridge had a clear purpose: raising the bottom income to a subsistence level to address the issue of mass poverty (Conde-Ruiz & Profeta, 2003). Beveridge therefore recommended that benefits should be provided at the subsistence level only, and individuals who wished to enjoy their retirement at a higher living standard should make their own retirement savings (Blake, 2003). In the report, Beveridge stated that:

Social security must be achieved by co-operation between the State and the individual. The State should offer security for service and contribution. The State in organizing security should not stifle incentive, opportunity, responsibility; in establishing a national minimum, it should leave room and encouragement for voluntary action by each individual to provide more than that minimum for himself and his family. (Beveridge, 1942, pp. 6-7)

Beveridgean retirement protection systems can be found in Ireland, the Netherlands and the UK. These systems typically have the following characteristics (Werding, 2003):

- Membership is universal, covering the total labour force or even all citizens of a country.
- The link between contributions and benefits is weak.
- Benefits are largely intended to guarantee a certain minimum level of retirement income (i.e. subsistence level).

Some countries adopted an approach similar to the Beveridgean system as early as in the 19th century. For instance, Denmark introduced a means-tested system financed from general revenues in 1891. Sweden also implemented a universal contribution-financed basic pension with a tax-financed, means-tested supplement in 1913 (Ebbinghaus & Gronwald, 2011).

Comparison of the Two Types of Public Retirement Protection Systems

It is often argued that there are noticeable differences in the ideology of the Bismarckian and Beveridgean systems. The Bismarckian system aims to ensure a reasonable standard of living in old age, while the Beveridgean system focuses on securing a retirement income at the subsistence level. For the Beveridgean system, any retirement income in excess of the basic public pension benefits should be provided privately (e.g. personal savings and private occupational pensions). It is also suggested that compared with the Bismarckian system, the Beveridgean one is more conducive to the development of private occupational pensions (i.e. second pillar) and personal savings (i.e. third pillar). It is even alleged that the generosity of the Bismarckian system may crowd out private savings (Ebbinghaus & Gronwald, 2011; Feldstein & Liebman, 2002).

It should, however, be noted that the two types of systems are not mutually exclusive. For instance, minimum pension guarantees in which pension benefits are not linked to contributions have been adopted by some Bismarckian systems (e.g. Belgium and Luxembourg). On the other hand, some Beveridgean systems have implemented earnings-related, PAYG pension programmes so as to provide better retirement protection for their citizens (e.g. UK). The design of retirement protection systems in some countries in fact combined the features of both types of systems at the outset. In the US, state governments provided means-tested pensions financed by general revenues during the 1920s. The Social Security Act of 1935 created the Unemployment Insurance, the Aid to Dependent Children, the Old Age Insurance (OAI), and the Old Age Assistance (OAA). The OAI, a Bismarckian system, gradually evolved into the Old Age Survivors and Disability Insurance, the programme that is nowadays known as Social Security. The OAA, a Beveridgean-style means-tested system (jointly funded by the federal and state governments), was replaced by the Supplemental Security Income in the early 1970s (Feldstein & Liebman, 2002).

While originating in Europe, public retirement protection programmes received increasing attention from other regions after World War I. The issue of retirement protection was included in the agendas of some of the newly established international organizations, including the International Labour Organization and the International Conference of National Unions of Mutual Benefit Societies and Sickness Insurance Funds launched in Brussels in 1927 which became the International Social Security Association later (International Labour Organization, 2009).

The table below lists the years that the first pension laws were passed in a number of countries. Starting from Europe, public retirement protection systems spread gradually to Oceania, Latin America, North America, Asia and Africa.

Table 2.1 Years of First Legislation of Pension Systems in Selected Countries

Europe		North America	
Germany	1889	Canada	1927
UK	1908	US	1935
France	1910		
Sweden	1913	Asia	
Italy	1919	Japan	1941
Netherlands	1919	Turkey	1949
Spain	1919	China	1951
Poland	1927	India	1952
Greece	1934	Singapore	1953
		Saudi Arabia	1962
Oceania		Pakistan	1972
New Zealand	1898		
Australia	1908	Africa	
		South Africa	1928
Latin America		Egypt	1955
Argentina	1904	Tunisia	1960
Brazil	1923	Nigeria	1961
Chile	1924	Ethiopia	1963
Costa Rica	1941	Gabon	1963
Mexico	1943	Kenya	1965

Source: Arza & Johnson (2006)

Rapid Expansion of Public Retirement Protection Systems after World War II

Before World War II, benefits provided by public retirement protection systems were only modest, giving no more than 15% to 20% of the average wages, and most retirees were expected to live just a few years after retirement (World Bank, 1994). The rapid expansion of retirement protection systems came after World War II. The expansion was fuelled by the economic boom and increasing wages in the 1950s and 1960s. In addition to the risk of old-age poverty, income maintenance in old age started to become a concern of the public at that time. Expectations were formed that living standards of pensioners should increase in tandem with the rising living standards of the employed. These expectations in turn led to political pressure for increasing pension benefits so as to keep up with living standards (Ebbinghaus & Gronwald, 2011).

Such an expansion was particularly noticeable for Bismarckian systems. For instance, in some countries, retirement protection schemes were originally provided only for certain occupational sectors. The coverage was subsequently extended to most or the entire working population. New beneficiaries were added as schemes were expanded from old-age coverage to include widows and orphans. The statutory retirement age was also reduced in some countries. Early retirement options were introduced so that individuals would become eligible for pension benefits earlier. Workers who were in mid-career at the time retirement protection systems started might be provided full pension benefits with less than a full career of contributions. Benefits were also made more generous which could be relied on as the main instead of a supplementary source of retirement income (Zviniene & Schwarz, 2014). For example, in Italy, two-tier benefits (flat-rate plus earnings-related) and a minimum pension for those without sufficient contribution records were introduced in the 1950s. Pension coverage was also extended to include workers in the agricultural sector and the self-employed (Ebbinghaus & Gronwald, 2011).

Some systems were turned from funded ones to PAYG ones. For instance, the Federal Republic of Germany introduced a new formula in 1957, and turned the funded system to a PAYG one, offering better pension benefits to current pensioners (Ebbinghaus & Gronwald, 2011).

Expansion of retirement benefits was not restricted to the Bismarckian systems. Among the Beveridgean systems, the UK introduced the Basic State Pension (BSP), a PAYG system, under the National Insurance Act 1946. In addition to the BSP, the Graduated Retirement Benefit (GRB), the first earnings-related state pension in the UK, was implemented in 1961. The GRB was replaced by the State Earnings-Related Pension Scheme in 1978, which was in turn substituted by the State Second Pension in 2002. In addition, means-tested benefits were provided through National Assistance which later became Pension Credit (Bozio, Crawford, & Tetlow, 2010). In Sweden, an earnings-related pension system (i.e. Allmän Tilläggspension) was also introduced in 1960. It was a mandatory PAYG programme covering all employees and was replaced by a new system in 1999 (Hagen, 2013).

In the US, a series of amendments was made to the Social Security Act in the 1950s. In 1950, 61% of civilian workers were engaged in jobs covered by Social Security programmes. By 1959, the figure exceeded 86%. Moreover, the general benefit provided by Social Security rose by an average of 77% in 1950. In the 1960s, benefit levels were also increased twice. In addition to the general benefit increases, which were designed to keep pace with inflation, the benefit rate for aged widow(er)s was also improved. Men were also allowed to claim reduced retirement benefits at the age of 62 (Martin & Weaver, 2005).

Reforms of Retirement Protection Systems

In the 1980s, rising unemployment, inflationary pressures following the first oil crisis in 1973 and on-going demographic changes caused worsening public deficits in many countries, including developed countries as well as developing countries like Latin American countries. In Eastern Europe, the transition from a planned economy to a market economy also had an impact on their retirement protection systems. Against this background, pension reforms, particularly retrenchment of public pension programmes and introduction of privately managed occupational programmes, have been carried out in many countries.

Driving Forces for Pension Reforms

Ageing Population

Many developed economies have been encountering significant demographic changes, including increased life expectancy and a low fertility rate. Both of these demographic developments have led to a steep increase in the ratio of the elderly to working-age individuals. For example, in OECD countries, the average life expectancy at retirement for men was 13.4 years in 1958, which had increased to 18.5 years by 2010. It is forecast to continue to rise to 20.3 years in 2050. The share of people aged 65 and above is forecast to be around a quarter of the total population and 40% of the working population (aged 15-64) in 2050 (Pallares-Miralles, Romero, & Whitehouse, 2012).

An ageing population has a profound impact on public retirement protection systems, particularly PAYG systems, as the working population will have a larger number of retirees to support for a longer period of time. In addition, the working population (the contributors to the retirement protection system) as a proportion of the whole population will continue to shrink.

Table 2.2 Life Expectancy at Retirement in OECD, Men(1958-2050) (Number of Years)

Country	1958	1971	1989	1999	2010	2020	2030	2040	2050
Australia	12.5	12.5	14.7	16.6	18.6	19.5	19.3	19.0	19.7
Austria	12.0	12.0	14.3	15.7	17.5	18.7	19.5	20.3	21.1
Belgium	15.3	15.3	17.6	19.2	21.1	22.3	23.1	24.0	24.8
Canada		10.7	14.4	16.3	18.3	19.1	19.9	20.7	21.4
Czech Republic	15.4	14.2	14.8	16.9	17.0	16.9	17.8	17.2	18.1
Denmark	13.7	11.7	12.2	13.0	16.4	17.1	15.8	16.5	17.2
Finland	11.5	11.4	13.9	15.2	16.8	17.6	18.3	19.1	19.8
France	12.5	13.0	18.8	20.2	21.7	22.4	23.3	24.0	24.8
Germany	14.2	14.1	16.0	17.6	17.0	17.9	18.7	19.5	20.3
Greece	19.9	20.7	22.4	23.1	24.0	21.8	22.5	23.3	24.1
Hungary	15.6	15.1	14.8	14.9	16.5	14.4	14.5	15.4	16.3
Iceland			14.0	14.9	16.8	17.5	18.3	19.1	19.8
Ireland	7.6	7.7	13.1	14.1	16.9	17.7	18.5	19.2	20.0
Italy		16.7	23.6	25.4	22.8	21.7	19.4	20.1	20.9
Japan	14.8	13.1	16.2	17.0	18.8	19.6	20.3	21.0	21.6
Korea, Republic o	f			17.5	20.2	21.1	19.9	19.6	19.3
Luxembourg	12.5	11.4	13.8	19.0	20.8	22.1	23.0	23.8	24.6
Mexico	14.2	15.3	16.2	16.4	17.2	17.9	18.3	18.6	18.9
Netherlands	13.9	13.3	14.3	15.1	17.3	18.1	19.0	19.8	20.6
New Zealand		15.7	17.9	19.0	18.1	19.0	19.7	20.5	21.2
Norway	9.5	8.9	12.7	13.7	15.7	16.6	17.3	18.1	18.9
Poland	15.9	15.0	14.3	15.0	14.4	14.9	15.6	16.4	17.2
Portugal	12.4	11.8	14.3	15.0	16.3	17.1	17.8	18.5	19.2
Slovak Republic	16.6	15.5	15.3	15.9	14.9	15.7	16.6	17.6	18.6
Spain	13.1	13.7	15.6	16.2	17.9	19.0	19.9	20.6	21.4
Sweden	11.7	12.0	15.4	16.4	17.9	18.8	19.5	20.3	21.1
Switzerland	12.9	13.3	15.5	16.9	18.9	20.0	20.8	21.6	22.4
Turkey		14.6	29.9	31.1	31.1	28.4	24.5	21.0	22.5
UK	11.9	12.3	13.8	15.4	16.9	17.7	17.5	17.2	16.9
US	12.8	13.2	15.0	16.1	16.8	17.3	16.8	17.2	17.7
Average	13.4	13.4	16.0	17.3	18.5	18.9	19.2	19.6	20.3

Source: Pallares-Miralles, Romero, & Whitehouse (2012)

Table 2.3Population over 65 Years Old/Total Population (%)High Income OECD Region (2010-2050)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050
Australia	13.9	15.3	16.7	18.2	19.5	20.3	21.0	21.1	21.5
Austria	17.6	18.5	19.4	21.2	24.0	26.4	27.4	27.5	27.8
Belgium	17.4	18.4	19.6	21.3	23.0	24.2	24.6	24.6	24.5
Canada	14.1	15.6	17.4	19.5	21.2	21.7	21.7	21.7	21.9
Denmark	16.7	18.6	19.7	20.6	21.8	22.9	23.6	23.5	22.7
Finland	17.2	19.8	21.7	23.0	23.8	24.1	23.6	23.6	23.9
France	17.0	18.4	19.8	21.3	22.5	23.3	23.9	23.8	24.0
Germany	20.5	20.9	22.1	24.0	27.1	29.7	30.1	29.8	29.7
Greece	18.3	19.2	20.1	21.6	23.0	25.0	26.7	28.2	28.8
Iceland	11.9	12.4	14.2	16.4	18.3	19.8	21.0	21.9	23.4
Ireland	11.3	12.2	13.2	14.3	15.5	16.8	18.5	20.3	21.3
Israel	10.2	11.0	11.9	12.7	13.2	13.6	14.5	15.4	16.3
Italy	20.4	21.2	21.9	23.0	25.0	27.3	29.3	29.9	29.4
Japan	22.6	25.5	27.1	27.7	28.3	29.5	32.0	33.5	34.2
Luxembourg	14.0	14.4	15.6	17.0	18.9	20.9	21.4	21.4	20.9
Netherlands	15.4	17.6	19.3	21.1	23.0	24.6	25.2	24.9	24.4
New Zealand	13.0	14.1	15.4	17.1	18.9	20.1	20.5	20.4	20.5
Norway	15.0	16.5	17.7	18.8	19.9	21.2	22.0	22.0	21.8
Portugal	17.8	18.6	19.7	21.2	23.0	24.6	26.4	28.1	28.8
Spain	17.2	17.3	17.8	19.2	21.2	23.4	25.6	27.5	28.1
Sweden	18.3	19.8	20.5	20.9	21.6	22.4	22.9	22.9	22.7
Switzerland	17.2	17.9	18.5	19.5	21.0	22.1	22.4	22.2	22.2
UK	16.6	17.6	18.0	18.8	20.2	21.6	22.1	22.0	22.3
US	13.0	14.0	15.5	17.3	18.6	19.1	19.3	19.4	19.8

Source: Pallares-Miralles, Romero, & Whitehouse (2012)

Impact of Retirement Protection Programmes on the Labour Market

It is argued that public retirement protection programmes have impacts on the labour market. With certain retirement income protection in place, people may become less likely to continue to work after reaching the statutory retirement age (Börsch-Supan, 2012; Pallares-Miralles, Romero, & Whitehouse, 2012). During the period of 1960 to 2010, the labour participation rates of those above age 65 in different regions decreased substantially. While this trend may be attributed to a number of factors, the availability of better retirement protection programmes is likely to be one of the factors influencing their retirement decisions.

Table 2.4Evolution of Labour Force Participation Rates of
those Aged over 65 (%), 1960-2010

Region	1960	1980	2000	2010
East Asia & Pacific	40.7	37.6	32.1	29.4
Europe & Central Asia	24.4	18.0	11.2	10.1
Latin America & Caribbean	34.6	31.7	24.9	22.7
Middle East & North Africa	29.0	25.8	20.0	18.0
South Asia	47.0	44.9	39.7	36.8
Sub-Saharan Africa	56.7	54.7	50.3	48.3
High-income OECD Countries	19.8	14.4	7.2	6.3

Source: Pallares-Miralles, Romero, & Whitehouse (2012)

Some countries such as Canada, Ireland, Luxembourg, Norway and Sweden reduced the standard age of eligibility for pension benefits in the period of 1970 to 2010 (International Monetary Fund (IMF), 2011).

Table 2.5 Pensionable Ages, 1970-2010

Country	1970	Men 1990	2010	1970	Women 1990	2010
Australia	65	65	65	60	60	62
Austria	65	65	65	60	60	60
Belgium	60	60	60	60	60	60
Canada	68	66	65	68	66	65
Czech Republic	60	60	61	55	57	59
Denmark	67	67	65	62	62	65
Finland	65	65	65	65	65	65
France	65	60	61	65	60	61
Germany	63	63	65	60	60	65
Greece	57	57	57	57	57	57
Iceland	67	67	67	67	67	67
Ireland	70	65	65	70	65	65
Italy	60	55	59	55	55	59
Japan	60	60	64	55	56	62
Korea, Republic of			60			60
Luxembourg	65	65	60	65	65	60
Netherlands	65	65	65	65	65	65
New Zealand	60	60	65	60	60	65
Norway	70	67	67	70	67	67
Portugal	65	65	65	65	62	65
Slovak Republic	60	60	62	55	57	57
Slovenia			63			61
Spain	65	65	65	65	65	65
Sweden	67	65	65	67	65	65
Switzerland	65	65	65	60	62	63
ик	65	65	65	60	60	60
US	65	65	66	65	65	66

Note: Pensionable ages represent the age at which people can draw full benefits assuming individuals start to work at age 20.

