Content

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Abstract

After the Hong Kong baby boom in the 1950's, the population are now approaching retirement. The Hong Kong Special Administrative government is facing pressure both medical and financial in catering for this aging population. There was lack of retirement protection in Hong Kong before 2000 which recognised it was a real demographic problem. Only one third of the working population was protected by an Occupation Retirement Scheme. Since December 2000, a formal and comprehensive retirement benefit scheme: The Mandatory Provident Fund Scheme (MPF) was launched by the government to cover the majority of working population.

This study aims to examine the extent of people's understanding of the MPF in relation to saving behaviour, investment knowledge, retirement attitudes and demographic factors. The research result indicated that the MPF seems to be ineffective in enhancing a saving culture, because of the low level of MPF and investment knowledge. According to demographic analysis, having a child, homeownership and age has substantial influence on retirement saving. Gender, income level and marital status have limited impacts on it. The level of education has no significance at all.

The concluding section suggests that education and information about the MPF play a critical role in improving understanding and saving with the MPF. It promotes financial inclusion, improves knowledge of risk and investment, offering more investment instruments, so as to enhance the commitment of works and enable them to value the MPF scheme. In future, retirement benefit reform should be incorporated with social security reform, with the cooperation among government, employers, financial institutions and individuals.

Chapter 1 Introduction

The aging population is increasing, people are now living longer due to medical advancement and improved living standards. The post World War II baby boomers are entering into a retirement. The financing of pensioners, and their medical and social expenses has become a heavy burden for governments (Disney , 2001; Els, 2004). Different forms of pension have been introduced to solve endemic problems (Pension Commission, 2004; Samwick, 1998). Saving philosophies and retirement habits are causing increasing concern (Bergstrom, 1989; Disney, 1996, Furnham, 1985). However, recent research has focused mainly on cognitive processes and life cycle changes (Blake, 2004; Webley et al, 2001, Kotlikoof, 1963), pensioners' attitudes and understanding of pension related matters are under research (Webley et al., 2001; Lewis et al, 1995). At a macro level, Hong Kong has maintained a relatively high saving level at 30 percent, but there is no statistical analysis on individual household savings (Siu, 2002). At a micro level, it is not known whether the Mandatory Provident Fund (MPF) scheme can induce greater savings (Siu, 2000). In Australia, the mandatory superannuation system has been implemented for its first five years, loans were increased in proportion to contributions (Economist, 1998). The relationships between saving attitude, MPF knowledge and retirement behaviour are under research in Hong Kong.

The purpose of this study is to find the extent of people understanding of the Mandatory Provident Fund (MPF) and how that compares with the future MPF schemes, and to explore peoples saving attitudes and behaviour as retirement approaches. It will assess whether these are consistent with the intent of the MPF in promoting retirement saving. Thus, this research attempts to examine how MPF knowledge, investment knowledge,

retirement behaviour and demographic factors influence peoples saving plans for their retirement.

Knowing people's attitudes towards saving and retirement are crucial. Attitude can be used to predict future behaviour; it can also affect attitudes and psychological perspectives (Foxall, 1997). By identifying factors which influence saving and retirement, more effective and focused measures and policies can be proposed for a better for retirement. The research findings may be used as a blue print by the Mandatory Provident Fund Authority and Social Welfare Department in Hong Kong for any future social security reform. Financial institutions may make use of the findings to design tailor made investments and retirement products for specifically targeted segments. Individuals will benefit from their being financially independent, and will enjoy a satisfactory standard of living as pensioners. They will achieve satisfaction and maximum benefits by organising their retirement saving. Ultimately, society as a whole will benefit from alleviating pensioner poverty.

This dissertation will be structured as follows:

Chapter 2 will first introduce the demographic background in Hong Kong and its impact on the Hong Kong economy. The social security system including Comprehensive Social Security Assistance (CSSA), Old Age Allowance (OAA) and Occupational Retirement Schemes will be outlined, with a particular focus on the Mandatory Provident Fund (MPF) Schemes will be explained in detail.

Chapter 3 will review the literature relating to the demographic challenges, the reasons for intervention in pension matters and various kinds of pension system. A life cycle model will offer a theoretical perspective and explain saving in relation to pension provision. Several independent and dependent variables, and their relationships, will be identified, and nine hypotheses will be defined.

Chapter 4 will explain how to select a sample for this research. The quantitative methods and closed ended questionnaires are used. The questionnaire layout will be explained.

Chapter 5 will first provide a basic description of the respondents' background. SPSS software is used to analyse the correlation between the understandings of the MPF, saving behaviour, investment knowledge, and retirement behaviour. Three specific areas of additional voluntary saving, saving orientation and MPF benefit payment methods are selected to conduct a detailed analysis across those with a different demographic background. Finally, future MPF development will be discussed.

Chapter 6 is a discussion about MPF schemes including their advantages and disadvantages. Several recommendations such as financial inclusion, providing more education and information, and social security reform will be examined in detail.

Chapter 7 will conclude that the MPF is a saving foundation or basis which is not sufficient to wholly protect retirement. In dealing with the demographic challenges, the government has attempted to institutionalise saving by MPF scheme. People are required to join the labour market, so as to be covered by the scheme. Bank, financial institutions and insuers are expected to play a more important role in the pension market. The future

MPF reform is expected to integrate with social security reform, in order to offer more incentives toward retirement saving.

Chapter 2 Background

In Hong Kong the retirement age is usually not clearly defined. Different companies define their own retirement ages. Most public institutions set their retirement age at 60 years old, but public services deliver subsidised medical or social security services until the age of 65. Thus, there is a 5 year gap between the working retirement age and benefit entitlement age. Until the introduction of the Mandatory Provident Fund (MPF) Scheme, the statutory normal retirement age was defined at 65 years old, whereas early retirement age was 60 years old.

The government has taken a regulatory role in setting up a Mandatory Provident Fund Authority (MPFA) to enforce and monitor the MPF system. The MPF is managed by trustees such as HSBC, Bank of Consortium, Manulife and Prudential (MPFA, 2004). Employers select MPF service provision and schemes, while employees can choose their own investment portfolio within the selected schemes. All MPF members can withdraw their accrued benefits at age 65.

In this section, the demographic challenges of the aging population and its impact on Hong Kong's economy will be examined. Four social security schemes have been implemented to provide assistance to the elderly including the Comprehensive Social Security Assistance (CSSA), the Old Age Allowance (OAA), the Occupational Retirement Scheme Ordinance (ORSO) and the Mandatory Provident Fund Scheme (MPF), with a particular focus on MPF schemes which will be explained in detail.

2.1 Demographic Factors

2.1.1 The Aging Population

Hong Kong has faced demographic challenges since the 1970s, in the decade between 1971 and 1981 the aging population aged over 65 increased from 4.5 in 1971 percent to 8.7 percent in 2001. By 2004, over 12 percent of population were aged over 65 as shown in the Table 2.1. The proportion of the aged population has increased three fold since the 1970s (Census and Statistics Department, 2003). The Hong Kong Census and Statistics Department (2005) estimated that the retired population will further increase to 17.2 percent by 2021 and 24.3 percent by 2031 (Table 2.2).

Table 2.1 **Hong Kong: Mid-Year Population by Age Group**

	1995 (mid-year)		1999 (mid-year)		2004 (Census)	
Age Group	('000)	%	('000)	%	('000)	%
Under 15	1,195.1	19.4	1,182.9	17.6	1025.2	14.9
16-64	4,359.2	70.8	4,802.9	71.5	5041.0	73.0
65 and over	601.8	9.8	734.9	10.9	829.3	12.1
Total	6,156.1	100.0	6,720.7	100.0	6895.5	100.0

Source: Census and Statistics Department, Hong Kong (1996, 1997, 2005)

Table 2.2 Population Projection Aged Over 65

Year	Population aged 65 or above	% of total population
1971	182, 300	4.5
1981	344,300	6.6
1991	502,400	8.7
2001	753,600	11.2
2011	919,600	12.2
2021	1,414,400	17.2
2031	2,120,000	24.3

Sources: Hong Kong Annual Digest of Statistics, 2002 and Hong Kong Population Projections 2002-2031, Census and Statistics Department

2.1.2 The Dependency Ratio

People in Hong Kong enjoy the longest life expectancies in the world. The Hong Kong Government (2004) illustrates some important demographic features of Hong Kong, table 2.3 shows that the projection of the life expectancy will increase to 78 years old for males and 83 years old for female by 2016. The fertility rate reduced from 1.17 in 1996 to 0.96

in 2002, which is well below replacement level. In addition, the mortality rate remains at a low level which dropped from 7.6 per 1000 population in 1981 to 4.9 per 1000 population in 2001, the pace of population ageing will naturally increase very fast (Hong Kong Government, 2004). Table 2.4 indicates the elderly dependency ratio in the next decade will continue to increase from 158 in 2002 to 198 in 2016, then further rise significantly to 380 by 2031. Census and Statistics Department (2003) also shows that since the post-war baby boomers in the 1950s will by that time of retirement age.