Moreover, some retirement protection schemes offer early retirement incentives, which also affect the labour market. These schemes are said to have played a role in depressing employment at older ages (OECD Economics Department, 2004).

Fiscal Pressure

Increases in the generosity of benefits, ageing population and maturing of retirement protection programmes have led to a substantial increase in public pension spending relative to gross domestic product (GDP) since the 1960s. According to the IMF, public pension expenditure in the advanced economies rose from 3.8% of GDP in 1960 to 8.4% of GDP in 2010. The IMF projected that it will continue to grow to 9.6% in 2030 (IMF, 2011). The fiscal pressure has given rise to the problem of the sustainability of these retirement protection systems. In view of this, many governments have adopted measures to alleviate the worsening fiscal positions.

Table 2.6 Public Pension Expenditure as a Percentage of GDP (%),1960-2030

Country	1960	1970	1980	1990	2010	2020	2030
Australia	2.9	2.6	4.3	4.1	4.7	4.9	5.5
Austria	8.3	10.0	11.7	12.8	13.9	14.0	14.8
Belgium	4.8	6.5	10.1	9.9	10.0	11.4	12.8
Canada	2.1	2.4	3.4	4.7	4.9	6.0	6.8
Czech Republic				7.3	7.6	7.4	7.6
Denmark	3.3	5.1	6.4	6.7	7.9	7.4	7.0
Finland	4.5	6.1	7.7	9.4	10.6	12.0	12.7
France	4.7	6.7	9.0	11.1	13.3	12.6	13.4
Germany	8.2	8.8	10.2	9.5	10.6	10.7	11.7
Greece		5.4	5.9	10.5	12.1	12.2	12.4
Iceland	2.1	2.6	2.7	2.9	3.3	3.4	3.7
Ireland	3.2	4.0	5.7	4.3	4.5	4.8	5.3
Italy	4.5	6.7	9.8	10.9	14.7	12.8	13.1
Japan	1.2	1.1	4.2	5.2	10.0	10.3	9.8
Korea, Republic of				0.8	1.7	3.4	6.2
Luxembourg	3.0	4.9	8.1	9.9	7.4	8.5	12.2
Netherlands	3.7	6.2	10.3	10.9	7.0	7.8	9.4
New Zealand	4.3	4.0	7.5	8.0	5.5	6.2	7.8
Norway	2.4	5.6	6.2	7.9	7.2	8.6	9.5
Portugal		1.4	5.0	6.5	12.7	13.2	13.4
Slovak Republic					6.4	6.1	7.1
Slovenia					10.1	10.8	13.0
Spain		3.1	7.2	8.9	9.2	9.8	9.7
Sweden	3.5	4.9	8.8	9.6	9.6	8.8	8.6
Switzerland	1.9	3.6	6.5	6.4	8.2	9.3	10.4
UK	4.0	4.9	6.3	5.9	6.3	5.7	6.7
US	3.9	4.9	6.5	6.3	6.8	7.4	8.5
Average	3.8	4.8	7.1	7.6	8.4	8.7	9.6

Source: IMF (2011)

General Trends of Reform Measures

Recent reforms made to address the pressures of the changing economic and demographic environment have essentially proceeded along a combination of the following routes: redressing the problems of public retirement protection systems, developing privately managed, fully funded retirement protection systems, exploring possibilities to convert into NDC accounts and increasing coverage of retirement protection programmes.

Redressing Problems of Public Retirement Protection Systems

To improve the financial prospects of public retirement protection systems, a major direction of reform has been to reduce pension expenditure or contain its growth through a number of measures (Disney, 2003; Gern, 2002; OECD, 2014a):

- a. Reducing the overall generosity of benefits;
- **b.** Increasing the period of contributions, such as the number of years of service for entitlement to full pension;
- c. Freezing pension indexation or changing the indexation of benefits to a less generous indicator;
- d. Imposing a means test on the entitlement of basic benefits;
- e. Raising the statutory retirement age;
- **f.** Tightening eligibility rules for early retirement in the context of pension entitlement;
- g. Rewarding a longer working life;
- h. Increasing contribution rate; and
- i. Increasing prefunding of future pension expenditure (e.g. building up reserve funds).

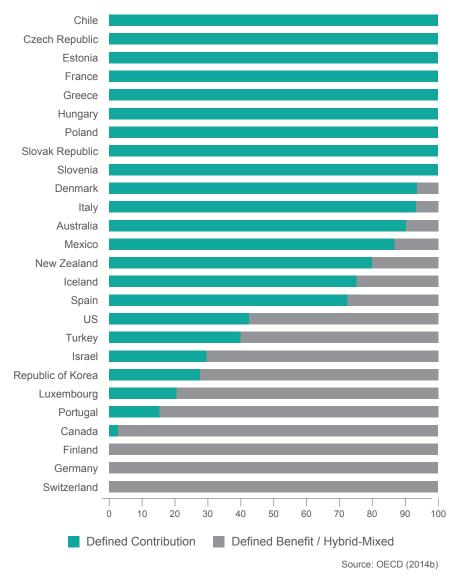
Developing Fully Funded, Defined Contribution, Privately Managed, Occupational Pension Systems

In 1994, the World Bank released a publication entitled "Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth" (World Bank, 1994) which recommended a three-pillar approach to address the issue of old-age protection. The three pillars are a publicly managed pillar (first pillar), a mandatory privately managed pillar (second pillar) and a voluntary pillar (third pillar).

While Sweden established a second pillar system to complement the multi-pillar retirement protection system, some countries (particularly those in Central and Eastern Europe, and Latin America) have replaced their existing PAYG systems with fully funded second pillar systems. For instance, in 1981, Chile created a new mandatory second pillar system to gradually replace the previous PAYG system. Due to the successful pension reform in Chile, the outlook of its retirement protection system has changed markedly since the early 1990s. This system change has influenced policymakers in many countries. In 2014, second pillar systems were in operation in 32 jurisdictions. Some other countries have also adopted a variant of the second pillar, such as an auto-enrolment arrangement which allows employees to opt out from the system (e.g. New Zealand and UK).

Along with the development of second pillar systems, DC schemes have become prevalent among voluntary occupational schemes (i.e. third pillar) in many countries. As shown in Figure 2.1, out of the 26 OECD countries, the shares of DC pension fund assets outweighed those of DB funds in 16 countries in 2013. In nine countries, only DC funds were operated. DB funds, however, still play an important role largely due to their historical prominence as the favoured arrangement for occupational arrangements in certain countries, such as Canada, Finland, Germany and Switzerland (OECD, 2014b).

Figure 2.1 Relative Shares of DB and DC Pension Fund Assets as a Percentage of Total Assets (%) in Selected OECD Countries, 2013



Despite their prevalence in a number of countries/regions, second pillar systems have been encountering certain challenges particularly after the outbreak of the global financial crisis in 2007-08, such as exposure to investment risk, fees and charges and insufficient coverage.

Exploring Possibilities of Converting into NDC Account Systems

To reduce public pension spending, some countries have considered replacing the PAYG system (i.e. first pillar) with a fully funded DC system (i.e. second pillar). Such a change however has to deal with the problem of transition costs. During the transitional period, one generation has to pay for pensions twice: for their parents' PAYG entitlements and for their own funded pensions. Instead of converting the PAYG system into a fully funded DC system, some countries have attempted to explore the possibilities of moving towards an NDC system. As explained in Chapter 1, an NDC system is a hybrid of a PAYG system and a fully funded DC system. It is PAYG financed, but each employee has an account which tracks his contributions and attracts a rate of return set by the government (e.g. with reference to the GDP growth in Italy and the average economy-wide wage growth in Sweden). When employees reach retirement age, accumulated contributions and notional returns will be converted into an annuity. The government could also adjust the annuity rate so as to take account of any changes in life expectancy (World Bank, 2005).

Increasing Coverage of Retirement Protection Programmes

Ensuring adequate coverage of retirement protection schemes, particularly in respect of low-income groups, is an important way to address the issue of old-age poverty. There has been an increasing focus of some governments on offering basic income protection for vulnerable groups, and some of them have carried out measures to extend coverage of retirement protection schemes to these people. For instance, in Japan, from October 2015 onwards, the gualifying period for the national pension will decrease from 25 years to 10 years which would benefit short-career workers. In Mexico, the coverage of the Pensión para Adultos Mayores, a retirement protection scheme for individuals with no or low pension income, was extended to include all people aged 65 and above, and non-Mexicans having resided in Mexico for at least 25 years. Some countries also offer saving incentives, such as matched contributions, subsidies and tax deductions or credits (e.g. US 401(k)), to increase coverage in voluntary private pensions, while others focus on non-financial measures, including auto-enrolment (e.g. UK) (Holzmann, 2012; OECD, 2014a).

Conclusion

While retirement benefits provided by the government can be traced back to the Roman Empire, modern public retirement protection systems started only in the 19th century. Since then, retirement protection programmes, aimed at alleviating old-age poverty as well as maintaining reasonable living standards after retirement, have flourished in different parts of the world.

Over time, the coverage and generosity of retirement protection programmes also expanded considerably, particularly after World War II. Since the 1980s, in view of the economic and demographic changes, reforms of retirement protection systems have continued to take place. To make them more sustainable, substantial redesign of some of these systems, or parts of the systems, has been implemented. While some countries have added fully funded DC systems (i.e. second pillar) to their multi-pillar retirement protection framework so as to reduce the risk of over-reliance on the pillars financed by government revenue, a number of others have replaced their PAYG systems with second pillar systems. In tandem with these developments, some countries have placed their focus on extending coverage of retirement protection to the vulnerable groups of society. Since the development of retirement protection systems often hinges on local circumstances of countries, there is no single uniform design for every country or region.

Chapter 3 The Second Pillar — A Key Pillar of Retirement Protection

According to the World Bank, retirement protection should be delivered through a diversified, multi-pillar approach. Within this framework, a second pillar system is an employment-based, mandatory, privately managed, fully funded, contributory system. This chapter examines the development of second pillar systems in the global arena. It starts with a discussion of the major objectives of second pillar systems and then considers the evolution of second pillar systems in the world as well as the driving forces for their expansion. The trends and challenges associated with the expansion of second pillar systems are also discussed at the end of the chapter.

Objectives of Second Pillar Systems

The purpose of retirement protection systems is to allow people to meet their post-retirement expenses. Broadly speaking, retirement protection systems have two core objectives: protection against the risk of old-age poverty and consumption smoothing (Holzmann, Hinz, & Dorfman, 2008). To achieve these two objectives, proper design of the overall retirement protection framework is required. According to the World Bank's retirement protection framework in 2005 (Holzmann & Hinz, 2005), the framework comprises five pillars:



The goal of protection against the risk of old-age poverty is to help those people who do not earn enough during their working lives and are therefore unable to save sufficiently for their old age. They need assistance from society to keep them out of poverty in old age. This goal is mainly served by zero and first pillar systems, which are normally financed on a PAYG basis from governments' general revenue and/or designated contributions of members. Since the management and benefit payout of zero and first pillar systems are performed by the governments, these two pillars are often called public retirement protection systems or public pension systems.

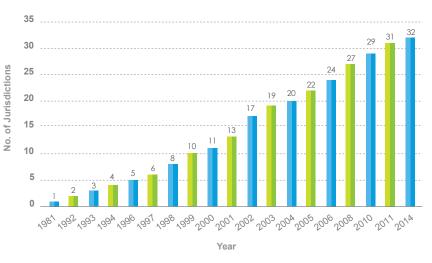
Many people will have decent earnings during their working lives. They will however not be able to maintain a reasonable standard of living after retirement if they have overspent when they are young. There are many reasons why individuals might not save enough. They may be shortsighted; they may prefer consuming today rather than saving for tomorrow; or they may live longer than expected. It is often too late when people discover that they do not have adequate resources to support their retirement lives. Some may not have adequate information to properly plan for retirement themselves. The consequences of such individual behaviour may create social problems. If some members do not have adequate resources to maintain themselves in retirement, other members of society may have to support them. To address this risk to society, consumption smoothing is a core function of retirement protection systems (Holzmann, Hinz, & Dorfman, 2008). In simple terms, consumption smoothing is about compelling people to save for retirement when they are able to do so.

The goal of consumption smoothing is served by pillars other than the zero pillar. For second pillar systems, members have to make contributions which are invested in financial assets through pension funds. Members can withdraw their accrued benefits from their own accounts upon retirement or meeting other eligible withdrawal grounds. Often, second pillar systems are called private pension systems.

Evolution of Second Pillar Systems

Some of the earliest retirement protection schemes offered by employers to employees in the private-sector were set up in the UK in 1842 and in the US in 1875 (Blake, 2003; Seburn, 1991). However, these schemes were voluntary in nature. In contrast, mandatory second pillar systems have a rather short history with pension reform in Chile being seen by many as the starting point for the development of modern mandatory second pillar systems. In 1981, Chile created a new mandatory DC, privately managed and fully funded system to gradually replace the previous PAYG system. Along with the successful reform in Chile, the outlook of global retirement protection systems has changed markedly, particularly after the release of the World Bank's publication entitled "Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth" in 1994. In 2014, second pillar systems were in operation in 32 jurisdictions. Figure 3.1 and Table 3.1 show the expansion of second pillar systems in different parts of the world.

Figure 3.1 Evolution of Second Pillar Systems



Notes:

- 1. "Year" refers to the year in which second pillar systems started operation.
- 2. Only DC systems are included. Three DB systems (i.e. Iceland, the Netherlands and Switzerland) are excluded.
- 3. Those jurisdictions with second pillar systems discontinued (i.e. Argentina, Bolivia and Hungary) are excluded.
- 4. One jurisdiction (Tajikistan) without infomation on the commencement date of its second pillar is excluded.
- Source: IMF (2012); International Organisation of Pension Supervisors (2011); Maldives Pension Administration Office (2015); National Pensions Regulatory Authority (2015); OECD (2009, 2011); Scherman (1999); Superintendence of Pensions (2010); World Bank (2015)

Relatively speaking, more second pillar systems were established in developing economies, particularly those in Africa, Central and Eastern Europe, and Latin America.

Table 3.1 Year of Commencement of Second Pillar Systems

Jurisdiction	Year	Jurisdiction	Year
Chile	1981	Estonia	2002
Australia	1992	Kosovo	2002
Peru	1993	Russian Federation	2003
Argentina*	1994	Dominican Republic	2003
Colombia	1994	Lithuania	2004
Uruguay	1996	Nigeria	2005
Mexico	1997	Slovak Republic	2005
Bolivia [^]	1998	Macedonia	2006
El Salvador	1998	Norway	2006
Hungary [^]	1998	Israel	2008
Kazakhstan	1998	Panama	2008
Poland	1999	Romania	2008
Sweden	1999	Ghana	2010
Hong Kong	2000	Kyrgyz Republic	2010
Costa Rica	2001	Malawi	2011
Latvia	2001	Maldives	2011
Bulgaria	2002	Armenia	2014
Croatia	2002		

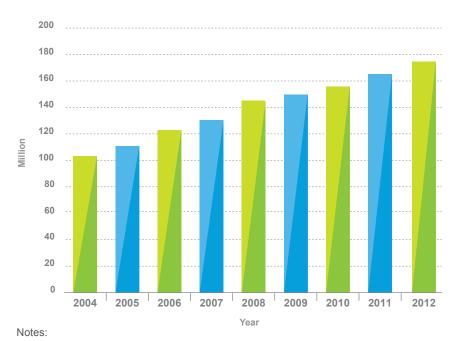
* The second pillar system ceased to operate in 2008.

[^] The second pillar system ceased to operate in 2010.

Source: IMF (2012); International Organisation of Pension Supervisors (2011); Maldives Pension Administration Office (2015); Mesa-Lago (2014); National Pensions Regulatory Authority (2015); OECD (2009, 2011); Scherman (1999); Superintendence of Pensions (2010); World Bank (2015)

The development of second pillar systems helps increase the number of people covered by retirement protection systems. Among 23 jurisdictions³ with second pillar systems, the total number of enrolled members rose from 103 million to 175 million during the period between 2004 and 2012.

Figure 3.2 Number of Enrolled Members in Second Pillar Systems



- The chart includes data of 23 jurisdictions from 2004 (or the year that the data are available) to 2012. These jurisdictions are Australia, Bulgaria, Chile, Colombia, Costa Rica, Croatia (since 2005), Dominican Republic, El Salvador, Estonia (since 2008), Hong Kong (MPF schemes), Kazakhstan, Kosovo (since 2006), Latvia, Lithuania (since 2008), Macedonia, Mexico, Nigeria, Peru, Poland, Romania, Russian Federation (since 2007), Slovak Republic (since 2007) and Uruguay.
- 2. Data as of December each year, except Australia (as of June).
- 3. The member data of some jurisdictions used the number of member accounts as units. If a member maintained more than one account, the number of members in this jurisdiction, as included in the above figure, may have been overestimated.