Table 2.3 Hong Kong: Expectation of Life at Selected Ages, 1977-2016

	Age			
	Male		Female	
Year	At Birth	At 60	At Birth	At 60
1977	70.1	16.4	76.7	21.1
1986	74.1	18.5	79.4	22.6
1996	76.3	20.0	81.8	24.1
2006*	77.5	20.8	82.8	24.8
2016*	78.1	21.1	83.4	25.1

* 2006 and 2016 figures are projections
Source: Census and Statistics Department, Hong Kong (1997)

Table 2.4 Hong Kong: Elderly Dependency Ratio 2002-2031

Year	Child	Elderly	Overall
2002	223	158	381
2006	203	162	365
2011	180	164	344
2016	178	198	376
2021	179	245	424
2026	180	313	493
2031	182	380	562

Notes: the Child dependency ratio refers to the number of persons aged under 15 per 1,000 persons aged between 15 and 64.

The overall dependency ratio refers to the number of persons aged under 15 and aged 65 and over per 1,000 persons aged between 15 and 64

Sources: Hong Kong Government (2004) *Report of the Task force on Population Policy*

2.2 How Demographic Changes Impact on Economics

The ageing population increases financial pressure on the Hong Kong government and ultimately adversely affects to slow down the economic growth. Detail will be explained as follows.

2.2.1 Increase Social Security Expenditure

The pressure of old age expenditure is increasing exponentially as the retirement population increases. In 2003, 61% of the population aged 60 or above are receiving Comprehensive Social Security Assistance (CSSA) or Old Age Allowance (OAA). Both schemes are solely tax-financed and non-contributory. The total government expenditure in financing assistance for the elderly increased from HK$7.8 billion in 1997/98 to HK$11.8 billion in 2002/03. The number of elderly CSSA recipients is expected to increase by 304% in 30 years. It is estimated that by 2031, the total payment for OAA and CSSA will reach HK$10.4 billion and HK$20.8 billion respectively. In addition, the increase of the ageing population puts extra pressure on healthcare expenditure (Social Welfare Department, 2004, Hong Kong Government, 2004)

2.2.2 Slow Down Economic Growth

A higher proportion of resources will be deployed to cater for the needs of the elderly. A higher dependency ratio means that a smaller number of the working age group will have to bear a heavier burden of supporting the elderly group. Likewise, the Government is suffering an economic crisis in having to rely on a small portion of working group to fund the social security bill for the retired population. In the long run, the higher proportion of resources devoted to an ageing population will mean that fewer resources will be allocated to productive investment or to the younger generation of society (Siu, 2001). Consequently, a prolonged economic downturn, dampening expectations and reducing competitiveness may well result.

To sum up, Hong Kong is facing a serious demographic crisis. As life expectancy rises and the birth rates reduces, the proportion of the aged population increases rapidly. The government has worked with the Elderly Commission to enhance awareness of the old

age issues, which implies the roles of individuals and their interrelation is changing markedly.

2.3 Social Security

2.3.1 The World Bank's Three Pillars

The World back conducted a global examination of old-age security in 1994. The report: "Adverting the Old Age Crisis: Policies to Protect the Old and Promote Growth" suggested that an effective social security measures would consist of three pillars:

1. A publicly managed compulsory system with minimal welfare level preventing poverty for the old people;
2. A privately managed mandatory saving system; and
3. A voluntary savings system.

The three pillars approach aims to redefine systemic risk through the combination of private and public systems and to alleviate political pressures. The report recommended reducing the role of the first (public) pillar and stressing the role of the second (private) pillar, in order to promote long term saving, to develop capital markets and to facilitate economic growth.

2.4 Social Security in Hong Kong

2.4.1 Comprehensive Social Security Assistance (CSSA), Old Age Allowance (OAA)

In Hong Kong, there are four major social security schemes: Comprehensive Social Security Assistance (CSSA), Old Age Allowance (OAA), Occupational Retirement Schemes (ORSO) and Mandatory Provident Fund Schemes (MPF). Cash benefits in the

form of a Public Assistance Scheme were developed in 1971, followed by old Age Allowances which were introduced in 1973 (Chak, 2003). The general principle of social security in Hong Kong is residual and remedial to cater for people who cannot get financial support from their families and social networks. The government only provides a limited assistance as a safety net. The comprehensive Social Security Assistance (CSSA) and the Old Age Allowance (OAA) schemes is a major social security prop for the aged. It is not designed as a retirement supplement, though it is performing a similar function.

The CSSA Scheme, which is means-tested, provides a safety net for those individuals and families who cannot support themselves financially. It was implemented in 1994 to replace the Public Assistance Scheme. The amount payable to able-bodied elderly person is HK$ 2,140 per month. The OAA is a provision to provide Hong Kong residents aged 65 or above and meet their special needs arising from disability or old age. The OAA is a "consolation" for not having a retirement protection scheme (Ho, 2001). The provisions of the OAA are means tested for those aged from 65 to 74, the amount of payment is HK$605 per month; while the non-means-tested provision for those aged over 70 is about HK$2,240 per month. Table 2.5 shows the asset limits and amount of benefits of CSSA and OAA. The social security expenditure increased five times in the last decade, which was HK$ 21.8 billion in 2002/03, compared with HK$4.4 billion in 1992/93 (Social Welfare Department, 2004).

Table 2.5 Comprehensive Social Security Assistance Scheme

	Asset Limit (HK$)	Amount of standard Rate Per Month (HK$)
Able-bodied aged 60 or above	22,000	2,140
Old Age Allowance		
Aged 65-69	160,000	625
Aged 70 or above	Nil	705

Source: Social Welfare Department (2004) Annual Report

2.4.2 Occupational Retirement Schemes

Hong Kong has developed privately managed retirement schemes since 1919. Most of them are occupational based in Hong Kong. Pension in a form of regular payment is not common, except for some members of the Civil Servant pension schemes. In the 1970s and 1980s, many international firms established schemes in Hong Kong provided lump sum payments for terminated or retired employees (Ho et al, 2004). These occupational schemes are not regulated. In 1993, the HKSAR government enacted an Occupational Retirement Schemes Ordinance (ORSO) to register all these voluntary privately managed retirement schemes, in order to ensure ORSO were schemes were properly operated and funded. However, only one third of the workers (1.1 million) were covered by voluntary retirement scheme or pension scheme in 1999. Two million of the workforce did not have any retirement protection (Chow, 2002; Ho et al, 2004; MPFA, 2002).

2.4.3 The Mandatory Provident Fund Scheme (MPF)

Under the strong financial pressure induced by the aging population, a new Mandatory Provident Fund Scheme Ordinance (MPFSO) was approved in 1995, the scheme was launched in 2000. It is a privately managed, employment based, defined contribution scheme to protect the entire workforce (Siu, 2000). The MPF is complemented by personal savings and the CSSA, which is similar to the three-pillar system suggested by the World Bank (Chow and Chou, 2004).

2.5 Key Features of Mandatory Provident Fund Schemes (MPF)

This section elaborates the key features of the MPF system. The MPF is a retirement saving program to provide a lump sum retirement payment. All the contributions are invested under a trust arrangement which is regulated by Hong Kong Law. All scheme

assets are held independently from trustees or investment managers, so as to protect scheme members from financial risks. Currently 85 percent of the workforce (3.4 million) is protected by the retirement scheme (MPFA, 2004). By March 2005, 65 percent of employees will have joined the MPF scheme, 20 percent have joined other retirement schemes, 11 percent not required to join a local scheme and 4 percent are required to join but have not yet joined any MPF scheme (MPFA, 2005).

2.5.1 Mandatory Provident Fund Schemes Authority (MPFA)

The mandatory Provident Fund Schemes Authority (MPFA) was set up under the MPFSO in 1998 to ensure effective and efficient operation of the MPF system. In 2000, it took over from the Office of the Registrar of Occupational Retirement Schemes. The major functions of MPFA include ensuring compliance with the MPF legislation, registering MPF schemes, approving MPF investment funds, regulating approved trustees, as well as making rules for the MPF contributions, schemes administration and investment funds. Apart from MPFA, the Securities and Futures Commission, the Insurance Authority and the Monetary Authority are responsible for the regulation of MPF products and service providers (MPFA, 2002).

2.5.2 The Transitional arrangement between ORSO Scheme and MPF Schemes

Under the MPF system, an employer who already operated an ORSO scheme needed to change the scheme in one of the following forms (Gadbury et al 2004, MPFA 2004):

ORSO Scheme with Open Membership

The employer offers employees the choice of either the MPF exempted ORSO scheme or an MPF scheme to their existing members

ORSO Scheme with Close Membership

Existing members continue to accrue benefits under the ORSO scheme, but new employees are required to join an MPF scheme.