Source: Australian Prudential Regulation Authority (2014); International Federation of Pension Funds Administrators; MPFA

In tandem with an increasing number of second pillar systems, assets accumulated in these systems also rose substantially. In 24 jurisdictions⁴, the total accumulated assets increased from US\$411 billion in 1999 to US\$2,018 billion in 2012.

³Owing to an absence of data, only 23 pension jurisdictions are taken into account.

⁴Owing to an absence of data, only 24 pension jurisdictions are taken into account.

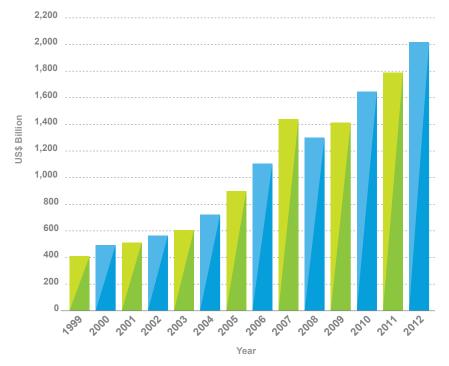


Figure 3.3 Growth of Assets in Second Pillar Systems

Notes:

- The chart includes data of 24 jurisdictions from 1999 (or the year that the data are available) to 2012. These jurisdictions are Australia, Bulgaria, Chile, Colombia, Costa Rica, Croatia (since 2005), Dominican Republic, El Salvador, Estonia (since 2008), Hong Kong (MPF schemes), Kazakhstan, Kosovo (since 2006), Latvia (since 2004), Lithuania (since 2008), Macedonia, Mexico, Nigeria, Peru, Poland, Romania, Russian Federation (since 2004), Slovak Republic (since 2007), Sweden (since 2002) and Uruguay.
- 2. Data as of December each year, except Australia (as of June).
- Source: Australian Prudential Regulation Authority (2014); International Federation of Pension Funds Administrators; MPFA; National Social Insurance Board (2004); Swedish Social Insurance Agency (2006, 2009); Swedish Pensions Agency (2014)

The growth of pension fund assets also has an increasing impact on the economies of different jurisdictions. For instance, in Australia, assets of pension funds were equivalent to 68.7% of the size of its GDP in 2002. In 2012, the ratio rose to 91.4%, an increase of 22.7 percentage points.

Table 3.2 Pension Fund Assets as a Percentage of GDP (%)

Jurisdiction	2002	ear 2012
Australia	68.7	91.4
Bulgaria	1.0	7.3
Chile	52.8	59.8
Colombia	6.4	18.2
Costa Rica	4.8	9.8
Croatia	1.1	16.3
El Salvador	7.4	28.8
Estonia	0.2	8.5
Hong Kong*	4.2	21.6
Mexico	4.6	14.1
Uruguay	8.4	19.4

* MPF schemes only

Source: OECD (2015); Census and Statistics Department (C&SD)(2015a); MPFA

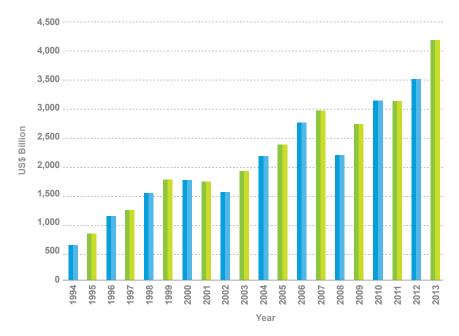
Voluntary Retirement Savings Schemes as Alternatives

In some countries, tax incentives are given to voluntary contributions made to mandatory second pillar systems (e.g. Australia's tax deductible voluntary contributions). In other countries, instead of establishing a mandatory second pillar system, governments encourage or incentivize the setting up of voluntary retirement savings schemes. Some governments encourage participation in these schemes by offering tax incentives to either employers or employees or both instead of making participation in these schemes mandatory (e.g. US 401(k) plans). The efficacy of tax incentives is affected by many factors such as the structure of the tax system, the levels of taxation and equity issues around incentivizing one particular form of savings vehicle. Some governments provide different types of fiscal incentives, such as making matching contributions to personal accounts in defined circumstances. Some countries (e.g. New Zealand and UK) make use of non-fiscal incentives such as auto-enrolment arrangements under which employers are obliged to enrol employees in a retirement savings scheme automatically with a choice for employees to opt out

from the scheme. The purpose of such arrangements is to enhance employees' participation rate in these schemes by reliance on the employees' own inertia.

In higher tax jurisdictions, tax incentives can be particularly influential in affecting savings patterns. By way of example, the total assets of US 401(k) plans, which are tax incentivized, recorded a substantial growth, from about US\$675 billion in 1994 to US\$4,190 billion in 2013.

Figure 3.4 Total Assets of US 401(k) Plan (1994-2013)



Source: Investment Company Institute (2014)

New Zealand's Kiwisaver, which operates under an auto-enrolment arrangement, also recorded strong growth in both membership and asset size from 2008 to 2013. The total number of members rose from about 720 000 in 2008 to over 2.1 million in 2013, while the asset size increased from NZ\$701 million to NZ\$16,565 million during the period.

Table 3.3 New Zealand: Kiwisaver

	Total membership	Total assets under management (NZ\$ million)
2008	716 637	701
2009	1 100 540	2,660
2010	1 459 942	5,851
2011	1 755 932	9,187
2012	1 966 444	12,735
2013	2 146 843	16,565

Source: Inland Revenue (New Zealand) (2013)

These developments tend to suggest that personal provision of retirement savings through privately managed DC schemes has gained widespread support in many different jurisdictions. While the design details of a retirement protection system in a jurisdiction are often subject to local circumstances, there are many common features of second pillar systems that distinguish them from other retirement protection pillars.

Driving Forces for Development of Second Pillar Systems

The rapid development of second pillar systems is not without reasons. Among others, second pillar systems maintain financial sustainability, help alleviate the pressure of an ageing population, ensure actuarial fairness and possibly contribute to economic growth.

Maintaining Financial Sustainability

Retirement protection systems in many jurisdictions rely, to varying degrees, on PAYG financing – current workers have to make contributions that are used to finance retirement benefits of current retirees. Demographic changes have made this mode of financing more difficult. The populations in most developed economies, and some developing ones, are ageing as fertility rates decline and life expectancy increases. If the number of retirees grows faster than that of workers, the contributions collected from current workers will be progressively less able to cover promised benefits to retirees. In some cases, governments have had to bail out retirement protection schemes from general revenue sources which have created strains on the governments' fiscal position (James, 2012).

Against this background, a number of countries (e.g. Chile, Mexico and Sweden) converted partly or entirely their PAYG systems into fully funded ones (i.e. second pillar systems) so as to address the issue of financial sustainability of their retirement protection systems.

Regarding the mode of financing, second pillar systems that are DC arrangements are generally fully funded which makes them more financially sustainable than a PAYG one. In a fully funded system, pension schemes have adequate assets to cover all current and future payment obligations. Upon retirement, members will be able to withdraw their accrued benefits from their accounts in schemes irrespective of the fiscal position of the government at that time. So the provision of a second pillar system could reduce the risk of over-reliance on the pillars financed by government revenue and consequently reduce the financial pressure on those pillars.

Coping with the Issue of Ageing Population

The launch of a second pillar system is not a panacea for an ageing population. It may however to a certain extent help society ease the adverse effects of an ageing population. A second pillar system that mandates current workers to accumulate savings for their retirement in future avoids passing the pension bill to the next generation. Further, by facilitating investment diversification into global markets, modern second pillar systems can minimize overexposure to local economies that may be particularly adversely affected by an ageing population (Holzmann & Hinz, 2005).

Actuarial Fairness

Under second pillar DC systems, there is a close link between members' contributions and benefits. Mandatory contributions are made to a member's account with reference to his income level. Generally speaking, more contributions will be made into the account of a member with a higher salary level⁵. A member is only eligible to withdraw his savings (contributions plus any investment return thereon) accumulated in his own account, but not in other members' accounts. Therefore, it is actuarially fair to all members.

In addition, under second pillar systems, each worker finances his own retirement. Second pillar systems therefore can better address the issue of fairness associated with intergenerational transfers. In PAYG systems, contributions from current workers (i.e. the younger generation) are used to pay the benefits of current retirees (i.e. the older generation). Such an intergenerational transfer can no longer work smoothly in countries where the number of people entitled to receive pension benefits has grown to exceed the number of workers making pension contributions (Howse, 2007). To fill the gap, the younger generation may need to make more contributions or the government may be required to allocate resources from its general revenue to finance these systems. The government's revenue however mainly comes from the tax payments of current workers (i.e. the younger generation) as well.

Generating Economic Benefits

While it is not the major purpose of a retirement protection system, economic benefits are one possible external benefit produced by second pillar systems. According to the World Bank and the OECD, second pillar systems may generate economic benefits at least in three ways: higher aggregate savings, lower labour market distortions⁶ and more efficient financial markets (Holzmann & Hinz, 2005; Yermo, 2012). Figure 3.5 shows the possible economic benefits of second pillar systems.

The establishment of a second pillar system does not necessarily lead to an increase in the aggregate savings of a country. If individuals are rational savers, the introduction of a second pillar system will have no net effect on national savings as individuals will simply reduce their personal savings by an equal amount. However, if some of them are myopic or do not save for retirement voluntarily for some reasons, introducing a mandatory second pillar system will raise national savings (Feldstein & Liebman, 2002).

In this regard, some empirical studies show that mandatory savings appear to have a potentially positive effect on the aggregate savings of a country. For instance, a World Bank study of 43 countries suggests that the accumulation of assets of pension funds increases national savings

⁵Normally, an income cap is in place to regulate the maximum level of relevant income for mandatory contributions.

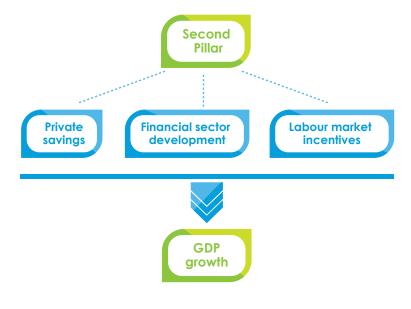
⁶Further details of the impact of retirement protection systems on the labour market are provided in Chapter 2.

when these assets are the result of a mandatory programme. However, there are doubts as to whether this effect extends to voluntary programmes (Murphy & Musalem, 2004). Some other research also shows that the introduction of a second pillar system may have an "awareness effect" which raises people's awareness of the need and responsibility to save for retirement, thus promoting further savings (Venti, 2006).

However, there are opposing views. Some argue that mandatory savings may crowd out voluntary savings. If members offset contributions to their accounts in a second pillar system through reduced savings, total private savings are unaffected by any increases in the balance of these accounts (Orszag & Stiglitz, 2001).

Second pillar systems may also have an indirect, positive impact on an economy by boosting developments of financial markets, including equity and bond markets. In Australia, the Reserve Bank of Australia considered that its second pillar system, the superannuation system, appeared to have supported the stability of the financial system by adding depth to financial markets and providing a stable source of finance for other sectors (Reserve Bank of Australia, 2014).

It is often argued that retirement protection systems affect the participation of individuals and households in the labour market. If individuals consider pension contributions as an implicit payroll tax, their interest in participating in the labour market will be undermined. In certain PAYG systems, lifetime pension benefits are available from a certain age. In some cases, early retirement options are available so that individuals become eligible for pension benefits earlier. These systems are said to have played a role in depressing employment at an older age (OECD Economics Department, 2004). Under a typical second pillar DC system, benefits accumulated in a member's account are generally linked to the amount of contributions they have made (as well as investment returns thereon). Individuals could save more by contributing over a longer working life. Such a system does not create a disincentive for people to work, and therefore will result in a lower distortion effect to the labour market (Holzmann & Hinz, 2005).



Source: Adapted from Yermo (2012)

Recent Trends and Challenges

While second pillar systems have received support in a number of countries over the past few decades, they have inevitably experienced some setbacks, particularly in light of the impacts of the global financial crisis (GFC) in 2007-08. This section discusses some recent trends and challenges faced by second pillar systems.

Investment Return and Risks

The GFC highlighted the investment risk borne by members in second pillar DC systems. Under second pillar DC systems, contributions made by or on behalf of members are invested in financial assets such as investment funds. Therefore, members' investment choice and the performance of assets invested will determine the ultimate amount of their benefits. Different means may be employed to deal with the investment risk of second pillar systems. Proper design of the default fund is recommended by international organizations, such as the OECD. To minimize the impact from a sudden market downturn on members' retirement benefits at the moment of retirement, life-cycle strategies are considered by the OECD as an appropriate investment strategy of default funds. Under life-cycle strategies, equity investment will decrease as a member approaches retirement age (OECD, 2012).

To provide members with opportunities to reduce any losses caused by a sudden market downturn upon retirement, some systems allow members to defer withdrawal of benefits and/or to withdraw benefits in phases.

Recent behavioural studies show that investors, including members of retirement protection schemes, do not necessarily behave rationally when making investment decisions. While some of them may not have the necessary knowledge to make such decisions, others may have the required knowledge but do not make such decisions actively due to inertia (Tapia & Yermo, 2007). Against this background, financial education and proper disclosure of information are the key tools to help members make informed investment choices and manage their retirement investment effectively. For those who do not take active care of their retirement investment due to inertia, it is suggested that specific arrangements, like properly designed default funds, should be put in place (OECD, 2012).

Fees and Charges

In a public pension system, the government agency which operates the system may not charge any explicit administration fees. In reality however, the cost is borne by taxpayers as the operation of the agency is often financed by the government's general revenue. A typical second pillar system is operated by private companies both for the necessary administration of the arrangement and also for investing the contributions. In providing their services to members, fees and charges are collected, often from the assets of members' accounts. Since these fees and charges inevitably reduce the return of members' investment,

how to ensure that they are set at a reasonable level is a controversial issue in many second pillar systems.

Promoting competition among service providers is a policy commonly used to drive down fees and charges of pension funds. In this regard, enhancing disclosure of information, including fees and charges, is considered as an important tool to promote market competition (lonescu & Robles, 2014; OECD, 2014a). Some countries (e.g. Australia and Chile) try to address the issue of fees and charges by streamlining the schemes' administration and stepping up policies on default funds. There are views by some that competition between service providers is not an effective price setting tool because end users (members) are not very price sensitive.

A fee cap on pension funds has been employed by some systems, but its effectiveness is not conclusive. Some argue that fee caps may even cause unintended consequences, such as reduced incentives for service providers to enhance operational efficiency (lonescu & Robles, 2014).

It is also argued that the asset size of pension funds will have a bearing on their fees and charges as larger funds are likely to capitalize on economies of scale (Bikker, Steenbeek, & Torracchi, 2010). Restricting the number of fund choices and/or promoting mergers of pension schemes and funds are among the ways to increase fund size (James, Smalhout, & Vittas, 2001).

Coverage

By default, second pillar systems are employment-related and therefore unable to offer protection to persons who are not employed or self-employed. People with broken employment records are also insufficiently protected. Since the core objective of second pillar systems is consumption smoothing (i.e. putting aside part of employment income as savings for retirement), they provide very limited retirement protection to those lifetime poor who have made no, or inadequate, contributions to schemes. These people may therefore face the old-age poverty problem. It can therefore be seen that a second pillar system alone cannot provide a total solution to the retirement needs of the whole population. To adequately manage old-age poverty, it needs to be complemented by other pillars, for instance, government-provided zero pillar or first pillar systems.

Longevity Risk

Longevity risk is the risk that the actual life span of an individual will exceed expectations. There is a risk that an individual may outlive all of his retirement savings accumulated through a second pillar system. There are several strategies adopted to manage such risks, although the primary one is simply to save more by contributing higher amounts or to contribute over a longer working life. In addition, the longevity risk may also be managed or transferred through the proper design of the payout phase and the development of instruments to transform the assets accumulated into a stream of income at retirement (e.g. annuity or phased withdrawal) (Antolin, 2008). Income streaming or annuities cannot, however, convert an inadequate amount of savings into an adequate income stream.

Conclusion

The primary objective of second pillar systems is consumption smoothing, helping individuals to save for retirement. Over the past few decades, second pillar systems have received support in a number of jurisdictions. As fully funded systems, second pillar DC systems are financially sustainable. They are also actuarially fair, as members can only withdraw savings from their own accounts, and benefits are basically linked to the amount of contributions made by or on behalf of themselves (as well as any investment returns thereon). By requiring current workers to accumulate savings for their retirement in future, second pillar systems could avoid passing the pension bill to the next generation. Second pillar systems may also promote economic or financial development, though this is not their primary purpose. Certain challenges are faced by second pillar systems, including exposure to investment and longevity risks, the impact of fees and charges and inadequate coverage for the unemployed and low-income class. A second pillar system alone is unable to address all of these challenges, such as those related to inadequate coverage, and it needs to be complemented by other pillars so as to provide a comprehensive retirement protection for the whole population.