Wind up ORSO Scheme

The employer will have to enrol all existing members and new employees into an MPF scheme. The existing ORSO accrued benefits will continue to be invested, until existing members receive their ORSO benefits in accordance with the old ORSO schemes rules.

2.5.3 Protection of Scheme Assets

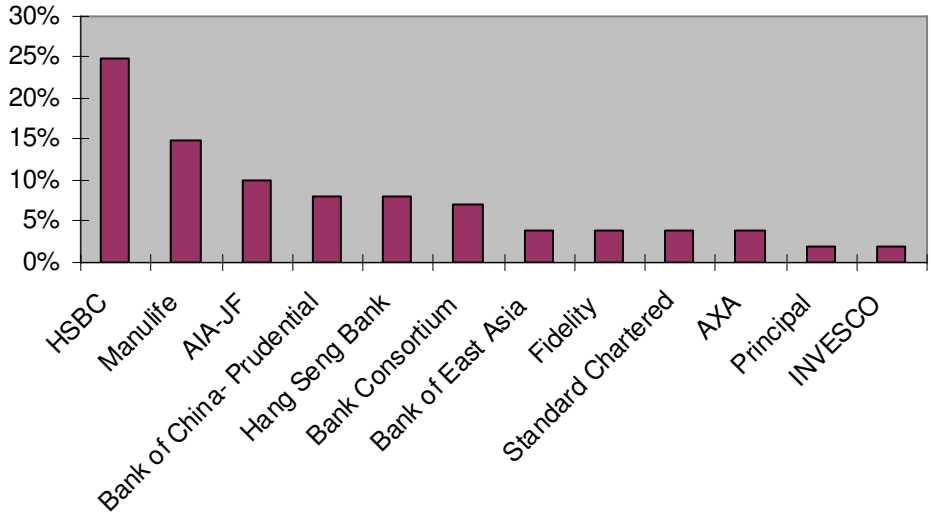
All MPF assets are managed under trust and are held by independent trustees. All trustees and provident services must meet stringent requirements. Each of them should have net assets of at least HK$ 150 million. In addition, all MPF schemes should be registered by the MPFA to ensure they comply with the legislative requirements. Professional indemnity insurance is provided to cover losses of prescribed risks such as fraud and negligence, but it does not cover losses from poor investment decisions. A compensation fund is set up to protect scheme members suffering losses from any illegal conduct by service providers. The Hong Kong government provided HK$ 600 million to set up the fund, supplemented by a levy of 0.03 percent on MPF net asset value (MPFA, 2002).

2.5.4 MPF Service Providers

The approved trustees are the major bodies who manage MPF schemes, and have to check the amount of MPF contributions accurately. In 2004, there were 19 MPF trustees (Appendix 1). The top 10 MPF service accounted for 89 percent of the Market Share as shown in Chat 2.1 (Watson Wyatt, 2004). If employers fail to pay the contribution, every

month the trustees will report this to the MPFA which may impose surcharge and/or imprisonment. Some service providers may out source the scheme administration and custodial duties. Trustees must appoint an investment manger to ensure the MPF investment is complying with the relevant requirements. MPF intermediaries are responsible for marketing activities to provide the MPF information and to advise on related issues (MPFA, 2002).

Chat 2.1 Top 10 MPF Service Providers Market Share



Source: Watson Wyatt (2004) MPF Providers Watch

2.5.5 MPF Scheme Types

Employers must register relevant employees in one of the three types of MPF scheme. In 2004, there were 43 master trust schemes, 2 industry schemes and 2 employer sponsored schemes registered (MPFA, 2004). Employers should arrange for their employees to become a member of the chosen scheme. Self-employed persons should enrol in a master trust scheme, or if appropriate, an industry scheme (MPFA, 2002). The scheme details are as follows:

Firstly, Master trust schemes are the most common, which are open to employer, self-employed people and allows terminated MPF and ORSO members to transfer their accrued benefits from other schemes. By pooling the contributions from small employers, the master trust scheme enjoys economies of scale and a high degree of efficiency in investment and administration. It is appropriate for small and medium sized companies.

Secondly, employer-sponsored schemes are operated by a single employer and it's subsidiaries. This type of scheme is restricted to it's own employees. Only employers with a large number of employees may benefit from running this type of scheme in a cost effective manner.

Thirdly, industry Schemes are designed for a highly mobile situation such as is found in catering and construction industries. Casual employees in these industries can join the schemes regardless of the duration of their employment. Employers and self-employed persons from these two industries can be enrolled in industry schemes. Participation in the industry schemes is not compulsory; employers can opt to join either master trust schemes or employer-sponsored schemes. The major advantage of the industry scheme is that accrued pension rights are portable within the scheme to minimize transfer costs. Thus, industry scheme members are not required to change their scheme if their new employment is in the same industry if both previous and new employers have joined the same industry scheme.

2.5.6 Investment Funds

Trustees appoint investment managers to make long term investment of MPF contributions. Employers choose MPF service providers to provide at least one scheme to employees (Appendix 2). Each scheme generally includes several investment portfolios for its members. Scheme members choose their own investment portfolios within their employers' chosen scheme (MPFA, 2002; Gadbury et al, 2004). Most schemes usually include the following funds (MPFA, 2002).

Capital Preservation Fund

According to MPF ordinance, each scheme must include a Capital Preservation Fund, which is similar to a money market fund. The capital preservation fund intends to provide a low investment risk product and to achieve an investment return comparable to the banks' saving rate. This fund is kept in the Hong Kong dollar investment market and invested in short-term debt securities. The average investment period should not exceed 90 days. Each month administrative expenses can be deducted from the fund, but only when investment returns of the fund exceed the earnings calculated on the prescribed savings rate. The rate is declared by the MPFA each month. Thus, the capital preservation fund does not guarantee any return and may suffer losses.

Guaranteed Fund

A guaranteed fund may be a conservative fund, or a low risk fund. It consists of equity, bond and cash. There are two kinds of guaranteed fund: hard guarantee and soft guarantee. A hard guarantee fund is obligated to pay a minimum net return without meeting any pre-condition requirement. A soft guaranteed fund will only pay the minimum return when

certain conditions are met such as a withdrawal of MPF benefit and a minimum investment period.

Money Market Fund

The money market fund is mostly for short-term investment such as commercial investment and treasury bills. It is sensitive to the interest rate. The credit risk of the fund is relatively low, but its return is relatively higher than interest earned from saving deposits.

Bond fund

The Bond Fund is usually invested in debt securities issued by the government, banks and commercial institutions. Bond funds offer a stable income from interest and capital appreciation. The Higher credit rating of bonds is associated with low risk and low returns.

Stable Fund

A stable fund consists of both bonds and stocks, it is also called a balanced fund. The fund may be invested either globally or regionally to take advantage of investment opportunities in different markets and economies. The estimated return of the stable fund is higher than the bond fund but lower than the equity fund.

Equity Fund

An equity fund mainly invests in the global market or in a single country, which aims to earn a higher rate of return through capital appreciation. The price of an equity fund can fluctuate, since stock market can go up or down within a short period of time.

Index-tracking Fund

The major aim of an index tracking fund is to track the investment performance of an index. It also aims to acquire an investment return closely matched to the performance of the index being tracked such as Hang Seng Index Tacking Fund.

2.5.7 Coverage

All full-time and part-time employees aged between 18 and 65 and employed for over a continuous 60 days must join the MPF scheme. For catering or construction industries, casual employees are employed on a daily basis or for a fixed period less than 60 days. They are still required to join MPF schemes (Siu, 2002). Self-employed workers such as sole proprietors or partners in a partnership are also required to enrol. Under the MPF ordinance, certain groups are exempted including domestic helpers, hawkers and civil servants covered by statutory pensions. Apart from these exempt persons, trustees cannot reject any application to eligible by schemes members under the non-refusal legislation (MPFA, 2002).

2.5.8 Contributions

The amount of the MPF qualified earning lies between HK$5,000 and HK$20,000 per month (table 2.6). Both employer and employee should each contribute 5 percent of relevant income and subject to a maximum amount of contribution HK$1,000 per month. Relevant income includes wages, salaries, commission, bonus, leave pay, gratuity and allowances, but excludes housing allowances, severance payments and long service payments. To avoid leading to financial difficulties, if an employee's relevant income is less than HK$ 5,000 per month then that employee is exempted from contributing, but the employer is still required to contribute. Each month employers are required to deduct their employees' MPF contributions from their incomes, and then submit it to the trustees.

Employers are also required to issue a monthly pay-record to employees stating the employee's relevant income, and both the amount of contribution and date of contribution. Self-employed persons are required to contribute 5 percent of relevant income subject to maximum of HK$1,000 per month. Those whose income is less than HK$ 5,000 per month are also exempted from contribution (MPFA, 2004; Gardbury et al, 2004).

Table 2.6 MPF Contribution Rates

Monthly Relevant Income		**< HK$5,000**	**HK$ 5,000 or above**
MPF members	Employers' Contribution	5%	5% Max. contribution amount HK$1,000/ month
	Employees' Contribution	Nil	5% Max. contribution amount HK$1,000 /month
Self-employed Person	Contribution	Nil	5% Max. contribution amount HK$1,000 /month

Source: MPFA (2004) Annual Report

2.5.9 Voluntary Contributions

Contributions in excess of the mandatory minimum amounts made by employers, employees and self-employed persons are regarded as voluntary contributions. The vesting, preservation and portability requirements will be subject to individual schemes rules (MPFA, 2002).

2.5.10 Vesting and Benefit

Mandatory contributions and investment returns made by employees and employers are fully and immediately vested to scheme members (MPFA, 2002). Scheme members have to bear management fees deducted from both members and employers' contributions, and to suffer gain or loss from investment risks. Employer contributions and their investment return can be used to offset long service and severance payments. The payment will be deducted from employer contributions or refunded to employers, while employee

contributions will not offset any payments. Should employees change their jobs, their benefits can either be retained in existing master trust schemes, or transfered to new employers' MPF accounts or transfered to any other MPF service providers' preserved accounts. Therefore, ex employees enjoy freedom to choose their service providers for their accrued benefits.

2.5.11 Withdrawal of Accrued benefits

Scheme members reaching the normal retirement age of 65 can withdraw the total accrued benefits in a tax-free lump sum. There are no regulations to restrict how to spend the lump sum (Gadbury, 2004). Several conditions allow members to claim for the benefits, as follows:

- Decease. The accrued benefits will be paid to personal representatives.
- Early Retirement. Reach the age of 60 or above and ceased employment or self-employed.
- Total incapability
- Permanent departure from Hong Kong (once only option)
- Small balance. If the total balance of all MPF accounts is less than HK$5,000 and no MPF contribution were made in the last 12 months. And scheme members do not intend to be employed or self-employed.

2.5.12 Fees and Charges

MPF charges can be classified into three ways including asset-based fees such as trustee and investment management fees, annual lump sum charges to scheme members such as a membership fee and event based fees such as changes in investment portfolio (MPFA,

2002). The basic administration cost is usually between 2 and 3 percent of the contribution amount (Mok, 2000).

2.5.13 Tax Deduction

Employees and self-employed people's mandatory contributions are tax deductible, subject to maximum limit of HK$12,000 per year. Additional voluntary contributions are not exempt from tax. Employers' MPF contributions are tax deductible against Profit Tax up to 15% of the employee's earnings (MPFA, 2002).

To sum up, the increasing age of the population and the dependency ratio increases the financial burden and slows down economic growth. The traditional social security systems: Comprehensive Social Security Assistance and Old Age Allowance solely rely on governmental funding which is inadequate to protect those in retirement. Occupational Retirement Schemes plays a limited role in protect a small portion of the workforce. In 2000, a formal and legal MPF scheme has been introduced with a main aim of protecting the entire workforce.

Chapter 3 Literature Review

This chapter aims to analyse the demographic crisis and its impact on government intervention and pension reform. A life cycle saving model provides a framework for a relationship between saving and retirement. The three major variables of saving, investment and retirement, and their relationships with pension will be analysed. Then demographic factors such as gender, age, and income and their influence on retirement saving will be discussed.

3.1 Demographic Challenges

3.1.1 The Baby Boom

After population growth known as the baby-boom in 1945, was experienced. Now these people most individuals are living longer due to medical advancement and improved living standards. Baby boomers are soon to reach retirement age. The low fertility rate is not sufficient to replace the population. A macroeconomic theory postulates that the aging population affects saving and investment rates, national productivity, governmental spending and labour supply (Disney, 1996). Thus, the increasing aged population will increase pressure on taxation in order to finance social security bill. The Italian ageing population caused a deficit in their social security pension in the 90s, leading to both economic and political crises (Disney, 1996). The Dutch government estimated that the ratio of the pension liability to gross wages will increase from 2.6 in 2001 to 4.5 in 2030 (Ewijk and van de Ven, 2002). There is pressure to reduce the costs and scope of social security, which will influence personal savings and retirement planning.

3.1.2 The Dependency Ratio

The increasing financial burden will produce a problem of more consumers rather than producers in the economy. If the number of workers in the labour market decreases, the economic dependency ratio will increase (Disney et. al, 1994). Economic theory argues that increased longevity rather than a reduced labour force will cause a higher dependency ratio. Individuals need to work longer in order to maintain their desired consumption levels (Disney et. al, 1994). However, in the UK the dependency ratio is not yet significant, and has not affected consumption and personal savings. In the USA and East Asian areas, private savings is negatively related to the dependency ratio, social security expenditure and government saving (Edwards, 1996).

3.2 Reasons for intervention

The Government may intervene in the pension market to promote saving under certain conditions. If a low saving rate in bank is due to individuals investing in the capital markets to obtain a higher return and the better retirement protection, the government may not need to encourage savings. However, if saving is low because of unrealized saving needs and financial illiteracy, government intervention will be required (Lusardi et al, 2001). Usually, government encourages savings and investment for the following reasons:

Banks (1998) examined reasons for state intervention to encourage saving for retirement. Paternalism is the major rationale for government intervention, since people will save less than the optimal level for retirement. Young people tend to spend more than to save, and then expect the government will cater for their retirement. Increasing old age social security may lead to a financial crisis. Redistribution may be another motive for intervention in order to reallocate resources from the rich to the poor. In the UK and

Australia, the pension seems to be a tax imposed on workers. European systems are not designed mainly for redistribution effects (Banks and Emmerson, 2000).

People may be myopic about retirement benefits. Different pension schemes involve different risks which are suitable for different people. For instance, state programmes are at risk from policy changes, defined benefit schemes are subject to earning risks, and defined contribution plans are subject to investment risks. If individuals do not have pension knowledge, they may make wrong decisions and not save enough for their retirement. The UK retirement survey showed that 40 percent of individuals' retirement income will be less than expected (Dilnot et al, 1994). The US also experienced similar retirement problems because of unexpected ill health in the 1990s. However, the cost of advice and regulation may reach 20-30 percent of pension saving, and therefore may be unprofitable in selling pension provisions to low income groups. It is doubtful whether a voluntary saving pension market is suitable for low earners (Pension Commission, 2004). Monitoring the pension market is also problematical. In the UK, mis-selling issues were widespread in the 1990's. It proved that inadequate pension advice would adversely affect pensioners (Disney, 2001).

3.3 The Pension System

The Pension provides a source of income after retirement. This section will explain three major pension systems: Pay as You Go (PAYG), defined benefit and defined contribution schemes. The UK pension system will be explained.

3.3.1 Pay as You Go (PAYG) System

Governments have intervened in the pension market because of the above stated reasons. The earlier pension system is unfunded, which is called Pay as You Go (PAYG) system. The existing employees paid directly to finance existing retirees. However, potential problems may arise with demographic risks such as a decrease in the birth rate, or an increased life expectancy. The number of pensioners will increase more than the number of employees (Banks and Emmerson, 2000). To maintain the pension system, employees are required to contribute more or retirees receive less pension. Otherwise, the system will become unsustainable without cutting benefit. In addition, an incomplete PAYG system will reduce people's incentive to work and to save. Particularly, the rich benefit most from this type of system, they tend to participate in the labour force later, to retire earlier and to live longer.

3.3.2 Defined benefit and Defined Contribution Schemes

Occupational retirement schemes are funded, and are mainly classified into defined benefit (DB) schemes and defined contribution (DC) schemes. A DB scheme is one in which the employer's contribution rates is not defined. The amount of benefits is calculated by a formula based on age, years of service and final average salary. A DC scheme is one in which employers' and employee's contribution rates are defined. Employees' benefits are based on the accumulated contributions and investment return (MPFA, 2002).

DB schemes can spread the risk over generations. The risk can be increased or induced by unemployment and job changes and cause economic exposure. The benefit is visible, but financing the benefit is not as transparent. In contrast, a DC scheme will not spread the

risk. Scheme members suffer investment risks, future wage and earning risks. The financing of benefit is apparent but neither its cost nor the outcome is clear. In response to increasing life expectancy, a DC scheme may adjust rates and alter rules automatically for individuals. A DB scheme requires an actuary to make any adjustment (Banks and Emmerson, 2000). They affect retirement decisions, private DB pensions tend to encourage early retirement, while DC schemes tend to defer retirement (Blake, 2004).