Chapter 4 A Shared Responsibility

This chapter reviews the development of retirement protection in Hong Kong. It first examines how Hong Kong addressed the issue of old-age protection in the early days and the evolution of its retirement protection system in the past decades. With reference to the five-pillar framework of the World Bank, the current state of Hong Kong's retirement protection system, which reflects a shared responsibility among individuals, employers and the Government, is then discussed in more detail. Various challenges faced by Hong Kong's retirement protection system are analyzed at the end of the chapter.

Provision of Old-Age Assistance in Hong Kong in the Early Days

In the 19th century, the Government provided hardly any formal old-age assistance. Any help provided to the elderly came mainly from family support. In traditional Chinese values, the virtue of filial piety presumes that it is the children's responsibility to take care of their parents. In this way, family members were expected to be financially interdependent. It was generally believed that the elderly could expect necessary assistance from their family members as they shared the same access to a common family budget (Chan, 1998).

A series of epidemics and natural disasters in the mid-to-late 19th century in Hong Kong caused severe damage and casualties and led to a reassessment of how society protected those in need. For example, in 1855, a typhoon with heavy rain brought about great damage to drains, piers, roads and houses (Eitel, 1983 as cited in Chan, 2011). In the 1890s, the bubonic plague caused over 2 000 deaths (Pryor, 1975). Due to fiscal constraints, the Government's top priority was to deal with these immediate issues. Against this background, charitable organizations and religious groups played an active role in filling the void by offering social services to the people in need, including the elderly (Lee, 2009; Chan, 2011). In 1869, the hygiene condition of Kwong Fook I-tsz, a small temple initially for people to place spirit tablets of their ancestors, was deteriorating as it was gradually taken over by the sick and destitute as a refuge. This aroused the concern of the public and the Government. A group of community leaders proposed to raise funds and build a hospital to help the poor. The Government granted \$115,000 and a piece of land in Sheung Wan for this purpose. The Tung Wah Hospital was built in 1870 through the enactment of the Chinese Hospital Incorporation Ordinance (Tung Wah Group of Hospitals, 2014).

The Tung Wah Hospital was the first hospital in Hong Kong to provide free Chinese medicine and health-care services for the sick and poor. To complement the services provided by the Government, the Tung Wah Hospital provided free education (from 1880), free funeral services and disaster relief for people in need. These community services evolved and were expanded to cover services for the elderly, rehabilitation services for the handicapped, youth and family services, and the management of temples. The Tung Wah Hospital was amalgamated with the Kwong Wah Hospital (established in 1911) and the Tung Wah Eastern Hospital (established in 1929) to form the Tung Wah Group of Hospitals in 1931 (Tung Wah Group of Hospitals, 2014).

Another example is the Lok Sin Tong Benevolent Society of Kowloon. From the mid-18th century, people in Kowloon City customarily conducted their trading businesses at the market near the Lun Jin Pier. A designated scale was placed in the market to weigh goods in order to ensure a fair trade, and fees were charged for using this scale which was managed by a group of traders. They spent the money collected for charitable purposes, such as providing free medical consultation for the needy and burial services for the poor. In 1880, this charitable organization was officially established (Lok Sin Tong Benevolent Society of Kowloon, 2015). Religious groups also play a role in providing social services. The Sisters of St. Paul de Chartres is such an example. Soon after arriving at Hong Kong in 1848, they started to take care of abandoned babies. Gradually, their charitable services were expanded to provide education for children and a home for aged women. After the outbreak of the bubonic plague in Hong Kong in 1894, they started to provide medical services for old women. In 1898, a hospital was opened to provide medical services for the needy, which is now known as the St. Paul's Hospital (Sisters of St Paul de Chartres, 2015).

Though only available to a small segment of employees in Hong Kong, retirement benefits were provided to civil servants by the Government and certain employees by some large trading houses. In the public sector, pension benefits were available to civil servants pursuant to the Pensions Ordinance 1862. In the private sector, the first retirement scheme established under trust in Hong Kong was set up by a large trading house in 1919 (Gadbury, Taylor, & Watkin, 2003).

Developments after World War II

The main feature of post-war Hong Kong was the rapid growth of its population, which created an urgent need for the Government to address social issues of the day (Endacott, 1978). In 1947, the Government set up the Social Welfare Office (renamed the Social Welfare Department (SWD) in 1958). This office primarily served as the link between the Government and voluntary agencies (Lee, 2009).

A major fire devastated the squatter huts in Shek Kip Mei in 1953 and destroyed the homes of some 58 000 people. To provide shelter for victims, the Government soon embarked on the construction of resettlement flats with eight six-storey blocks built in 1954 and 21 additional blocks in the following eight years. The resettlement estate in Shek Kip Mei marked the commencement of Hong Kong's ambitious public housing programme (Hong Kong Housing Authority, 2009).

During the 1950s and 1960s, a number of non-governmental organizations (such as charitable organizations and kaifong welfare associations) and religious groups were established, providing more and more social services to the needy in Hong Kong. Many of these organizations were linked to their parent bodies overseas. They have been contributing tremendously to the development of social services in Hong Kong. In 1953, Caritas Hong Kong was founded by the Catholic Diocese of Hong Kong. The primary purpose of its establishment was to offer relief and rehabilitation services to the poor and the distressed. In its first decade, Caritas mainly provided relief services for new immigrants. After setting up multi-service centres in local districts in the 1960s, Caritas developed rapidly in social work services relating to families, children and youth, elderly and people with disabilities (Caritas Hong Kong, 2015). Likewise, the Haven of Hope Christian Service was established in 1953. It began by providing medical relief for new immigrants residing in Junk Bay (near Tseung Kwan O). Their services gradually developed to provide medical and social services for the community as a whole (Haven of Hope Christian Service, 2015).

In addition to the newly established organizations, some old institutions like the Po Leung Kuk also broadened their scope of services. Formally established in 1882, the Po Leung Kuk initially aimed to protect women and children from kidnapping and trafficking. In response to rapid social changes in the 1960s, their services evolved to include residential care, day care, education, rehabilitation and elderly care (Po Leung Kuk, 2015). In 1955, the Hong Kong Jockey Club also formally decided to devote its surplus each year to charity and community projects. In 1959, a separate company, the Hong Kong Jockey Club (Charities) Ltd (later replaced by The Hong Kong Jockey Club Charities Trust), was formed to administer donations (Hong Kong Jockey Club, 2015).

Established in 1968, the Community Chest was a new concept in charity in that it separated fund-raising from the direct provision of social services. In the 1960s, elderly service was one of the areas that received money from the Community Chest. Funds were allocated to provide elderly homes / hostels, home nursing, temporary hostels, house maintenance and furniture, free meals and financial and medical assistance (Community Chest, 1999). During the 1960s, various important proposals were made by the Government, which laid down the foundation for social development in the 1970s. The white paper on "The Aims and Policy for Social Welfare in Hong Kong", published in 1965, stated the objective of providing social services as follows:

Both governmental and voluntary services should be concentrated on helping to alleviate or prevent the causes of dependency and so reducing the extent of destitution. (Hong Kong Government, 1965, p. 9)

In respect of the role of the family in supporting the elderly, the 1965 white paper put forward that:

In Chinese tradition, social welfare measures which individuals may need on account of poverty, delinquency, infirmity, natural disaster and so on, are regarded as personal matters which at least in theory ought to be dealt with by the family (if necessary the 'extended family'). It is clearly desirable, on social as well as economic grounds to do everything possible in Hong Kong to support and strengthen this sense of 'family' responsibility. (Hong Kong Government, 1965, p. 6)

In the same year as the white paper was published, the Government appointed a consultant from the UK, Professor Gertrude Williams⁷, to study social welfare in Hong Kong. She visited in 1966, and in the same year, published a report entitled "Report on the Feasibility of a Survey into Social Welfare Provision and Allied Topics in Hong Kong". She adopted another perspective in viewing the social welfare issues of Hong Kong. In her report, it was stated that:

⁷ Professor Gertrude Williams was the Professor of Social Economics at the University of London.

"

Whilst the family provides help during an emergency, the exigencies of the industrial urban life now lived by most people does not allow of prolonged and continuous help. Once the first impact of the emergency has been overcome the resources of kin cannot be stretched to cover any long-term needs. (Williams, 1966, p. 14)

Her core recommendation was that an independent research unit should be formed to provide information on both long- and short-term social issues (Williams, 1966). Consequently, in July 1966, a month after the publication of her report, the Government and the Hong Kong Council of Social Service began a joint investigation into the state of Hong Kong's social services. As a result, the Urban Family Life Study, backed by a grant of \$1 million, was conducted to provide data that would facilitate the work of welfare agencies (The Hong Kong General Chamber of Commerce, 1966).

The Government also established a dedicated interdepartmental working party to examine existing social security provisions and make recommendations. The working party favoured the introduction of contributory social insurance on the grounds that there was a substantial number of old people, widows and divorces in the population; and the traditional extended family system had been weakened by the pressures of industrialization and urban life. The recommendations made by the working party were not adopted by the Government, being considered as impractical and financially unfeasible (Chow, 1998).

In view of the continuous economic development of Hong Kong in the 1970s, the pressure on the Government to provide old-age security, and in a broader sense, social services mounted. In this regard, social welfare was one of the three social policy areas⁸ given major emphasis by the Government at that time. As far as social welfare is concerned, the Government identified various areas of development, including

the Public Assistance Scheme⁹ for those who did not have adequate means of support and special provision of facilities for the disabled and the elderly¹⁰. At a Legislative Council (LegCo) meeting in October 1972, a draft white paper entitled "Social Welfare in Hong Kong: The Way Ahead" was tabled (The Legislative Council, 1972; Scott, 1989).

The white paper not only led to the introduction of the "Infirmity Allowance" (subsequently renamed the Old Age Allowance) in Hong Kong, but also provided the basis for a five-year plan on social welfare in Hong Kong. The plan was first introduced in 1974 and subsequently reviewed annually (Scott, 1989).

The Government's expenditure on social welfare increased rapidly in the 1970s. In 1974-75, for example, spending in this area amounted to \$212.5 million, 65% more than the previous year. Despite this, the Government at that time did not consider introducing a social security scheme by means of mandatory contributions or increased taxation to meet the financial commitment (Scott, 1989).

In fact, during the course of preparing the white paper, discussions on various recommendations made by the interdepartmental working party were reopened. Nonetheless, the white paper did not propose any contributory social security schemes for the following reasons (Chow, 1998):

- mandatory contributions would not be acceptable to the people of Hong Kong;
- such a scheme would place a heavy financial burden on employers; and
- the operation of the scheme would require a huge administration framework, which could not be established in the near future.

⁸ The three major areas put forward by the Government in 1972 were housing and new town policy, education and social welfare (Scott, 1989).

⁹ Introduced in 1971, the Public Assistance Scheme was renamed the Comprehensive Social Security Assistance Scheme in 1993 (SWD, 1998).

¹⁰ The Government identified four major areas of development in the area of social welfare: the Public Assistance Scheme for those who did not have adequate means of support, special help for vulnerable groups such as the disabled and the elderly, special provision of facilities for the disabled, and expansion of social and recreational facilities.

The Government's reluctance to introduce a social security scheme by means of mandatory contributions was revealed in a green paper on social security development in 1977¹¹. Such a position was subsequently adopted by the white paper on social welfare in 1979¹² (Chow, 1998).

The idea of a contributory social security scheme for the elderly was raised again in society in the 1980s. The debate on the issue lasted several years during the early 1980s. In view of the anticipated difficulty in the management of the assets accumulated in a contributory social security scheme, in 1987, the Government once again rejected the proposal for the establishment of such a scheme (Chow, 1998).

With the economic development of Hong Kong, many employers, especially larger ones, established retirement schemes for their employees voluntarily in the 1970s and 1980s. Before the implementation of the MPF System, it is estimated that about one-third of Hong Kong workers were covered by occupational retirement protection schemes, representing about 1 million of the 3.3 million people employed in 2000.

Birth of the MPF System

Background

After a couple of years of silence, the issue of establishing a compulsory retirement scheme was brought up again in 1991. At the LegCo meeting on 10 July 1991, a motion was moved to "take immediate steps to re-examine the setting up of a Central Provident Fund or other forms of compulsory retirement schemes in order that workers in Hong Kong are provided with comprehensive retirement protection". The motion was voted down by 29 votes to 11 (Legislative Council Secretariat, 2005).

In November 1991, the Executive Council decided that a retirement protection system should be introduced (Chow, 1998). Subsequent to the decision of the Executive Council, an interdepartmental working group on retirement protection was established in November 1991. The working group was responsible for studying possible options that would enable workers to secure better retirement protection (Education and Manpower Branch, 1992).

A consultation paper entitled "A Community-wide Retirement Protection System" was issued by the working group in October 1992 (Education and Manpower Branch, 1992). The consultation paper proposed the introduction of a retirement protection system, which entailed a privately managed mandatory contributory retirement scheme for all full-time employees under the age of 65.

Controversies on Different Proposals

Both trade unions and employers' associations were of the view that the involvement of the Government in the proposed contributory retirement protection system was too little. Some of them would have liked to see the Government having greater responsibilities in the proposed system, and felt it should take the form of a Central Provident Fund (Chow, 1998). There had been a lot of debate in the community since the proposal of 1992 was put forward. On 15 December 1993, the Government instead proposed to LegCo the introduction of a social insurance programme called the Old Age Pension Scheme (Education and Manpower Branch, 1994).

Subsequently, the Government issued a consultation paper entitled "Taking the Worry out of Growing Old – An Old Age Pension Scheme for Hong Kong" in July 1994. Under the proposed pension scheme, both employers and employees would have been required to contribute a monthly amount equivalent to 3% of an employee's wages. All Hong Kong permanent residents aged 65 and over would have been eligible to receive a flat-rate retirement pension, fixed at \$2,300 a month at 1994 price levels. The amount would have been indexed annually to the Composite Consumer Price Index (Education and Manpower Branch, 1994).

¹¹ The green paper is entitled "Help for those least able to help themselves: A programme of social security development".

¹² The white paper is entitled "White paper: Social welfare into the 1980s".

The proposal aroused intense discussions. While trade unions generally welcomed the idea, it was opposed by the business sector which perceived it as a fundamental change in Hong Kong's welfare policies. In view of the divergence of opinion among different stakeholders, the Government decided at the end of 1994 to withdraw the proposal (Chow, 1998).

Consultation and Legislative Process of MPF

According to the Government, in the consultation exercise for an Old Age Pension Scheme in 1994, the public's submissions indicated greater acceptance of a mandatory, privately managed scheme, particularly if it could be set up by 1997 (Legislative Council Secretariat, 2005).

In 1994, the World Bank released its publication entitled "Averting the Old-Age Crisis: Policies to Protect the Old and Promote Growth" which suggested a three-pillar approach for retirement protection. The Government studied its recommendations carefully and considered that, given the nature of the population in Hong Kong and the traditional financial and saving habits of its people, as well as its well-established and sound financial infrastructure, a mandatory system for saving for retirement was a good fit. In particular, Hong Kong had the Comprehensive Social Security Assistance Scheme (CSSA) as its first pillar of retirement protection. A mandatory employment-related contributions system would thus complete the three-pillar approach.

At that time, meetings were convened by the Government with LegCo members, trade union leaders and representatives of the business community. Through these meetings, the Government was more confident that the introduction of the MPF would be regarded as a practical way forward to help the retired (Legislative Council Secretariat, 2005). Consequently, the Government moved the following motion in LegCo in March 1995: "That this Council urges Government to introduce as expeditiously as possible a mandatory, privately managed occupational retirement protection system with provision for the preservation and portability of benefits" (Legislative Council Secretariat, 2005). LegCo voted in favour of the Government's motion to introduce a mandatory, privately managed occupational retirement scheme. The Government then introduced a bill into LegCo in June 1995 related to the establishment of the MPF in Hong Kong. The Mandatory Provident Fund Schemes Ordinance (MPFSO) was passed by LegCo in July 1995 and supplemented by detailed subsidiary legislation in 1998. The MPFA, the statutory body charged with regulating and supervising the MPF schemes, was set up in September 1998. The MPF System commenced operations in December 2000.

The Current State of Hong Kong's Retirement Protection

Over the years, Hong Kong has established a comprehensive social security system. While some social security programmes are not intended for any specific age cohorts (e.g. CSSA), some of them were introduced to address the needs of old age (e.g. Old Age Living Allowance). In addition to social security programmes, the Government also provides a wide range of social services, such as health care and public housing, facilitating the well-being of Hong Kong residents, including the elderly.

In conjunction with the Government's subsidized social programmes, individuals may also have made use of other resources (e.g. personal savings, family support and contributions to MPF or occupational retirement (ORSO) schemes) to meet their retirement expenses.

In the context of the five-pillar framework of the World Bank, the overall retirement protection of Hong Kong could be expressed as Table 4.1. The information contained in the table, particularly that in the third and fourth pillars, is however not exhaustive as individuals may have other means to save or invest for retirement and some other social programmes or services provided by the Government may not be covered by the table.