3.3.3 The Pension System in the UK

After the Second World War, the British government attempted to institutionalise retirement benefits (Phillipson, 1999). The UK pension scheme is composed of three tiers. The fist tier is a flat rate mandatory publicly funded pension, which is financed by employers and employees on a pay-as-you-go basis through the National Insurance System. The second tier is for all employees whose salary is over a certain limit. They can opt to choose a private pension or the social security programme. The third tier is additional voluntary saving (Disney, 2001).

The UK pension system is facing several challenges such as a reducing working population, increasing economical inactively per person prior retirement age, as well as an increasing part-time working population and sub contract employees. In addition, the downturn in the labour market induces dismissal or redundancy, or forces employees to retire earlier. The ageing population implies the intergenerational risk sharing under Pay As You Go (PAYG) pension schemes are disappearing. The state pension system is reducing benefits to the returned in real terms, but the private pension system is not expanding at the same pace to offset the state's retreating role.

Since the 1980's, the volatility of investment returns and higher life expectancy has imposed pressure on defined benefit schemes and a shift to defined contribution schemes. Retirement has become a social risk rather than social right. People are forced to develop their own retirement plans. Risk is further institutionalized and privatised. It ceases to be a national or social matter and becomes an individual matter. The actual funded pension is reducing and the gap enlarging under these demographic challenges (Vickerstaff, 2003). The UK official estimated that 9 million people may be under-saving. A well planned pension system required to take proactive measures to eliminate of social inequity and economic inefficiency (Pension Commission, 2004).

3.4 Theoretical Perspectives

3.4.1 The Effect of Pensions in a Life-Cycle Savings model

Life cycle theory studied saving and investment behaviour in relation to retirement (Feldstein 1944, 1980). The life cycle hypothesis assumed that under an efficient capital and perfect labour market without tax and uncertainty, individuals would spread consumption and expenditure evenly over the life. Different age groups have different saving behaviours. The model predicted that young people were spenders. In the early stage, individuals consume more durables such as cars and properties. In middle age, they save more for retirement when housing loans are paid off and children are grown up.

French (2005) adopted a simulation method to match the life cycle model, in order to explore pension, social security and taxation influences on the labour force. The sample was drawn from the Survey of Economic Opportunity to represent the US population. The survey found that people's expenditure increases by 44 percent between aged 30 and 55, then drops to 22 percent at ages between 55 and 65. During retirement, wealth is

maximized, income decreases. Individuals will capitalise their bonds and stocks to finance for the rest of the life. Therefore, people attempt to smooth their expenditure during life time, so as to maximise their wealth and thus create a saving pattern in their lives.

The life cycle hypothesis explained who save generally live well into retirement. People usually retire when they reach a specific age. If they are to keep spending after retirement, they need to accumulate assets whilst they are earning. The wealth is prepared for emergency purposes and subsequently provided bequests. In addition, this hypothesis introduced assets into the consumption function, and thereby gave a role to the stock market. A rise in stock prices increases wealth and consumption, while a fall in stock price would reduce consumption (Byrne, 2004). Hence, consumption is related to the financial market and general economic conditions.

3.4.2 Criticism of the Life Cycle Saving Model

However, there are several criticisms of this model. Firstly, people may not smooth their consumption evenly over different stages of life. At the work stage, people tend to spend more on working clothes and travelling. Secondly, individuals do not fully amortise their assets at retirement. They may hold some wealth in the form of housing and financial assets which tie up their savings. Thirdly, retirees continue to save during their retirement, for such things as unpredictable expenditure and medical expenses (Ando, Moro, Cordoba and Garlando, 1995; Disney, 1996) Fourthly, some individuals are neither motivated nor able to determine an adequate level of saving (Banks and Emmerson, 2000).

In practice, the model cannot fully match the British family structure. There are more families without children, and a huge increase of single parent families and single person

households. Other studies also found results inconsistent with the life cycle theory. In times of stress, particularly economic, precautionary saving tends to be higher, and will indirectly facilitate wealth accumulation rather than spending. Larger bequests may become an unintended result of ensuring sufficient capital is available for the very old (Smith, 1975; Mirer 1979; Horioka et al.,1996). Retirement benefits from annuities may be low as they are stock market related. They may be influenced by incentive and risk exposure. In the UK, USA and other developed countries, these factors affecting the model cannot accurately predict investment (Attanasiom, 1997; Burton D, 2001). Though the data from theses countries do not provide a complete explanation for retirement and saving behaviour, it provides a basic understanding that behaviour is goal-directed. The model has partially explained uncertainties of death, existence of social security, and savings for heirs, in relation to various patterns of lifetime earnings.

To sum up, the life-cycle model provides the theoretical underpinning that consumption in a specific period depends on expectations about lifetime income rather than current income. When individuals are in their working years, their income is high and they are willing to save for their retirement years. When retirement comes, their income drops and they spend the wealth previously accumulated. As applied to this research, the theory states that dependent variables of saving behaviour is influenced by demographic factors such as age, family status and children.

3.5 Variables

After reviewing various challenges on pension systems and the life cycle saving model, this part will examine saving as a dependent variable. Retirement behaviour, investment

knowledge, and demographic factors are identified as independent variables and their relationships and impact will be explored.

3.5.1 Saving

Saving is a residual between income and consumption (Agosin, 2001). According to the life-cycle model, if individuals expect to have high life expectancy, they will then tend to save for a pension and future wealth. Pensions include fixed amounts, and surpluses from average income or formerly earned wages. Private wealth includes bank accounts, insurances, stocks, bonds, real estate, less mortgages and debts.

Saving Motives

Different factors will affect saving and consumption motives. Individuals who expect a higher future income tend to have a higher current consumption. High future income insecurity will reduce current expenditure and thus people will save more (Carroll and Well, 1994; Carroll, 1994). Risk averse people tend to work more hours, and to save more as a buffer against income shocks (Blake, 2004). Intertemporal factors also affect saving motives. Chinese are more likely to plan for long term consumptions, such as wedding celebrations, and home purchases (King and Dicks, 1982). The English have a tradition of saving for a “rainy day” or economic problems unforeseen.

The motivation for saving and saving for retirement may not be the same (Burton, 2001). A British Household survey found that nearly half of respondents questioned said that they do not have a specific purpose for saving. The second major saving reason is for a holiday, so this type of saving is for the short term. The remaining saving reasons are for old age, house purchase, car purchase, home improvement and particularly for children higher education. The government wishes to encourage saving because it will stimulate

positive economic growth. Saving can increase capital flow into capital markets and thus help to develop more investment products. In the long run, more people investing their savings will lead to lower transaction costs and will increase the rate of return (Agosin, 2001). Working and saving can keep individual active in the economy and thus help to sustain the economy.

Low Saving Rate

A low savings rate could be the result of individuals not having a long term saving goal. The short term and self-maximizing consumption behaviour undermines the long term commitment of family and society. In the UK, an investigation of savings and investment behaviour was conducted. The data was collected from four representative surveys: The expenditure Survey and the British Household Panel Survey, the General Household Survey and the Family Resources Survey. The sample size was 22,166. The study found that the level of saving was low, 39 percent of households have some savings. 41% of people saved less than 50 pounds per month. Only 16 percent of respondents saved over 200 pounds per month (Burton, 2001).

A low saving rate could be due to other reasons. In the U.S., a National Income and Product Account saving rate has dropped from 10 percent in 1980's to 1 percent in the 2000's. About 40 percent of the drop was due to the available capital being invested in the stock market. Many individuals have accumulated their wealth through investment instruments rather than the personal saving account (Lusardi et al, 2001). If a low saving rate is due to bountiful retirement benefits, then the US government will not need to take extra powers of intervention.

3.5.2 Retirement Behaviours

Retirement means that individuals work until a certain time, and then quit their work. It can be a divided into different stages changing from full time to part time work and finally without work (Disney et. al, 1994; Vickerstaff, 2003). Blake (2004) found that retirement may further expand to a mixture of work, leisure and learning. Retirement ages usually range between 60 and 65. Some employees change to part time work prior to retirement; others continue to work beyond normal retirement age. Retirement behaviour is affected by various factors such as longevity, housing wealth and pension provision. People may work longer if they have more young children (Blake, 2004). After retirement, pension becomes a source of income. This is the rationale to save for an adequate retirement income (Cagan, 1975; French, 2005).

3.5.3 Investment Knowledge

Retirement saving is a long term investment. Investing for retirement is complex, both in deciding how much to save, and in decisions and how to invest to ensure an adequate retirement pension (Byrne, 2004). Investment decisions also require a consideration of risk tolerance level, age and personal circumstances. According to a USA retirement survey in 2003, one third of respondents had tried to calculate how much they needed to save for retirement. Among these respondents who had tried to estimate the amount of saving, 36 percent could neither provide the calculation nor the result. Decision making in these circumstances is thus likely to be irrational.

The Portfolio theory stated that benefits arise from diversified investment. It is risky to buy only one particular stock. However, individuals are bounded by human rationality, self-control and self-interest (Mullainthan and Thaler, 2000). Too many fund choices may

lead to individuals feeling the complexity makes it difficult to make investment decisions (Byrne, 2004). In addition, retirement investment requires an estimate of uncertain factors, for instance, future income, investment, investment return, tax, inflation and life expectancy. People lack of knowledge may make poor decision making.

3.5.4 The Relationships between Saving, Pension and Retirement

Burton (2001) noted that government attempted to encourage people to prepare for an adequate retirement, but that this has had little impact on saving attitude. Tax incentives are not effective. For example, the British government's Tax Exempt Special Savings Accounts and Personal Equity Plans have had a limited impact in motivating people to save more. However, the decline of state and occupational retirement schemes implies that saving will become more important in the future, and in general people are now becoming aware of this.

Several researchers found a substitution between wealth accumulation and pension savings (King and Dicks-Mireaux, 1982; Hubbard, 1986 and Jappelli, 1995). Pension has replaced other personal savings (Hemming, 2001). Feldstein (1979, 1982) basing his research on the life cycle model and explored the relationship between substitution and retirement. The substitution effect means that state pensions reduce the incentive of private saving for retirement. Retirement effect means that the state pension helps people to save more privately to maintain retirement, but it indirectly encourages employees to retire earlier.

According to economic theory, the increase in saving for pensions is a change in a form of saving. Pension is a kind of alternative form of saving. If a new asset is a substitute for

existing assets, there will be a high offset effect. The life cycle model noted that individuals will save less, if they know they will receive benefits in exchange for social security. Agosin's (2001) study found that Chilean government policy was ineffective in increasing savings. In the long term, if individuals are forced to save by the social security system, they may decumulate their personal saving (Agosin, 2001). In the US, a longitudinal survey supported the life-cycle models prediction that there is substitute effect between contribution to social security and saving. Individuals will reduce saving in other forms (Kotikoff, 1979).

Several researchers argued that social security has had little effect in reducing private saving in international aspects (Leimer and Lesnoy, 1982; Feldstein, 1980). Even though state pensions have reduced the need for private retirement saving, it does not affect elderly labour participation rates. Private occupational schemes directly facilitate savings, even thought it reduces labour participation rate. The net saving effect is still positive (Feldstein, 1974, 1982). Other researchers found that individuals covered by pensions tend to save more than those without pension (Pechman, Aaron and Taussig, 1986). Association of British Insurers (2004) indicated that 73 percent of people supported compulsory pension saving, more than half of them favour this if the amount of contribution is lower or the same as their existing voluntary contribution.

High earners have a displacement effect of pension wealth, but their personal saving is not intended to displace their pension. Dollar for dollar substitution may not take place, since the rate of return on a pension cannot be predicated accurately, in order to affect the saving rate or to shift to other forms of savings. For instance, Dutch households would not make a great change in their saving behaviour if the existing pension scheme were cut.

26% of them would make additional saving, 17% of respondents would not do so. They thought that their pension would be enough. 37% of respondents would not save more until a problem arises (Els et al, 2004). These findings rejected the one-for-one displacement of savings by pension (Alessie et al., 1997). A study found that government saving and social security only partially displaces personal saving in the UK (Blake, 2004).

Barro (1974, 1998) criticised researchers for neglecting bequest transfer from parents to children. He conducted a time series study from the 1970s to 1990s in the USA. The intergenerational transfers may equal burden of retirement benefit and offset the effect of social security. Apart from pension, other factors will also affect saving. For instance, stock market investors tend to save more additionally. Home ownership is a buffer and may be a or supplement for the old age pension. The financial market performance is highly affected by interest rates, exchange rates and investment regulations, which will in turn affect peoples' saving behaviour (Lusardi et al, 2001). Therefore, it is difficult to estimate peoples' response to pension policy and to determine the appropriate saving rate. The correlation between pension and saving is complex. Whether retirement saving programmes can increase saving is still debatable (Engen et al, 1996, Hubbard and Skinner, 1996). There is a deserving need to explore what factors can facilitate accumulation of pension wealth, as clearly only people with a surplus income may serve or invest in pension products

3.6 Demographic Factors Influences on Retirement Saving

Several academics have investigated factors that affect pension contribution and regular saving behaviour. Pension expectation is a critical factor which affects retirement

planning and attitudes (Mutran et al, 1997). Individuals believe that they require maximum savings and also believe that their private pension can maximize their retirement income (Furnham et al, 2002). Furnham (1985) denoted individuals' saving attitude towards saving is related to lifestyle. Peoples behaviour may be apparent; but it is their attitudes that are more likely to predict their behaviour (Furnham et al, 200). Retirement may not be the major motivation of saving (Munnel, 1976). Various demographic factors may affect the relationships between saving and pension. Details will be discussed as follows

3.6.1 Gender

The British Household Panel Study found that females are more likely to lack a private pension (Disney, 2001). They would take a 'wait and see' approach towards retirement, unlike most men. In the UK, women pensioners are poorer than men. 50 percent of women have not been covered by an occupational scheme, since they are excluded from full time or long term work. Most part-time jobs were performed by women, in which their employers did not provide any pension (DSS, 1996). The state pension system also assume that women could rely on their husband to support retirement. In contrast, men are more likely to be covered by an occupational and or a private.

3.6.2 Age

Age is positively related to saving and pensions, older people are more positive in saving attitude and behaviour (Bergstrom, 1989; Furnham et al, 2002). Younger people enjoy a higher financial return towards pension saving because of a compound interest effect, while older people are more motivated to save for retirement. They realise that retirement is coming soon, and have more concern about comfortable retirement life (Disney and

Whitehouse, 1992). British Household Panel Survey found that voluntary saving increased with age to maintain standards in retirement. The drawback is that people cannot withdraw the benefits to deal with emergent issues prior to retirement (Samwick, 1998). In addition, there is a strong positive relationship between the middle aged group and saving. People aged over 45 are more likely to make voluntary savings as a buffer against income shocks (Guariglia and Markose, 2000).

3.6.3 Income and Education

Educated people are more likely to should risk and to save more (Anonymous, 2005). The better educated people are more likely to have stable and well paid jobs, and they tend to make more voluntary contributions. In the UK, high earners are more likely to save more towards their pensions, but it could also encourage earlier retirement (Fields and Mitchell, 1984). Less educated people find it difficult to understand the complexity of the charging methods, and are thus reluctant to make additional contributions. They are also more conservative in investment (Guariglia and Markose, 2000; Muller, 2003). Pension education may be by financial seminars. Maki (2001) showed that education to learn more about rate of return and features of pensions, would influence individuals' decisions. In the US several experiments showed that employees attending seminars tends to save more (Bernheim et al, 1996).

3.6.4 Marital Status

The different saving behaviour between single and marriage couples can be explored by different kinds of saving account (Burton, 2001). In the UK, 43 percent of married couples saved in their own individual banking account compared with 56 percent who saved in a joint account, 2 percent have savings in both. It showed that most couples

would like to have independence from each other on financial matters. Moreover, 84 percent of non married women aged between 18 and 49 indicated that they would prefer to make their own investment and saving decisions. Hence, marital status does not have a significant impact on retirement saving.

3.6.5 Children

Hurd (1987) noted that the elderly who were without children tended to save less than the elderly who had with children. Dependency ratio adversely affects private saving in developed and developing countries (Masson et al, 1995). Barro (1974) criticised the life cycle model which neglected intergenerational transfer from parents to children. In the US, high earners save about 40 percent of their income, but they may preserve some wealth as bequests for their children (Lusardi et al, 2001). However, retirees may decumulate asset slowly to ensure sufficient capital for any future uncertainty and advanced old age. Bequests are not therefore a reliable source of wealth, thus it is difficult to assess the effects of bequests on saving behaviour.

3.6.6 Homeownership

Owing a house and leaving it as a bequest tends to prevent people from saving (Mirer, 1980). A retirement survey showed that renters tend to be poorer than homeowners (Gallagher and Henley, 1995). Blake (2004) argued that social security and housing seems to encourage consumption and reduce personal saving. Attanasio and Weber (1994) found that between 1983 and 1986 the increase in consumption was due to an increase in property price. However, future housing price is unpredictable. The Pension commission (2004) doubted that home ownership impacts on retirement because of the illiquidity of the housing asset. The life cycle model assumed that retirees can maximize their wealth

by selling their properties, as so to finance retirement. However, some homeowners may not be willing to leave their homes; even the maintenance cost is high.