Table 4.1 Hong Kong's Retirement Protection in the Context of the World Bank's Five-Pillar Framework

Pillar	World Bank	Hong Kong
0	Non-contributory, publicly financed and managed system that provides a minimal level of protection for retirement	 Old Age Allowance Old Age Living Allowance Disability Allowance CSSA
1	Mandatory, contributory and publicly managed system	
2	Mandatory, privately managed, fully funded contribution system	 MPF schemes ORSO schemes Civil service pension schemes Grant schools and subsidized schools provident funds
3	Voluntary savings	 Voluntary MPF contributions Top-up ORSO schemes Personal savings/investment Life insurance Annuities
4	Informal support, other formal social programmes and other individual assets	 Family support Public health care Elderly Health Care Voucher Scheme Elderly care services Public housing Reverse mortgage Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities

Pillar Zero

The zero pillar includes (i) the Old Age Allowance (OAA), the Old Age Living Allowance (OALA) and the Disability Allowance under the Social Security Allowance (SSA) Scheme, and (ii) the CSSA. Both schemes are non-contributory. They are managed by the Government and financed by its revenue. An eligible person can apply for either the assistance under the CSSA or one of the allowances under the SSA Scheme (SWD, 2015d).

<u>CSSA</u>

The CSSA provides a safety net for those who cannot support themselves financially. It is designed to bring their income up to a prescribed level to meet their basic needs. It is means-tested based on an applicant's income and assets. Since 1 February 2015, the amount of assistance for an able-bodied elderly aged 60 or above has been \$3,200 per month (SWD, 2015a).

On top of the standard rate of assistance, an annual long-term supplement of \$2,000 is available to elderly persons who have received the CSSA for more than a year. In addition, recipients of the CSSA may be entitled to other forms of supplements, including the Community Living Supplement and the Residential Care Supplement (SWD, 2015a).

Table 4.2 Types of Payment Received by Elderly Persons under CSSA

ltem	Amount (\$)	Frequency
CSSA Standard Payment*	3,200	Monthly
Long-Term Supplement	2,000	Annual
Community Living Supplement	300	Monthly
Residential Care Supplement	300	Monthly

* For elderly persons aged 60 or above who are able-bodied / 50% disabled.

Source: SWD (2015a)

Other than allowances in cash, all CSSA recipients are entitled to free medical treatment at public hospitals and clinics in Hong Kong (SWD, 2015a).

SSA Scheme

The objective of the SSA Scheme is to provide a monthly allowance to Hong Kong residents who are severely disabled or who are aged 65 years or above to meet special needs arising from disability or old age (SWD, 2015d).

OAA

The OAA provides a flat-rate allowance to persons aged 70 or above. It is a universal scheme and does not require meeting any income or asset tests. The OAA is commonly known as "fruit money" which is often viewed by the community as a token of appreciation for the elderly (Labour and Welfare Bureau, 2012). Since 1 February 2015, the allowance has been \$1,235 per month. The OAA could not be taken together with the OALA, the Disability Allowance or the assistance under the CSSA.

In October 2013, the Guangdong Scheme under the SSA Scheme was introduced. This scheme aims to provide the OAA for Hong Kong elderly persons aged 65 or above who choose to reside in Guangdong without requiring them to return to Hong Kong each year. Unlike the OAA, this allowance is means-tested for applicants aged between 65 and 69. The level of allowance is the same as that of the OAA (SWD, 2013).

OALA

The OALA was introduced in April 2013 to supplement the living expenses of elderly people aged 65 or above who are in need of financial support. Unlike the OAA, the OALA is means-tested. The amount of the OALA is about twice as that of the OAA (Labour and Welfare Bureau, 2012). Since 1 February 2015, the OALA has been \$2,390 per month. The OALA cannot be taken together with the OAA, the Disability Allowance or the assistance under the CSSA.

As of May 2015, there were more than 418 000 recipients of the OALA, nearly twice that of the OAA recipients (SWD, 2015c). In fact, the number of recipients of the OAA dropped sharply after the introduction of the OALA, showing a shift from the former to the latter.

There are two types of Disability Allowance: the Normal Disability Allowance (DA) and the Higher Disability Allowance (HDA). The DA is for severely disabled persons, and the level of allowance is \$1,580 per month. The HDA is for severely disabled persons who require constant attendance from others in their daily lives, but are not receiving such care in residential institutions subsidized by the Government or public hospitals and institutions under the Hospital Authority. Since 1 February 2015, the HDA has been \$3,160 per month. The DA or the HDA cannot be taken together with the OAA, the OALA or the assistance under the CSSA (SWD, 2015d).

Table 4.3 Summarized Statistics of SSA Scheme

Types of allowance	Amount per month (\$)	No. of cases*
OAA	1,235	215 360
- Guangdong Scheme		16 904
OALA	2,390	418 888
DA	1,580	109 906^
HDA	3,160	19 833 [^]
Total	Not applicable [#]	780 891

* As of May 2015

Each person is only eligible for one of these allowances.

^ Figures include non-elderly recipients.

Source: SWD (2015c, 2015e)

Pillar One

Currently, there is no first pillar system in Hong Kong. Some commentators have advocated the establishment of a contributory, universal retirement protection scheme. Engaged by the Commission on Poverty, a consultancy team from the University of Hong Kong led by Professor Nelson Chow proposed that the Government should consider whether to set up a scheme for the provision of a regular demo-grant for all Hong Kong permanent residents aged 65 and above (The University of Hong Kong, 2014). In this regard, the Commission on Poverty would consult the public on retirement protection in December 2015.

Pillar Two

The second pillar of Hong Kong's retirement protection comprises mainly MPF schemes, ORSO schemes, civil service pension schemes, and grant schools and subsidized schools provident funds.

MPF System and MPF Schemes

The MPF System is a mandatory, privately managed, employment-based and fully funded DC system. It started to operate in December 2000.

Coverage

The MPF System is a mandatory system, which helps ensure that each working individual sets aside some retirement savings during his/her working life. All employees (except for exempt persons)¹³ are covered by the MPF System. Employers in all industries have to enrol their regular employees (i.e. employees from 18 to 64 years of age and employed for 60 days or more) in an MPF scheme within the first 60 days of employment. Casual employees in the catering and construction industries, two industries identified as having high intra-industry mobility, are covered from the first day of employment. Self-employed persons from 18 to 64 years of age must enrol themselves in an MPF scheme within 60 days after they have become self-employed, unless they are exempt persons.

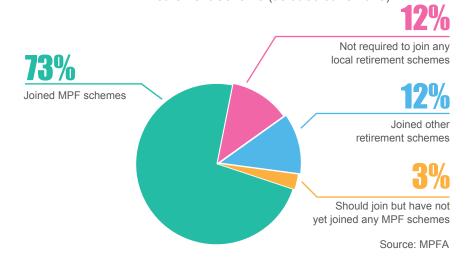
Before the MPF was implemented, it is estimated that only about one-third of Hong Kong workers were covered by any sort of occupational retirement protection scheme. In 2000, this represented not much more than 1 million of the 3.3 million people employed at the time. Large sections of those employed had no cover of any kind. After the launch of the MPF System, as at 30 June 2015, 85% of Hong Kong's

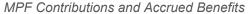
¹³The following categories of employees are exempt persons under the MPF System:

- People covered by statutory pension or provident fund schemes, such as civil servants and subsidized or grant school teachers;
- (ii) Employees who choose to remain as members of occupational retirement schemes which are granted MPF exemption certificates;
- (iii) Domestic employees;
- (iv) People from overseas who enter Hong Kong for employment for not more than 13 months, or who are covered by overseas retirement schemes;
- (v) Employees who are employed for less than 60 days, excluding casual employees engaged in the construction and catering industries; and
- (vi) Employees of the European Union Office of the European Commission in Hong Kong.

workers (about 3.2 million) were covered by the MPF System or some other form of retirement scheme. Most of the remaining workers are not legally required to join any local retirement scheme; this group includes workers with overseas retirement schemes, employees aged below 18 or aged 65 and above, and domestic helpers. Coverage of the working population by some pension arrangement in Hong Kong is high by international standards.

> Figure 4.1 Employed Population by Type of Retirement Scheme (as at 30 June 2015)





Employees and employers who are covered by the MPF System are each required to make regular mandatory contributions calculated at 5% of the employee's relevant income to an MPF scheme, subject to the minimum and maximum relevant income levels¹⁴. For a monthly-paid employee, the minimum and maximum relevant income levels are \$7,100 and \$30,000 respectively. According to the Employment Ordinance, if an employee becomes entitled to severance payment or long service payment, the payment is to be offset against the MPF benefits derived from the employer's contributions to the extent that the benefits relate to the employee's years of service for which the payment is payable.

¹⁴ Further details of the minimum and maximum relevant income levels of MPF mandatory contributions are provided in Chapter 5.

Self-employed persons who are covered by the MPF System must make regular mandatory contributions calculated at 5% of their relevant income to an MPF scheme, subject to the minimum and maximum relevant income levels. They can opt to make mandatory contributions on a monthly or yearly basis. The minimum and maximum relevant income levels are \$7,100 per month (or \$85,200 per year) and \$30,000 per month (or \$360,000 per year) respectively.

On the back of a high enrolment rate, the total MPF contributions made by employers, employees and self-employed persons have risen gradually since December 2000. Between December 2000 and June 2015, net contributions (i.e. contributions made, less the amount of benefits paid) stood at a total of \$455.17 billion. The effects of time and compounded returns are such that, as of June 2015, the accrued benefits (i.e. contributions plus investment return thereon) in the MPF System had grown to \$620.14 billion. This means that, in dollar terms, the MPF System generated an investment return of \$164.96 billion after fees and charges had been deducted, which translates into an annualized internal rate of return¹⁵ of 4.5% for the period. This is substantially higher than the inflation rate (1.7% per year) for the same period. Naturally, the precise details for individual MPF accounts will vary from this average figure, depending on individuals' choice of fund and on the timing of their contributions, but it can be seen that overall, the MPF System has added substantially to the retirement savings of workers.

Figure 4.2 Growth of MPF Accrued Benefits



Source: MPFA

ORSO Schemes

For a long time, quite a number of employers in the private sector offered retirement schemes to their employees voluntarily, and these employers could obtain profit tax deductions on their contributions to an approved retirement scheme. To ensure that such schemes were properly regulated and to provide greater certainty that retirement scheme benefits promised to employees would be paid when they fell due, the Occupational Retirement Schemes Ordinance (ORSO) was enacted and came into operation in 1993. The ORSO aims to regulate occupational retirement schemes through a registration system. It applies to all occupational retirement schemes operated in and from Hong Kong. It also covers offshore schemes (i.e. schemes whose domicile is outside Hong Kong, where the scheme or trust is governed by a foreign system of law) which provide retirement benefits to members employed in Hong Kong. For an occupational retirement scheme to be registered under the ORSO (thus becoming an ORSO registered scheme), it must fulfil certain criteria regarding the scheme terms, which are mainly designed for better protection of the employees' benefits. An occupational retirement scheme may be

¹⁵The internal rate of return (IRR) (also referred to as the dollar-weighted return) is a method to measure investment return. This method takes into account the amount and timing of contributions into and benefits withdrawn from the MPF System. The annualized IRR was calculated by raising the monthly IRR to the power of 12.

exempted from the ORSO registration requirements if it is an offshore scheme registered or approved by a recognized overseas regulatory authority or a scheme with not more than either 10% or 50 of their members, whichever is less, being Hong Kong permanent identity card holders. Such a scheme is referred to as an ORSO exempted scheme.

The launch of the MPF System was complemented by interface arrangements between ORSO schemes and MPF schemes, allowing for the exemption of eligible existing ORSO schemes from MPF requirements. The objective of the interface arrangements is to minimize the interference with existing ORSO schemes and avoid upsetting the contractual relationship between employers and existing employees. To protect the rights and interests of employees, employers of MPF exempted ORSO schemes are required to give eligible employees a one-time option to choose between joining MPF schemes or MPF exempted ORSO schemes.

While MPF schemes have gradually become the mainstay of the second pillar of Hong Kong's retirement protection, ORSO schemes continue to contribute significantly to the retirement savings of a large number of employed persons. With the implementation of the MPF System, enrolment of employees in ORSO schemes has been declining. Despite this, assets accumulated in ORSO schemes recorded steady growth, which reflects that on average ORSO members have seen substantial growth of savings in their ORSO accounts.

Figure 4.3 Number of Enrolled Employees in ORSO Registered Schemes

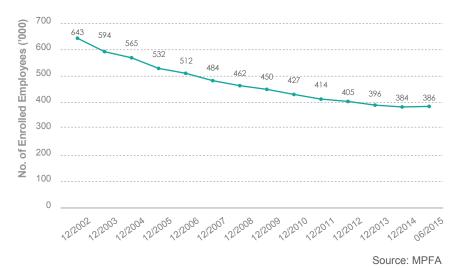
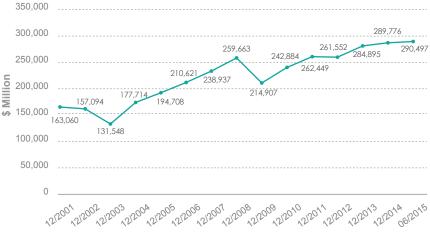


Figure 4.4 Growth of Assets of ORSO Registered Schemes



Source: MPFA

As at the end of June 2015, the total number of ORSO schemes amounted to 4 801. Among them, 4 045 were ORSO registered schemes and 756 were ORSO exempted schemes. With an asset size of \$290 billion, ORSO registered schemes covered a total of 6 400 employers and 385 600 employees.

Table 4.4 Summary Statistics of ORSO Schemes*

Total number of ORSO schemes (including ORSO exempted schemes)	
ORSO registered schemes	
Number of schemes	4 045
Number of employers	6 435
Number of employees covered	385 589
Annual contribution amount (\$ million)	17,882
Asset size (\$ million)	290,497

* ORSO statistics were compiled on the basis of the latest annual returns filed with the MPFA up to 30 June 2015 in respect of ORSO registered schemes.

Source: MPFA

Civil Service Pension Schemes

The Government operates two statutory, non-contributory pension schemes for civil servants who are serving on pensionable terms. The Old Pension Scheme is governed by the Pensions Ordinance, while the New Pension Scheme is governed by the Pension Benefits Ordinance. As of December 2014, about 106 900 civil servants were serving on pensionable terms (Civil Service Bureau, 2015).

A pension is normally granted to a civil servant when retiring from the service or in other circumstances as provided under the pensions legislation. A civil servant's pension is calculated on the basis of salary, length of service and pension factor under the respective pension schemes according to the prescribed formulae in the pensions legislation (Civil Service Bureau, 2015).

Other civil servants who are not appointed on pensionable terms are provided with MPF benefits under the MPF System (save for those exempted from the MPF System) through the Civil Service Provident Fund (CSPF) Scheme. The Government's contributions under the CSPF Scheme follow a progressive contribution rates schedule. Contribution rates, in terms of the percentage of the officer's basic salary at his substantive rank, increase according to the officer's completed years of continuous services on civil service terms (Civil Service Bureau, 2015).

Grant Schools Provident Fund and Subsidized Schools Provident Fund

The Grant Schools Provident Fund and the Subsidized Schools Provident Fund are provident fund schemes established to provide for payments to be made upon resignation, retirement, dismissal or termination of contract to teachers employed in grant/subsidized schools or to their estates in case of death. Every teacher who is employed in a grant/subsidized school and is approved for the purposes of the Codes of Aid is required to contribute to the Grant Schools Provident Fund or the Subsidized Schools Provident Fund. Temporary or unqualified teachers and those aged over 55 on first appointment are however excluded from this requirement (Education Bureau, 2012).

The monthly contribution to the Grant Schools Provident Fund or the Subsidized Schools Provident Fund is at the rate of 5% of the teacher's salary. The Government will make matching donations equal to 5% to 15% of the teacher's basic salary, depending on the teacher's length of continuous contributory service (Education Bureau, 2015a, 2015b).

In 2014, the number of contributors in the Grant Schools Provident Fund and the Subsidized Schools Provident Fund were 1188 and 36385 respectively. As at 31 August 2014, the net asset values of the Grant Schools Provident Fund and the Subsidized Schools Provident Fund amounted to \$3,166 million and \$71,395 million respectively (Education Bureau, 2015a, 2015b).

Pillar Three

According to the World Bank, the third pillar refers to voluntary arrangements that can take many forms (e.g. individual or employer-sponsored) but are essentially flexible and discretionary in nature (Holzmann & Hinz, 2005).

Individual Saving Arrangements

Individual saving arrangements may include personal savings and investment for retirement purposes (including making special voluntary contributions (SVC) to MPF schemes), life insurance and annuities. In respect of personal savings, there are no official statistics on the amount of savings set aside by Hong Kong people for retirement purposes. According to a survey conducted by the Investor Education Centre¹⁶ in 2014, 45% of respondents indicated that they saved money every month; 28% saved occasionally or when they had surplus; 11% only saved when they had specific needs and 16% did not save at all (Investor Education Centre, 2014). According to another survey conducted by a group of academics, approximately 42% of Hong Kong workers did not save privately for their retirement (except for mandatory savings like the MPF) (Chou, Yu, Chan, Chan, Lum, & Zhu, 2014).

MPF SVC

For MPF scheme members who prefer to make use of the MPF System for additional retirement savings, the MPF System also accommodates such a need through the arrangement of the SVC. The SVC is paid directly by a scheme member to a scheme and the employer is not involved. Over the past years, the SVC has been gaining popularity. The amount of the SVC recorded rapid growth, rising 54 times from \$31 million received in the fourth quarter of 2005 to \$1,702 million received in the second quarter of 2015.

Life Insurance

Hong Kong's insurance market is one of the most developed in the region. Quite a number of Hong Kong people have secured life insurance, which may also form part of their financial resources for retirement.

According to the Office of the Commissioner of Insurance (OCI), there were over 10 million in-force individual life policies in 2013. Among the individual life policies, 8.7 million non-investment-linked policies provided an aggregate assured sum of about \$3.4 trillion (OCI, 2014). However, it is noteworthy that not all of these life policies were issued to Hong Kong residents.

Table 4.5 In-Force Individual Life Policies in 2013

	No. of policies	Sum assured (\$ million)
Non-investment-linked	8 741 810	3,438,603.6
Whole life	5 029 919	2,284,698.0
Endowment	1 330 690	307,717.8
Term	812 827	356,077.7
Others	1 568 374	490,110.1
Investment-linked	1 673 956	Not applicable
Total	10 415 766	Not applicable

Source: OCI (2014)

Annuities

Some Hong Kong people also purchased annuities so as to convert capital into a regular stream of income. According to the statistics released by the OCI, there were about 78 000 in-force individual annuity policies in 2013 (OCI, 2014). The number of newly issued individual annuities has increased substantially in recent years. However, not all of these annuity policies were issued to Hong Kong residents.

Table 4.6 In-Force Individual Annuity Policies in 2013

No. of policies
45 313
32 610
77 923

Source: OCI (2014)

Table 4.7 Number of Individual Annuity (New Business) During 2011-2013

	2011	2012	2013
Non-investment-linked	3 242	11 274	19 083
Single payment	400	776	773
Regular payment	2 842	10 498	18 310
Investment-linked	138	47	30
Total	3 380	11 321	19 113

¹⁶ The Investor Education Centre (IEC) is a dedicated organization with the mission of improving financial literacy in Hong Kong. The IEC is governed by an independent executive committee consisting of representatives of the four Hong Kong's financial regulators, namely the Securities and Futures Commission, the Hong Kong Monetary Authority, the MPFA and the Office of the Commissioner of Insurance, a representative of the financial industry and the Education Bureau as well as the General Manager of the IEC.

Employer-Sponsored Saving Arrangements

As part of fringe benefits for employees, some employers provide employees with a top-up scheme to supplement the benefits from mandatory contributions provided under an MPF scheme. In addition, quite a number of employers also make voluntary contributions (VC) (contributions exceeding the amount of mandatory contributions required to be paid by employers under the MPF legislation) into the MPF accounts of their employees.

The amount of the VC (made by both employers and employees) recorded substantial growth in 10 years, rising by over 200% from \$651 million in the fourth quarter of 2005 to \$2,147 million in the second quarter of 2015.

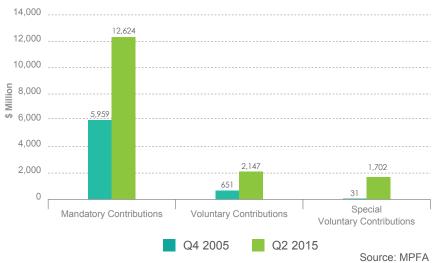


Figure 4.5 Amount of Mandatory and Voluntary Contributions Received

Pillar Four

According to the World Bank's five-pillar framework, the fourth pillar encompasses all informal support, formal social programmes and individual assets other than those under the zero pillar to the third pillar (Holzmann & Hinz, 2005). In Hong Kong's context, among others, the fourth pillar may include family support, health-care services (including the Elderly Health Care Voucher Scheme), public housing (including various priority schemes for the elderly), elderly care services, the Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities, and reverse mortgages.

Family Support

According to traditional Chinese customs, contributions from one's children are the most commonly accepted way of meeting financial needs in old age. According to a survey conducted by the Census and Statistics Department (C&SD) in 2010, some 38.5% of persons with parents often or very often gave financial support to their parents during the year before enumeration. Another 31.4% occasionally did so; while 29.9% rarely/never supported their parents in this way (C&SD, 2010).

According to another survey conducted by the C&SD in 2013, about 70% of current retirees indicated that their family members currently provided financial support to them. Among them, 16.7% cited that the average amount of monthly financial support provided by family members was \$1,999 or less. While 30.8% indicated an amount between \$2,000 and \$3,999 a month, 48.5% cited \$4,000 or more. The median amount of monthly financial support provided to them by their family members was \$4,000 (C&SD, 2013b).

Health-care Services

Hospitalization and Medical Consultations

Health-care services are crucial for the elderly. According to the Hospital Authority, the utilization rate of health-care services rises almost exponentially for people aged 65 years or over. The relative risk of an elderly person being admitted to hospital is about four times that of a non-elderly person (Hospital Authority, 2012).

Accounting for only about 13% (in 2010) of the Hong Kong population, people aged 65 years or above are however major consumers of medical services provided by the Hospital Authority. In 2010, they accounted for around 50% of all patient days, 53% of all accident and emergency admissions, and 68% of all unplanned emergency readmissions to public hospitals¹⁷ (Hospital Authority, 2012).

¹⁷ An unplanned emergency readmission is defined as an admission via the Accident & Emergency Department to the same specialty in any hospital under the Hospital Authority within 28 days of discharge.

In out-patient consultations provided by the Hospital Authority, 37.5% of all attendances at general out-patient clinics and one-third of the attendances at specialist out-patient clinics were taken up by patients aged 65 years or over. Moreover, it is common for the aged to attend multiple specialist out-patient clinics. In 2010, about 29% of elderly patients consulted two specialties, around 12% three specialties and another 5% four or more specialties (Hospital Authority, 2012).

Table 4.8 Selected Statistics on Hospital Authority's Services Used by the Elderly in 2010

	Percentage accounted for by patients aged 65 years or above (%)
All patient days in Hospital Authority	50
Accident and emergency admissions	53
Unplanned emergency readmissions to hospitals	68
Specialist out-patient clinic	33.3
General out-patient clinic	37.5

Source: Hospital Authority (2012)

With Government subvention, Hong Kong residents are required to pay only a portion of the costs for the services provided by the Hospital Authority. For example, residents admitted to the general ward are required to pay a \$50 admission fee and \$100 maintenance fee per day. The maintenance fee includes all the charges for clinical, biochemical and pathology investigations, vaccines, general nursing and prescriptions (Hospital Authority, 2015).

Thus, the cost of health-care services to the elderly is subsidized by the Government, as the Hospital Authority is heavily financed by the Government. For 2015-16, the estimated recurrent expenditure on health amounted to \$54.5 billion, which accounted for 16.8% of the Government's estimated total recurrent expenditure (Hong Kong Government, 2015).

Table 4.9 Fees and Charges of Hospital Authority

Service	Fees (for Hong Kong residents)
Accident and emergency	\$100 per attendance
In-patient (general acute beds)	\$50 admission fee, plus \$100 maintenance fee per day
In-patient (convalescent, rehabilitation, infirmary & psychiatric beds)	\$68 per day
General out-patient	\$45 per attendance
Specialist out-patient (including allied health services)	\$100 for the first attendance, \$60 per subsequent attendance, \$10 per drug item
Day procedure and treatment at clinical oncology clinic and renal clinic	\$80 per attendance
Dressing and injection	\$17 per attendance

Source: Hospital Authority (2015)

Elderly Health Care Voucher Scheme

The Elderly Health Care Voucher Scheme is a programme for enhancing the provision of primary care service for the elderly. Those aged 70 or above with a valid Hong Kong Identity Card or Certificate of Exemption are eligible to use the Elderly Health Care Vouchers (Department of Health, 2014). A pilot scheme, launched in 2009, aimed at supplementing existing public health-care services (e.g. general out-patient and specialist out-patient clinics) by providing a financial incentive to the elderly to choose private health-care services that best suit their needs, including preventive care. In 2014, the pilot project was converted into a recurrent support programme for the elderly, and the annual voucher amount increased from \$1,000 to \$2,000. Any unspent vouchers are allowed to be carried forward and accumulated, subject to a ceiling of \$4,000 (Department of Health, 2015).

The Elderly Health Care Vouchers can be used for services provided by medical practitioners, Chinese medicine practitioners, dentists, chiropractors, registered nurses and enrolled nurses, physiotherapists, occupational therapists, radiographers, medical laboratory technologists and optometrists with Part I registration under the Supplementary Medical Professions Ordinance; and preventive care, curative and rehabilitative services (Department of Health, 2014).

Elderly Care Services

A wide range of elderly care services are also provided directly or indirectly by the Government. These services include community care and support services, which assist the elderly to continue to live in the community for as long as possible and give support to their carers. In brief, there are three types of community care and support services — elderly-centre services such as the District Elderly Community Centres, community-care services such as day-care centres and other community-support services such as the Senior Citizen Card Scheme (SWD, 2015b).

Residential-care services are also provided for elderly people aged 65 or above who cannot adequately be taken care of at home. Persons aged between 60 and 64 may apply if they have a proven need. There are four types of residential-care services — Hostels for the Elderly, Homes for the Aged, Care and Attention Homes for the Elderly and Nursing Homes (SWD, 2015b).

Public Housing

Public housing provides accommodation for about 30% of Hong Kong people. Among persons aged above 65, about 39% are living in public rental housing (PRH) (C&SD, 2013c). Some housing schemes have been introduced by the Government to address the specific needs of the elderly.

Harmonious Families Priority Scheme

To encourage younger families to take care of their elderly parents or dependents and promote harmony in the family, the Housing Authority has introduced the Harmonious Families Priority Scheme (HFPS) by combining two schemes, the Families with Elderly Persons Priority Scheme and the Special Scheme for Families with Elderly Persons in respect of PRH applications (Hong Kong Housing Authority & Housing Department, 2015).

The HFPS offers priority to PRH applicants with elderly family members. Eligible families may opt to live in one flat or two nearby flats according to their choice of district and the number of flats available for their family situation (Hong Kong Housing Authority & Housing Department, 2015).

Single Elderly Persons Priority Scheme

Eligible applications under this scheme enjoy priority processing over applications by ordinary families. Applicants have to be 58 years of age or above, and to have attained the age of 60 at the time of flat allocation, while also fulfilling the general eligibility criteria of the application for the PRH (Hong Kong Housing Authority & Housing Department, 2015).

Elderly Persons Priority Scheme

Two or more elderly persons who undertake to live together upon flat allocation are eligible to apply for the PRH under this priority scheme, provided that they also fulfil the general eligibility criteria of the application for the PRH. Eligible applications under this scheme enjoy priority processing over applications by ordinary families. Applicants must be aged 58 or above at the time of filing their application and must have attained the age of 60 by the time of flat allocation (Hong Kong Housing Authority & Housing Department, 2015).

<u>Others</u>

Reverse Mortgage Programme

The Reverse Mortgage Programme was launched by the Hong Kong Mortgage Corporation Limited (HKMC) in 2011, encouraging banks to offer reverse mortgages to people aged 55 or above. A reverse mortgage is a loan arrangement, enabling borrowers to use their self-occupied residential properties in Hong Kong as a security to borrow from a participating bank. The borrowers remain owners of the properties and can live there for the rest of their lives (HKMC, 2011, 2015a).

Borrowers will receive monthly payouts over a fixed period of 10, 15 or 20 years or their entire lives. When borrowers' reverse mortgages terminate or borrowers pass away, they or their inheritors have the preferential right to redeem their properties by repaying to the bank the outstanding amount owed under the reverse mortgages. If borrowers or their inheritors choose not to exercise such a right, the banks will sell their properties to recover the outstanding loan amounts (HKMC, 2015a).

To be eligible for the programme, the borrower must be a holder of a Hong Kong Identity Card, aged 55 or above and must not be an undischarged bankrupt or otherwise subject to bankruptcy petition or individual voluntary arrangement. The property owned by the borrower is also subject to a number of requirements.

From the launch of the programme to December 2014, a total of 742 applications were received. The average age of applicants was 69 and the average monthly payout amounted to \$14,300 (HKMC, 2015b).

Table 4.10 Number of Applications under the Reverse Mortgage Programme

Year (as of December)	Total number of applications (cumulative)
2011	173
2012	319
2013	538
2014	742

Source: HKMC (2015b)

Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities

This scheme aims to help the elderly and eligible persons with disabilities to participate more in community activities. Elderly people aged 65 or above, recipients under the CSSA aged below 65 with 100% disabilities and recipients of the DA/HDA aged below 65 are eligible to join the scheme. Beneficiaries can travel on designated transport modes (e.g. Mass Transit Railway, franchised buses, ferries and green minibuses) at \$2 per trip any time. If the original fare for a journey is below \$2, beneficiaries need to pay only the original fare (Labour and Welfare Bureau, 2015).

Issues and Challenges of Hong Kong's Retirement Protection

Like many mature economies in the world, Hong Kong has been facing the issues of an ageing population and decelerating economic growth. On the demand side, an ageing population raises the need for retirement protection. On the supply side, a decelerating economy is going to undermine the Government's capabilities in providing public services.

Increasing Life Expectancy and Low Fertility Rate

Life expectancy in Hong Kong is among the highest in the world, with 81.2 years for males and 86.9 years for females in 2014. It is predicted that by 2064, the male and female life expectancy at birth will become 87.0 and 92.5 years respectively (C&SD, 2015b).

The fertility rate (number of live births per 1 000 women) in Hong Kong is also among the lowest in the world. The fertility rate was 1234 in 2014 and is predicted to edge down to 1182 in 2064 (C&SD, 2015b).

The combined effect of an increase in life expectancy and lower fertility rate has led to an ageing population in Hong Kong. The age group of 65 and above is projected to rise markedly from 15% of the population in 2014 to 33% in 2064. For those aged 80 and above, the proportion will rise from 4% of the whole population to 15% over the same period (C&SD, 2015b).

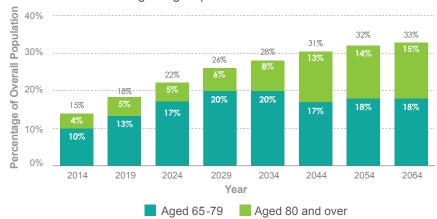


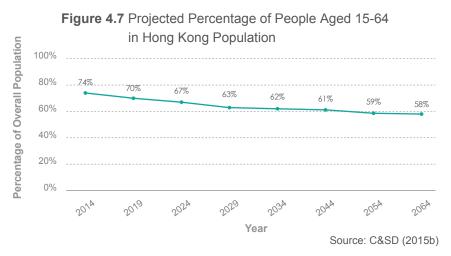
Figure 4.6 Projected Percentage of People Aged 65 and above in Hong Kong Population

Note: Figures may not sum to the total due to rounding.

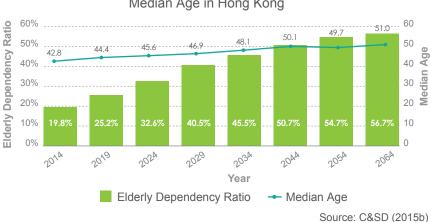
Source: C&SD (2015b)

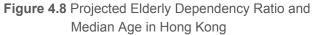
Shrinking Working Population

In tandem with a rise in the older population, the working population is predicted to shrink. In absolute numbers, the age group between 15 and 64 is forecast to decrease from 5.4 million in 2014 to 4.6 million in 2064 while their share of the whole population drops from 74% in 2014 to 58% in 2064 (C&SD, 2015b).



Correspondingly, the median age of Hong Kong population is expected to rise from 42.8 in 2014 to 51.0 in 2064. The elderly dependency ratio (ratio of those aged 65 and above to those aged between 15 and 64) is predicted to increase from 19.8% in 2014 to 56.7% in 2064 (C&SD, 2015b).

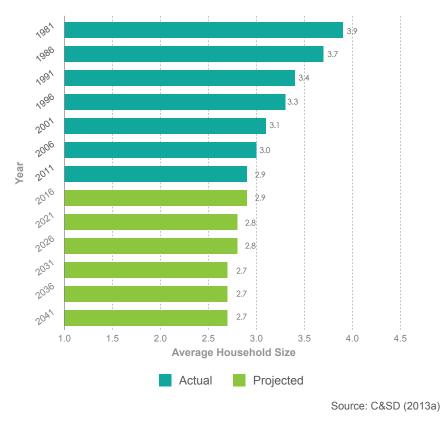




Smaller Size of Families

On the back of a low fertility rate, the size of Hong Kong's families also tends to shrink. In 1981, the average household size comprised 3.9 members. In 2011, the average size dropped to 2.9 members. It is predicted that by 2041, the average household size will further decrease to 2.7 members (C&SD, 2013a). Family support used to be an important source of retirement income in Chinese societies. The shrinking family size will inevitably undermine the availability of this source of support.