To sum up, the aging population and the effect of the baby boom increase the pressure to reform the pension system and to encourage personal saving. The MPF is a kind of retirement benefit and a basis of investment and wealth accumulation. However, it is uncertain whether the MPF will increase aggregate household savings. In spite of the forecast future pattern of wealth accumulation, it is still doubtful whether capital will flow from traditional forms of savings into the MPF scheme. Even increase in saving does not imply increase saving for retirement. Saving is interrelated with retirement and investment behaviour. Also, demographic factors will also affect this behaviour in various ways. The relationships between the MPF, saving and retirement is ambiguous and multifaceted.

3.7 Hypotheses

Elt et at (2004) conducted a survey of pension saving among Dutch households in relation to general characteristics such as age, gender, education and income. In addition to the above literature reviews, this research attempts to test whether several of these hypothesises are applicable to the MPF system in Hong Kong.

Hypothesis 1:

The people with better understanding of the MPF are thus more likely to save.

Hypothesis 2:

The implementation of MPF has a positive impact on saving.

Hypothesis 3:

There is a significant relationship between the understanding of risk and saving behaviour.

Hypothesis 4:

There is a significant relationship between peoples understanding of MPF funds and either no additional saving, or additional voluntary saving in MPF accounts.

Hypothesis 5:

There is a significant relationship between the understanding of MPF funds and stock holding.

Hypothesis 6:

There is a significant relationship between the expectation of social security and the level of confidence to save enough for retirement.

Hypothesis 7:

Making additional voluntary contributions in the MPF account is significantly different across different demographic factors:

- Gender
- Age
- Income
- Education qualification
- Marital status
- Children
- Homeowership

Hypothesis 8:

Saving for the short term, not for retirement is significantly different across different demographic factors:

- Gender
- Age
- Income
- Education qualification
- Martial status
- Children
- Homeownership

Hypothesis 9:

Retirement benefit either in a lump sum or an annuity is significantly different across different demographic factors:

- Gender
- Age
- Income
- Education qualification
- Martial status
- Children
- Homeownership

Chapter 4 Methodology

4.1 Sampling

Determining sample size is an important issue, and is used to consider how much sampling error may be tolerated. The smaller a sampling error which may be tolerated, then a larger sample will be required. A 95 percent of confidence interval is generally accepted in research (Bryman, 2001). However, sampling size is not easy to determine. If the sample size is too large, it may waste time, resources and money. If the sample size is too small, it may lead to inaccurate results. Taking 10 percent of the sampling frame is one of the ways of calculating sample size. It may not be helpful in certain research, as the appropriate sample size will depend on the size of the sampling frame. For a very small sampling frame, a sample of 10 percent would be too small. Generally speaking, 30-50 cases are regarded as a minimal level for meaningful statistical data analysis.

This research is a cross-sectional based study to collect data at a point of time in July 2005. Due to limited time and resources, the cluster method is used to choose target populations. The trading and telecommunication industries are major economic entitles in Hong Kong. The former generated a gross profit of HK$14,555 million and employ 31,600 workers, the latter generated a gross profit of HK$2,203 million and employed 168,029 workers in 2003 (Census and Statistic Department, 2005). Respondents are recruited from these two sectors. Quartic International Limited and Hutchison Global Communications Limited are selected to represent each industry. A multi-stage clustering sampling is used to distribute questionnaires in administrative departments. Random sampling enables an equal probability of each person being selected to minimize sampling error and bias (Babbie, 2001). Randomization improves the representativeness of this research. This research was limited to respondents aged 18 or above who are eligible to

meet the MPF minimum age and excluded self-employed people. This provided a highly cooperative and well stratified sample from different demographic backgrounds who participated in this research, the result can be generalised to other business sectors in Hong Kong.

4.2 Instrumentation

4.2.1 Research Strategy

Quantitative research is used to develop knowledge by experimental designs such as quasi-experiments and correlation studies; or to generalise findings by non-experimental design such as surveys, questionnaires or structural interviews (Kepple, 1991; Babbie 1990). Data collection methods can use either closed ended or open ended questions, and numeric or non-numeric data analysis. In contrast, qualitative research is a way to obtain knowledge, which can be narrative, phenomenologies, and grounded theory and case studies (Strauss and Corbin 1990; Stake 1995). A mixed approach has been developed since 1959 to combine both qualitative and quantitative methods. For instance, a field method includes observations and interview to collect qualitative data integrated with survey in collecting quantitative data (Sieber, 1973). Researchers gather data by asking a list of questions about attitudes, or collect information regarding specific behaviour. They can also conduct a site visit, to observe behaviour and to interview. This research is also aimed to test several hypothesises and correlations among saving, MPF scheme, investment, retirement and demographic factors. Hence, a quantitative method is adopted.

4.2.2 Questionnaire

Saving behaviour involves personal privacy, and is not easily observed. Observation may not be an appropriate means to collect data, and its findings are not easy to generalise.

Respondents may not be willing to disclose their saving habits to interviewers, who may tend to under-report. Hence, face to face interviews may not be applicable in this research. To certain extent, a questionnaire would be relatively feasible to obtain real figures. It is an impersonal device for securing answers to questions by using a form which the respondents fill in by themselves. Anonymity can be assured. Respondents would have more confidence to disclose their information. A self-administered questionnaire can also reduce interviewers' influence leading to a biased result. Respondents find it convenient to fill up a questionnaire when they are free. Questionnaires are a speedy way to collect data within several weeks (Bryman, 2004). In addition, a closed ended questionnaire is used to offer a range of fixed choice. Respondents are asked to choose the one that most closely represents their views. Closed questions tend to be more popular than open questions to eliminate the problem of coding. Less work and training is required to administer closed ended questionnaires.

However, respondents may lack spontaneity (Salant and Dillman, 1994). A follow up action was taken 5 days after questionnaires were distributed, in order to ensure a high response rate. Closed ended questionnaires are not easy to develop, and may introduce bias by forcing the respondent to choose from the alternatives, or by suggesting answers the respondents may not have thought of otherwise. In this research, special attention has been paid to exhaustiveness and mutual exclusivity. Besides, respondents may not fully understand the questions. Several measures were taken into account to construct the questions. All wording must be simple and easily understood by respondents. Vague and ambiguous words are avoided to prevent researchers interpreting the questions based on their different backgrounds and points of views. The patience and ability of respondents is considered, in order to ensure they can read the entire questions. Lengthy questions are

eliminated. Indefinite words such as ‘usually’, ‘seldom’ and ‘many’ are problematic and are avoided due to different meanings for different respondents. Finally, double negative should be eliminated, such as avoid using the negative words ‘not’ in questions (Birley and Moreland, 1998).

A cover letter was attached to the questionnaires to state clearly the research topic was about the Mandatory Provident Fund, and was conducted for academic purposes. A correspondence method was provided for any enquiry or clarification. Confidentiality was assured for all data. Instructions were provided for certain questions, such as ‘to circle the appropriate answers’. A pilot test was conducted to improve the content of the questionnaire. In order to ensure respondents well understand all the questions, a back transition method was used by asking sample people to go through their own explaining of questionnaires. Several questions simplified to change from multiple choice questions to categorical questions, to enable respondents to answer more easily. The structure of questionnaires was reorganised. An interesting and non threatening topic was arranged at the beginning to involve respondents involved and motivate them to cooperate in completing the questionnaire. Difficult questions in testing the understanding of MPF were arranged by the end. The most sensitive personal information was put in the last section. Several questions were cut to shorten the questionnaires All these revamps were aimed to encourage a higher response rate and to ensure an adequate response.

Apart from primary data, collected data from other researchers or institutions were used. These are known as secondary data. For instance, documents, journals, government reports, editorials and website were used as a supplement for analysis. These data provided a look into the past for longitudinal analysis. This method is relatively cheap in

cost and time. Most of these data are of high quality data conducted by professionals, i.e. the annual reports and information provided by the Census and Statistic Department in Hong Kong.

4.3 Questionnaires Layout

The questionnaire consisted of three kinds of measurements: factual data (e.g. demographics, savings), Likert five point continuous scales (ranging from strongly agree to strongly disagree) and categorical scales (Yes/ No questions) (Appendix 3). The Likert scale is a multiple indictor to access specific attitudes, which appears as a series of statements. The level of agreement ranges from point 5 (strongly agree) to point 1 (strongly disagree). The scale is used to measure the level of intensity, frequency or evaluation. A computer application: SPSS 13.0 for Windows is used for analysis in checking internal consistency. Means, standard deviation, correlation, t-test and Chi-square are calculated to test correlations among variables.

This questionnaire was divided into dependent and independent factors. Dependent variables are factors that depend on the independent variables, such as outcomes of results of the independent variables. In this research the dependent variable is saving behaviour for retirement, which is affected by independent variables such as understanding of MPF, Investment knowledge, and retirement attitude. Independent variables are possible causes, influences or affect outcomes. Demographic factors are also used as independent variables in this research, such as gender, age, income, education qualification, marital status, children and residential status etc.