Figure 4.9 Average Household Size in Hong Kong (1981-2041)



Decelerating Economic Growth and Fiscal Conditions of the Government

According to the forecast of a report released by the Working Group on Long-Term Fiscal Planning in 2014 (Financial Services and the Treasury Bureau, 2014), Government expenditure on selected age-sensitive items will multiply even without inflation or service enhancement.

Table 4.11 Forecast of Government Expenditure on Selected Age-Sensitive Items

	2014-15 \$ billion (in 2013 co	2041-42 \$ billion nstant prices)
Recurrent subvention requirement of Hospital Authority	47.2	85.6
Old Age Living Allowance/Old Age Allowance	14.6	36.4
Welfare services for the elderly	6.2	16.3
Public transport fare concession scheme	0.6	1.8
Elderly Health Care Voucher Scheme	0.8	2.5

Source: Financial Services and the Treasury Bureau (2014)

The report predicts decelerating economic growth in Hong Kong over the long term as the labour force starts to stagnate. Against this background, Government expenditure will keep growing at a faster pace than the growth of Government revenue and the economy. According to the report, if this trend persists, structural deficits will surface within a decade. The looming of structural deficits inevitably undermines the ability of the Government to provide public services.

Conclusion

Hong Kong's retirement protection system has been undergoing substantial changes over the past years, responding to social and economic developments. Among others, the establishment of the MPF System could be considered as a landmark. Like many other places in the world, there have been incessant calls for refinements of the retirement protection system in Hong Kong. For instance, in the past few years, some members of the public have reiterated their demand for a universal retirement protection scheme.

The current set-up of Hong Kong's retirement protection system reflects a shared responsibility among individuals, employers and the Government. As suggested by the World Bank, a multi-pillar model is better suited to address the issue of retirement protection. These different pillars, built on the concerted efforts of individuals, employers and the Government, need to work together to provide for total retirement protection for the population.

Chapter 5 MPF System in Evolution

As the second pillar of the retirement protection framework in Hong Kong, the MPF System is designed to benefit the broad working population of Hong Kong. Over the past 15 years, the MPF System has faced numerous challenges but has still been able to contribute to a better retirement protection landscape in Hong Kong. To build a savings system that Hong Kong people value, the MPFA, the statutory body established to regulate and supervise MPF schemes, has been refining the infrastructure of the MPF System with reference to operational experience and suggestions from stakeholders.

Early Days of MPF – From Ideas to Reality

When the MPF System was launched back in December 2000, it represented one of the biggest social policy initiatives in Hong Kong. It was a second pillar system of the multi-pillar system recommended by the World Bank in 1994: an employment-based contribution scheme that was mandatory, privately managed and fully funded. From a practical perspective, whilst it was based on principles that had worked in other jurisdictions, it was brand new, had to be built from scratch, and needed to be tailored to Hong Kong's unique population and circumstances. No template or model could thus be easily adopted to create this system.

The primary legislation setting up the MPF System, the MPFSO, was drafted in 1994 to 1995 after a period of long debate. However, the eventual passing of the MPFSO in July 1995 was only the beginning. The 1995 MPFSO established the MPF System in principle, but before the System could be up and running, a wide range of other legislative groundwork and practical planning was essential. With the 1998 amendments to the MPFSO enacted, it became necessary to set up an executive arm for System implementation. Up to 1998, a small MPF Office had been handling matters relating to the scheme. By September 1998, the MPFA was established with the task of preparing to make the MPF a reality.

To make a smooth start, the MPFA endeavoured to accomplish the following four important tasks in the short years before the launch of the MPF System:

- a. The overall regulatory framework, including relevant guidelines, codes and other regulatory tools, was put in place so as to minimize the possibilities of loopholes, uncertainties and grey areas in the laws relating to the MPF.
- b. A licensing arrangement was established to vet and approve both trustees and investment products offered under the MPF. At the same time, the MPFA invited employers who were offering their employees retirement benefits under the existing ORSO schemes to apply for exemption from the MPF if they wished. By July 2000, the MPFA had completed processing all the applications for MPF exemption from ORSO schemes.
- c. An 18-month public education and publicity campaign was launched to help raise both public awareness and acceptance of the MPF. This was a gigantic campaign made up of numerous individual events designed to get the MPF into the public eye and educate the general public about the potential benefits of the MPF System for their long-term future.
- d. Proper corporate arrangements were made to ensure internal preparedness, including establishing offices, recruiting and training staff, developing an effective information management system, and setting up a call centre through which members of the public could find out more about the MPF System and resolve problems that arose. In addition, the MPFA recruited a team of inspectors and trained them to follow up with employers and self-employed persons who did not comply with MPF requirements.

With the trustees and investment funds approved and registered, the regulatory framework put in place, the public ready for the MPF, and the MPFA itself organized and prepared, the stage was set for the idea to become a reality. On 1 December 2000, the MPF System commenced operation.

Putting the System on the Right Track

The MPF System encountered numerous challenges and difficulties in its early days. From the outset, both the MPF System and the MPFA have been tightly constrained by the legislation that because of its importance, was drafted in a relatively detailed manner and is prescriptive in nature. This has meant that there have seldom been any "quick fixes" to issues that have arisen, such as fee levels and employees' choice of schemes, as changes in most areas can only be made through legislative processes. Some issues, such as the offsetting arrangement of the severance payment and long service payment against MPF accrued benefits, are in fact outside the remit of the MPFA. Given this, the MPFA's focus has been on ensuring that the MPF System, as defined in the legislation, works in the best and smoothest way possible, to the benefit of the entire working population. At the same time, however, it also explores ways to improve the System, and regularly proposes legislative amendments to bring about appropriate changes.

Since its launch on 1 December 2000, the MPF System has been continuously evolving and developing. Throughout the past 15 years, the MPF legislation has been amended in many aspects with the objective of making the System better suited to the needs of scheme members, as reflected by the enactment of nine amendment bills between 2001 and 2015.

Streamlining and Minimizing Administrative Work

Soon after getting over the hurdle of launching the MPF System, the MPFA started to deal with the teething problems identified when actual MPF operations commenced, and to consider ways of minimizing administrative work and streamlining the day-to-day running of the massive MPF operation. Significant steps in this direction have been taken since as early as 2002. One example that illustrates the kind of small but cumulatively significant changes is the adjustment to the initial employee contribution holiday. Originally, employers' MPF contributions began from the day that their employees started work, whereas employees' contributions began from their 31st day of work. This created administrative problems because the 31st day of employment seldom

matched the first day of a payroll cycle, so employers had to carry out complex calculations to work out the correct contribution. The 2002 legislative amendment waived the requirement for employees' contributions for any first incomplete payroll period after the 30-day contribution holiday. In 2008, another legislative amendment made it faster and less burdensome for trustees to carry out their statutory obligation to notify scheme members who have turned 65 about their eligibility to withdraw MPF benefits. Before 2008, trustees were required to solicit a reply each year from members about how they wished their benefits to be handled; if they failed to get a response, they had to re-send the Annual Benefit Statements and continue to solicit a reply from those members. The 2008 amendment removed the requirement for getting a reply from scheme members, a step which cut down on administrative work.

Ensuring Compliance by Employers

Protecting the rights and interests of scheme members is one of the core functions of the MPFA. Employers are obliged by law to enrol their employees in MPF schemes, make accurate and timely contributions, and take certain administrative actions (such as issuing pay records to their employees). From the outset, it was clear that some employers would resist the new MPF law and try to avoid the financial and administrative consequences by not enrolling their employees in the MPF, or by not making MPF contributions for them. Enforcement actions were taken against non-compliant employers. Examples include imposing surcharges and financial penalties on non-compliant employers, initiating civil claims to recover the contributions in default, and prosecution.

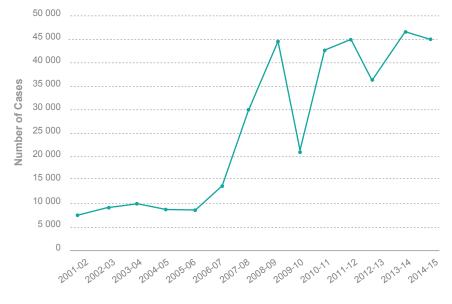
Over the years, legislative amendments have been made to enhance the deterrent effect against non-compliance with enrolment and contribution requirements. In 2002, a legislative amendment was made that introduced a new continuous offence for non-enrolment of employees within the permitted period. Five years later, however, some employers were still failing to enrol their employees in the MPF or make contributions on their behalf, and were paying little regard to fines imposed. A further amendment in 2008 introduced heavier penalties for non-compliance. Also

in December 2008, an amendment was introduced that made it an offence not to pay mandatory contributions in non-enrolment cases.

At the inception of the MPF System, housing allowance and benefits from income were excluded for the purpose of calculating MPF mandatory contributions. Some employers made use of this exclusion to arbitrarily reduce the amount of mandatory contributions. In 2008, an amendment was made to remove this exclusion.

In 2012, two enforcement-related provisions came into operation, making employers' failure to pay mandatory contributions a continuous offence, and making employers' failure to pay any sum payable under tribunal or court awards a criminal offence. For the period between 1 April 2001 and 31 March 2015, the MPFA investigated around 368 400 non-compliance cases relating to employers. The major alleged offences included defaulting on contributions and non-enrolment.





Note: Since April 2006, the number of cases investigated has included cases reported by trustees.

Source: MPFA

Wider Range of Choices Available to Employees

The MPF System is employment-based. Self-employed persons are responsible for enrolling themselves in MPF schemes, while employees are enrolled in MPF schemes by their employers. The arrangement of employers choosing MPF schemes for employees and enrolling them in the chosen schemes is administratively simpler for employers and facilitated the efficient launch of the MPF System. Nevertheless, it limits the scheme choices available to employees and thus limits market competition.

In order to give employees greater control over their MPF investments, the Employee Choice Arrangement (ECA) came into operation on 1 November 2012. After the implementation of the ECA, employees have the right to transfer the accumulated MPF benefits attributed to their own mandatory contributions to a scheme of their own choice at least once every calendar year. Employees are therefore given greater autonomy in managing part of their MPF investments. The ECA also helps enhance scheme members' engagement in their MPF investments as well as market competition. Up to June 2015, around 235 000 ECA transfer requests had been received by trustees.

Enhancing Statutory Regulatory Regime for MPF Intermediaries

With the introduction of the ECA, the sales and marketing targets of MPF intermediaries have expanded to include over two million employees, in addition to employers and self-employed persons. In order to better protect scheme members against possible mis-selling, a statutory regulatory regime for MPF intermediaries also came into force from 1 November 2012. This regime, based on a multi-regulator model, provides legal backing to the registration arrangement that was put in place at the inception of the MPF System.

Under the regime, MPF intermediaries are required to register with the MPFA before they can carry on sales and marketing activities or give advice in relation to MPF schemes. MPF intermediaries are supervised by frontline regulators (i.e. the Insurance Authority, the Monetary Authority, and the Securities and Futures Commission) and are expected to meet certain standards of conduct. Any substantiated cases of non-compliance with the statutory conduct requirements will be subject to disciplinary sanctions imposed by the MPFA.

Under the multi-regulator model, the MPFA works closely with the frontline regulators on complaints or cases with potential disciplinary or criminal prosecution actions. A Memorandum of Understanding concerning the Regulation of Regulated Persons with Respect to Registered Schemes under the Mandatory Provident Fund Schemes Ordinance (MoU) lays down the broad framework of the interaction and cooperation among the MPFA and the frontline regulators. Pursuant to the MoU, the MPFA also convenes meetings of the MPF Intermediaries Regulation Committee with the frontline regulators for exchanges of views on supervisory and enforcement issues relating to MPF intermediaries.

Table 5.1 Number of Registered MPF Intermediaries (June 2015)

	Principal intermediary [#]	Subsidiary intermediary [^]	Total
Number of registered MPF intermediaries	396	32 362	32 758
By frontline regulator			
Insurance Authority	345	25 003	25 348
Monetary Authority	18	5 331	5 349
Securities and Futures Commission	33	417	450
Total*	396	30 751	31 147

[#] A principal intermediary is a business entity registered by the MPFA as an intermediary for selling, marketing or giving advice on MPF schemes.

- ^ A subsidiary intermediary is a person registered by the MPFA as an intermediary for selling, marketing or giving advice on MPF schemes on behalf of the principal intermediary to which the person is attached.
- * A subsidiary intermediary may be attached to more than one principal intermediary or none (normally, for a period not exceeding 90 days). All subsidiary intermediaries are assigned to their principal intermediary's frontline regulator. Therefore, depending on the specific circumstances, a subsidiary intermediary may be assigned to more than one frontline regulator or may not have any frontline regulator.

Source: MPFA

Striving for Fee Reduction

On the whole, members of MPF schemes do not directly pay any fees or charges nor are fees and charges deducted from their accounts. Usually fees and charges are deducted from the assets of the funds in which the benefits of members are invested. Fees and charges incurred by MPF funds do affect the amount of accrued benefits accumulated by scheme members during the working years for their retirement. All other things remaining constant, reduction of fees and expenses will translate into higher retirement benefits for scheme members. In the light of its importance, the level of fees and expenses of the MPF funds has been a major focus of the MPFA for many years.

There is much debate about whether the fees and expenses are reasonable and fair to scheme members. The MPF System, similar to many second pillar systems in other jurisdictions, is a mandatory, yet privately managed, system. Being privately managed, these private operators need to recoup the costs incurred for business operations and make reasonable profits. In some countries (e.g. Australia and UK), private, not-for-profit bodies (e.g. labour unions or industry associations) have taken on such responsibilities alongside commercial entities, but no such bodies have shown interest in Hong Kong at this stage. Given the complexity and uniqueness of the management and administration of the MPF System, it is challenging for anyone to identify a benchmark for a reasonable fee level, and the primary mechanism for fee-setting has been market forces. Nevertheless, under the current fee structure, many believe that there should be room for fee reduction as scale increases along with an increasing MPF asset size.

Over the years, the MPFA has initiated different measures to drive down MPF fees and expenses by facilitating better, more informed market forces. This has included enhancing fee disclosure and transparency, implementing the ECA to allow employees to exercise some market choice and regulating certain types of fee practices. The MPFA has also been looking into ways to reduce the costs of the MPF System, thus facilitating fee reduction. In this light, an independent consultant was engaged in late 2011 to analyze the scheme administration costs of the MPF System, and make suggestions on how to better achieve simplicity

and cost reduction (Cost Study). Taking account of the results of the Cost Study, which was released in late 2012¹⁸, the MPFA has pressed ahead with the implementation of short-term measures within the existing legislative framework, including getting trustees to offer low-fee funds, working with trustees to merge less efficient schemes and funds, encouraging scheme members to consolidate personal accounts and streamlining and simplifying administrative processes to reduce operating costs. While the ECA has been discussed in the preceding paragraphs, details of other measures are provided in the paragraphs below.

Enhancing Transparency and Disclosure of MPF Fees and Services Information

In 2004, the MPFA issued the "The Code on Disclosure for MPF Investment Funds" which requires MPF providers to comply with standardized fee tables and disclosure of fees, charges and performance. One of the objectives of the code is to increase transparency of fees and to facilitate comparison of fees charged by different MPF funds so that members could make better informed choices. A Fund Expense Ratio (FER)¹⁹ was developed to provide a comparable measure of the total level of expenses incurred in investing through a fund, including the costs incurred at the lower level collective investment schemes. The code requires MPF trustees to regularly disclose the FER of MPF funds to scheme members using the Fund Fact Sheet.

To facilitate scheme members' access to fee information of all MPF funds, the MPFA launched a Fee Comparative Platform for MPF funds (http://cplatform.mpfa.org.hk/MPFA/english/index.jsp) in July 2007, which, amongst other items, includes the FER of each constituent fund in the System. Since June 2013, the platform has been further

enhanced, with the five-year and ten-year annualized rates of return of MPF funds made available alongside their fee information on the same page on the Fee Comparative Platform. Regarding the scope of services offered by different MPF schemes and trustees, the MPFA launched a Trustee Service Comparative Platform (http://tscplatform.mpfa.org.hk/scp/eng/index.jsp) in September 2012.

Making Available Low-Fee Funds in MPF Schemes

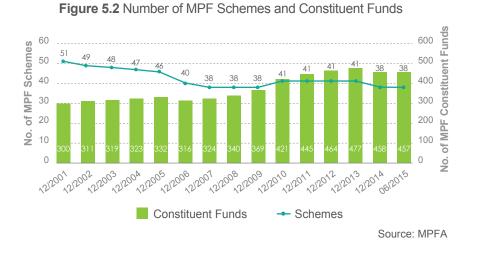
To allow scheme members a wider choice of lower-fee funds, the MPFA required MPF trustees to make available low-fee funds in each MPF scheme for scheme members to choose from. At present, every MPF scheme in the market has at least one low-fee fund (i.e. funds with management fees at or less than 1.0% or with an FER at or less than 1.3%). As at the end of June 2015, there were a total of 175 funds on the Low Fee Fund List, accounting for nearly 40% of all MPF funds. Of these funds, 127 funds invest in equities and/or bonds, accounting for about 70% of the low-fee funds. The list of low-fee funds is also available on the MPFA's website (http://cplatform.mpfa.org.hk/MPFA/english/low_fee_fund_list.jsp).

Encouraging Consolidation of MPF Schemes/Funds

The MPFA encourages trustees to explore the feasibility of consolidating their schemes/funds in order to benefit from economies of scale. In 2008, the legislation was changed to facilitate scheme mergers and consolidations. Since November 2012, several smaller funds have been terminated and two smaller schemes have been merged with bigger schemes by their trustees. This process is ongoing with several further announcements made through 2015.

¹⁸The report "Managing the changing landscape of retirement savings - Report on a study of administrative costs in the Hong Kong Mandatory Provident Fund system" is available on the MPFA's website (http://www.mpfa.org.hk/eng/information_centre/publications/ research_reports/files/MPF%20Consultancy%20Study%20Report(Eng).pdf).

¹⁹The Fund Expense Ratio is a synthetic indicator that shows, based on the most recent financial statements, the yearly level of fund fees and expenses that were deducted from the fund itself, as well as those deducted from any underlying funds in which the fund invests.



Consolidating MPF Personal Accounts

Scheme members also have an important role to play in facilitating fee reduction of MPF schemes by helping to reduce administration costs. Consolidating MPF personal accounts is a case in point. When changing employment, if employees give no instruction on how to handle their MPF accrued benefits, a new personal account will be created in the scheme of their former employer to hold and invest these accrued benefits. If employees do not take any action, new personal accounts will be created every time they change employment. Too many personal accounts not only make it difficult for scheme members to manage their MPF savings, but also increase the administration costs of the MPF System as a whole.

In view of this, the MPFA conducted a campaign to encourage scheme members to consolidate their personal accounts in 2013 with a view to facilitating better account management and contributing towards overall cost efficiency of the MPF System. To better assist scheme members in consolidating their personal accounts, the MPFA introduced a simple application form in September 2013, enabling scheme members to consolidate multiple personal accounts under different schemes just using that one form. From 16 September 2013 to 30 June 2015, trustees received around 193700 applications for consolidation of personal accounts.

Streamlining and Simplifying Administrative Processes

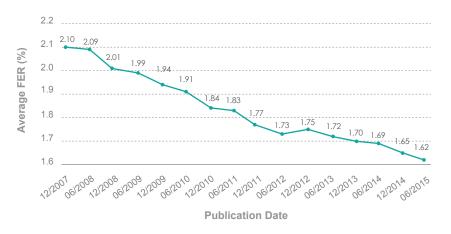
The MPFA has been enhancing the use of electronic processing to further improve operational efficiency of the System. These cover the interface between trustees, employers and employees, via various electronic platforms and means. Legislative amendments have also been passed by LegCo to abolish or combine certain required documents to streamline administrative processes.

Regulating Certain Fee Practices

To help simplify fee structures and prevent inappropriate charging practices, amendments have been made to the legislation that prevent fees being charged for some transactions, including transfers between schemes, transfers between funds and a number of withdrawals by instalments.

Between December 2007 and June 2015, the average FER of MPF funds dropped from 2.10% to 1.62%, representing a reduction of 23%.

Figure 5.3 Trend of Average FER of MPF Constituent Funds



Note: FER data were not available until 2007.

Source: MPFA

Ensuring Contributions Keep Up with Income Changes

The accrued benefits accumulated in the MPF System are long-term savings. Contributions are made over the whole of a working life from 18 to 64 years of age. During this period, income levels of scheme members will change over time, depending on the general economic conditions and personal career development.

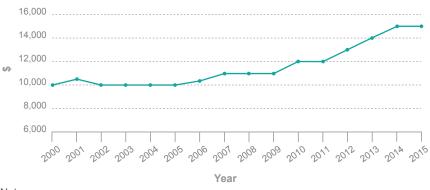


Figure 5.4 Median Monthly Employment Income in Hong Kong

2. The median monthly employment income refers to the figure as at the fourth quarter of each year, except for 2015 which refers to the first quarter of the year.

Source: C&SD (2015c)

The income in respect of which MPF mandatory contributions are required to be made is subject to a maximum level and a minimum level. Income normally grows with rising living costs. The purpose of setting a minimum level below which self-employed persons and employees are not required to contribute is to relieve the financial burden of mandatory contributions on lower-income earners. The purpose of setting a maximum level above which self-employed persons, employees and employers are not required to contribute is to allow higher-income earners the flexibility to meet their retirement savings needs by means other than mandatory contributions. It is necessary to adjust the minimum and maximum levels over time so that they reflect changes in the income distribution of the working population. Since the inception of the MPF System, the minimum level of relevant income (Min RI Level) and the maximum level of relevant income (Max RI Level) have been adjusted in response to prevailing situations. The Max RI Level has been revised upwards from \$20,000 a month at System implementation to \$25,000 from June 2012, and then to \$30,000 from June 2014. The Min RI Level has also been revised upwards three times from \$4,000 a month to \$5,000 from February 2003, \$6,500 from November 2011, and then \$7,100 from November 2013.

Table 5.2 Minimum and Maximum Relevant Income Levels in Respect of Employees Receiving Monthly Remuneration

Applicable to contribution periods commencing:	Minimum relevant income level (\$ per month)	Maximum relevant income level (\$ per month)
Before 1 February 2003	4,000	20,000
Between 1 February 2003 and 31 October 2011	5,000	20,000
Between 1 November 2011 and 31 May 2012	6,500	20,000
Between 1 June 2012 and 31 October 2013	6,500	25,000
Between 1 November 2013 and 31 May 2014	7,100	25,000
From 1 June 2014	7,100	30,000

Source: MPFA

Enhancing Efficiency of MPF Benefit Transfer

The transfer of MPF benefits involves buying and selling of funds. If a scheme member transfers MPF benefits from one trustee to another, it would involve data and money transfers between these trustees. In order to enhance the efficiency of MPF transfer processes and shorten the out-of-market period²⁰, the MPFA launched an electronic system known as the Electronic Portability Automation Services System (ePASS)

Notes:

^{1.} Foreign domestic helpers are excluded.

²⁰ Out-of-market period refers to the period after the original trustee has redeemed the fund units and before the new trustee purchases new fund units. In this period, scheme members' accrued benefits are not invested in any fund. Should there be any market fluctuation, scheme members may suffer from "selling low, buying high".

along with the ECA in November 2012. The ePASS provides a secure platform for automatic transmission of data on transfer of benefits between trustees.

In June 2014, the MPFA took a further step forward by introducing the E-Payment for MPF Transfer system in conjunction with the Hong Kong Monetary Authority. The E-Payment system, which has been adopted by all trustees, automates payments for the transfers of benefits between trustees. The manual work and time required for mailing, issuing, verifying and cashing cheques have since been reduced. The E-Payment system also enhances the accuracy and efficiency of the transfer process and shortens the time needed for transfers. The out-of-market period has been reduced to one week, and the entire transfer process has been shortened from an average of three to four weeks to two to three weeks.

Offering Greater Flexibility for Withdrawal of MPF Accrued Benefits

Currently, MPF accrued benefits can only be withdrawn in a lump sum upon attaining age 65 or satisfying the circumstances for early withdrawal. To give scheme members more flexibility, an amendment bill was introduced into LegCo in July 2014 and passed in January 2015 allowing for, amongst other things²¹, withdrawal of MPF accrued benefits by instalments upon reaching age 65 and early retirement reaching age 60. Changes related to withdrawal by instalments are expected to become effective in February 2016.

Since 1 August 2015, the MPFSO has been amended to add terminal illness as one of the statutory grounds for early withdrawal. Before this amendment, a scheme member could withdraw MPF benefits before 65 due to early retirement (for scheme members who have reached 60 and who declare that they will not work again in the future), total incapacity, permanent departure from Hong Kong and having a small balance in an MPF account.

Enhancing Supervision of Trustees

Under the MPF System, trustees are responsible for the administration of MPF schemes, formulation of investment strategies and decisions, and custody of scheme assets. To protect the interests of scheme members, the MPFA has been supervising trustees closely and adopting a proactive, risk-based supervisory approach in doing so. In addition to conducting on-site visits and monitoring the returns submitted by trustees off-site, the MPFA has been maintaining regulatory dialogues with trustees to understand their business models, risks and control environment. Codes, guidelines and circulars were issued to ensure that trustees act in compliance with statutory requirements.

A campaign to promote good governance and a compliance culture amongst trustees commenced in August 2014. The MPFA has been conducting visits to trustees' boards of directors and engaging in intensive regulatory dialogues with them on issues relating to governance and risk management. Trustees have also been asked to regularly review the performance of MPF funds and best practices in scheme administration.

To strengthen its investigation and enforcement functions in respect of trustees, the MPFA centralized its various enforcement functions in the Enforcement Division in early 2014. A key duty of the division is to handle complaints against trustees and investigate suspected cases of non-compliance by trustees. The MPFA identifies suspected non-compliance by trustees through a number of channels, including self-reporting by trustees, complaints against trustees received by the MPFA, and intelligence from the MPFA Supervision Division. In 2014-15, six financial penalty notices were issued to trustees in respect of non-compliance cases.

²¹These amendments include the addition of the ground of terminal illness for early withdrawal of MPF benefits, and proposals to streamline MPF administration processes and facilitate the use of electronic means of communication for better efficiency.

Enhancing the Community's Understanding of MPF

The MPF System, as a social programme, requires community support for its sustainable development. It was a brand new concept when the System commenced in December 2000, and the MPFA then launched an extensive public education and publicity campaign to help raise both public awareness and acceptance of the MPF and educate the general public about its benefits for their long-term future.

After the awareness stage, the focus of the MPFA's publicity and education initiatives shifted to enhancing scheme members' investment knowledge, reinforcing public understanding of the MPF System and enhancing public awareness of the importance of early planning and investment for retirement.

In 2005, the MPFA embarked on an MPF investment education campaign, comprising a wide array of activities and multi-media programmes to disseminate MPF investment knowledge at the community level and encourage scheme members to better manage their MPF investment.

In 2007, the MPFA introduced the MPF "JJ Five" Band to the public. Through a lively and interesting approach, the five cartoon characters explained the characteristics and risk levels of each type of MPF funds to assist scheme members in particular to better understand the unique features of each fund type so that they could map out an investment portfolio that best suited their needs.

In 2009, another MPF investment education campaign was launched to equip scheme members with the knowledge to make informed decisions in managing their MPF investments. Under the theme of "Making Informed Decisions for Your MPF Life", the campaign focused on explaining the six major decision points at different stages of the lifelong MPF investment process. Over the years, publicity campaigns with specific themes relating to MPF investment have been rolled out on different platforms, including television, radio, print and recently online as well, targeting the general public.

With the growing popularity of online social media especially among the young generation, the MPFA has devoted considerable resources to launching interactive online education and publicity activities to disseminate MPF messages in a light-hearted manner.

Reaching out is an important feature in the MPFA's publicity and education programmes. Activities like roving exhibitions and roadshows have been held in various districts to have face-to-face communication with the community.

For the keen-to-know scheme members, public seminars, talks and workshops have been organized. The MPFA also launched the "Friends of MPF" programme in 2010. The programme, open to all members of the public, facilitates two-way communication with scheme members. Different activities have been organized for the Friends to help enhance their understanding of the MPF.

For future scheme member (students at the tertiary, secondary, primary and kindergarten levels) as well as young working adults, the MPFA initiates programmes to disseminate messages on sound money management and promote the importance of having an early start on financial planning. MPF messages are delivered to parents of the younger students at the same time through related parenting activities.

Apart from the ongoing publicity campaigns to enhance public understanding of the System and MPF investment, the MPFA also organized large-scale territory-wide campaigns to publicize enhancements to the System, such as the launch of the ECA, adjustments to the minimum and maximum levels of relevant income and introduction of stiffer penalties for non-compliant employers. The MPFA also maintains a regular dialogue with stakeholders including labour unions, employer associations, academics, media, non-governmental organizations, professional bodies, think tanks, political parties, LegCo and District Council members as well as the MPF industry and other regulators on MPF-related issues, and works closely with them to refine the MPF System. In pursuing proposed changes to the MPF System, extensive engagement in the form of meetings, briefings and seminars has been conducted for relevant stakeholders to gauge their concerns and opinions. Members of the public are also widely involved through various channels to help them understand the proposals and gather their views so as to better align the proposals with public needs.

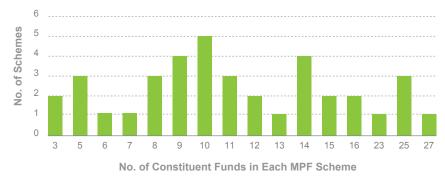
Major Initiatives in the Pipeline

In the past 15 years, the MPF System has surmounted many difficulties and challenges. In order for the System to continue to grow and develop, its future development needs to take into account the demographic, social and economic developments in Hong Kong. In this regard, the MPFA has been continuously working towards refining the System with the target that scheme members will find it easy to manage their MPF savings, and the System will be simple to administer and provide good value for money.

Standardized Default Investment Strategy (DIS) with Fee Controls

The investment return generated by the MPF funds chosen by scheme members is a key determinant of their ultimate MPF benefits. However, it may not be easy for scheme members to make proper investment choices. On average, there are about 12 constituent funds under each of the 38 MPF schemes. Some scheme members have expressed difficulty in making their choice, particularly after the implementation of the ECA when they are, in effect, able to choose between funds of different schemes.

Figure 5.5 Number of Constituent Funds Available in Each MPF Scheme (as of June 2015)



Source: MPFA

If a scheme member (whether an employee or self-employed person) does not make an investment choice, contributions will be invested in one or more of the constituent funds of the scheme in accordance with the default investment rules of that scheme. At the moment the default investment in each scheme is designated by the trustee. This results in different types of funds being used as the default in different schemes. As a result, the performance and risks of default arrangements under different schemes vary significantly.

After comprehensive studies and reviews, the MPFA has come to the view that an important next step in reforming the MPF System is to improve the investment choice framework by ensuring that all schemes make available a well-designed standardized DIS that represents good value for scheme members.

Having regard to results of a public consultation in mid-2014, the specific directions of the DIS are as follows:

- a. the DIS in each MPF scheme should be based on the same investment approach;
- b. the DIS will apply to contributions to or accrued benefits of an MPF scheme for which (i) a scheme member does not, or has not, indicated a choice of MPF funds, or (ii) a scheme member specifically chooses to invest according to the DIS;
- the DIS should be designed to reduce investment risks as a scheme member approaches age 65; and
- **d.** management fees of the DIS should not exceed 0.75% of assets per annum.

Subject to completing the necessary legislative process and preparation work, the DIS would be introduced by the end of 2016.

Standardization, Streamlining and Automation of Scheme Administration

The MPF System involves numerous administration processes, such as processing of contributions received, reporting of and following up with default contributions, processing of fund transfer and withdrawal requests, etc. The efficiency of scheme administration has a great bearing on the administration costs of the MPF System. In the report of the Cost Study, the consultant identified several cost drivers relating to the administration of MPF schemes and recommended strategic responses for improving efficiency and simplicity. In the light of the Cost Study, some short-term measures, including getting trustees to offer low-fee funds, working with trustees to merge less efficient schemes and funds, encouraging scheme members to consolidate personal accounts and facilitating further automation and streamlining of administrative processes, have been adopted.

The MPFA is now considering further fundamental measures to streamline and standardize the administration of MPF schemes. In this regard, it has appointed an independent consultant to conduct a study on different options, including their feasibility as well as the costs and benefits for the development of an initiative to streamline, standardize and automate scheme administration as far as possible . The objectives of this initiative are to lower the operating costs of MPF providers, allow employers and scheme members to deal with various MPF matters more conveniently and efficiently, and provide scheme members with better quality services.

The basic elements of this initiative include:

- a. providing electronic means for scheme members to access all relevant information about their accounts from one central source;
- **b.** setting up a central register for automatic calculation of the amount of contributions and for automatic submission of contribution information to trustees; and
- c. allowing centralized collection of MPF contributions through electronic means.

Conclusion

Since its implementation in December 2000, the MPF System has continued to evolve and progress. Since it takes an average working life of around 40 years for such a retirement savings system to mature, the System is still in a development stage. Further refinements and improvements are expected to be implemented step by step in the future in response to changing social, economic and market conditions as well as technological development. All of these efforts are based on the vision of the MPFA to build a retirement savings system that is valued by the people of Hong Kong.

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