4.4 Variables

Four variables including understanding of MPF, investment knowledge, saving behaviour and retirement attitude are assessed in the following ways.

4.4.1 Understanding of the MPF Scheme

To check understanding of the MPF scheme, several questions were asked such as the maximum amount of MPF contribution made per month and the normal retirement age to claim MPF. These attitudes towards MPF will be scored from 1 to 5, by evaluating whether MPF will be adequate to protect a comfortable retirement, and whether additional personal saving is needed to supplement MPF investment.

4.4.2 Saving Behaviour

One of the best predictors of saving behaviour is the total amount of money saved per month (Furnham, 1999). To further explore the MPF impact on saving, enquiries into changes in saving before and after the implementation of MPF will be made. A scoring question is used to ascertain whether saving is for short term purpose or for retirement.

4.4.3 Investment knowledge

To check investment knowledge, a question of whether the capital preservation fund may suffer loss was asked. Their attitudes toward investment will be scaled by understanding of MPF funds and investment information. In addition, respondents were asked whether they have attended MPF related seminars and what was their major source of information about the MPF.

4.4.4 Retirement Attitude

Expectations of retirement income, retirement age, benefits in the form of lump sums or annuity, family support and government support were ascertained. Confidence in saving for a comfortable retirement life was scored. Finally, questions on expectations about the future of MPF contribution rate and expected retirement age were asked.

Chapter 5 Data Analysis

In this chapter, a brief description on the respondents' background will be outlined. The correlation among understanding of the MPF, saving behaviour, investment knowledge, and retirement behaviour will be analysed. Three hypotheses of additional voluntary saving, saving orientation and the MPF benefit payment across demographic factors will be tested. Finally, people's expectation of MPF reform will be discussed.

5.1 Descriptive Statistics

In this research, 54 questionnaires were received; the response rate was 42 percent. 22 (41.5 percent) were male, 23 (58.5 percent) were female (Figure 5.1). Most of them were aged between 21 and 31 (67.0 percent). 10 respondents (18.9 percent) were aged between 31 and 40. And 2 respondents (3.8%) aged between 51 and 60, and below 20 respectively. Income levels 39 respondents (73.6 percent) earned less than HK$20,000. 10 respondents (18.9 percent) earned between $20,000 and $39,999. And the rest of 4 (7.5percent) people were high earners over HK$40,000. Education levels, most of them (71.7 percent) were a well educated with degree qualification. 41 respondents representing 77.4 percent were married, only 7 (13.2 percent) of them with children. The number of home owners was 18, about 34 percent in total.

Figure 5.1 Demographic Factors of Respondents

	Number	Percentage
All	53	
Male	22	41.5
Female	31	58.5
Age		
<20	2	3.8
21-30	36	67.9
31-40	10	18.9
41-50	3	5.7
51-60	2	3.8
60>	0	0
Income		
<$20,000	39	73.6
$20,000-$39,999	10	18.9
>$40,000	4	7.5
Education		
Primary or Below	3	5.7
Secondary	12	22.6
University or above	38	71.7
Marital Status		
Single	41	77.4
Married	12	22.6
Children		
Have	7	13.2
Don't have	46	86.8
Home Owners		
Yes	18	34
No	35	66

5.2 Correlation Analysis

5.2.1 Understanding of MPF

Retirement expectation is a factor which affects people's retirement planning and attitudes (Mutran et al., 1997). In this research, a five-point Likert-type scale is used to assess saving, investment and retirement attitudes. Saving is probably a habit for people in Hong Kong. 68% respondents indicated that they saved before MPF come in, but they agreed that most savings are only for the short term (mean = 3.64, S.D.=1.09). This may due to a non-comprehensive social security system in Hong Kong, where people are self-reliant in financing their daily expenses. Besides, more than half of respondents (58 percent) admitted that MPF is inadequate to ensure a comfortable retirement. Only 9.4 percent of

respondents think that MPF is sufficient for a comfortable retirement. One third of respondents (32.1 percent) are neutral towards the adequacy of MPF. This group may not have an adequate understanding of the MPF, and have a neutral attitude. Hence, it is interesting to explore the relationship between their understanding of the MPF and saving.

Fig 5.2 Understanding of MPF

			Normal Retirement Age	
			Correct	**Incorrect**
MPF Calculation	**Correct**	Number	32	2
		Percentage	60.4%	3.8%
	Incorrect	Number	14	5
		Percentage	26.4%	9.4%

Two questions were asked to check respondents understanding of MPF. The first one is to ask the maximum amount of MPF contribution per month. The second one is to ask what is the normal retirement age to claim MPF. Fig 5.2 showed 32 respondents (60.4%) correctly answered both questions. An industry survey was conducted in 2000, in which only 40 percent of people understood the principles of the MPF (Anon. 2000). Four years of the implementation of the MPF, understanding of the MPF showed slight improvement. However, the majority of respondents indicated that they neither know how to calculate the amount needed to save for retirement nor how much of the MPF accrual benefit will be accumulated when retired, 90.0% and 94.3% respectively. It means the knowledge and how to calculate MPF and retirement benefit is probably inadequate.

Fig 5.3 The Relationship between Understanding of the MPF and Saving

			Saving	
			Yes	**No**
Understanding of MPF	Yes	Number	18	14
		% within group	56.3 %	43.8%
		% of total	34.0 %	26.4 %
	No	Number	10	11
		% within group	47.6%	52.4%
		% of total	18.9%	20.8%
Total		Number	28	25
		Percentage	52.8%	47.2%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	.379	1	.538

The amount of saving is relatively low. On average respondents only saved HK$1,646 per month for retirement. This amount is lower than the amount of the Comprehensive Social Assistance Scheme payment about HK$2,140 per month, which is only used to support basic daily expenditure. A chi-square is used to test the relationship between understanding of the MPF and saving (figure 5.3). For respondents with MPF knowledge, 56 percent of them have savings. For those without MPF knowledge, 47.6 percent of them have a saving habit. There is no significant difference between people with or without MPF knowledge towards saving ($X^{2=}$ .379, p>.05). Hypothesis 1: the people with better understanding of the MPF are thus more likely to save is invalid. As mentioned above, only 60 percent of respondents are equipped with MPF knowledge, and 90 percent of them do not know how to calculate any retirement benefits required for their future. Hence, the low capabilities in MPF calculation and understanding of the MPF do not serve to encourage people to save.

5.2.2 Saving Behaviour

MPF Impact on Saving Behaviour

Fig 5.4 MPF Impacts on Saving Behaviour

			Saving after MPF came in		
			Less	**Same**	**More**
Saving habits before MPF	**Yes**	Number	10	17	9
		Percentage	27.8%	47.2%	25.0%
		% of total	18.9%	32.1%	17.0%
	No	Number	6	8	3
		Percentage	35.3%	47.1%	17.6%
		% of total	11.3%	15.1%	5.7%
Total		Number	16	25	12
		Percentage	20.2%	47.2%	22.6%

Chi-Square Tests

	Value	**df**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	.492	2	.782

Apart from understanding the MPF, the implementation of the MPF may have some influences on saving. However, figure 5.4 showing hypothesis 2: the implementation of MPF has a positive impact on saving behaviour is rejected ($X^{2=}$ .492, p>.05). More or less the same portion of respondents (47 percent), from the groups, with or without a saving habit, indicated that their saving habit would remain the same when the MPF came in. Overall 22.6 percent of respondents would save more, but 20.2 percent of respondents indicate that they would save less after the implementation of the MPF. The finding showed that MPF has a displacement impact on saving. Some people may reduce personal saving to offset MPF contribution. The net impact of MPF on saving is not obvious.

Correlation between the Adequacy of the MPF and Personal Saving

Fig 5.5. Correlation between Personal Saving and Adequacy of MPF

	Value	**Sig. Value (2-tailed)**
Person Correlation	-.303	.029

Saving behaviour may be affected by personal expectations. An internal consistency is found (fig 5.5). There is a moderate correlation is between the adequacy of MPF and personal saving ($r=-.30$, $p<.05$). If people expect that MPF is not enough to protect retirement needs, they are more likely to agree personal savings are needed as a supplement to MPF. They admitted that additional saving is still required, even though MPF has already been implemented. However, only 21 percent of respondents have made additional voluntary contributions towards MPF accounts. The MPF account is not a popular saving instrument, and is not fully utilised.

The Relationship between Understanding of Risk in Stock and Saving Behaviour

Fig. 5.6. The Relationship between Understanding of Risk and Saving Behaviour

	Number	Mean	S.D.
With Retirement Saving	28	4.00	.171
Without Retirement Saving	25	2.45	.142

T-Test

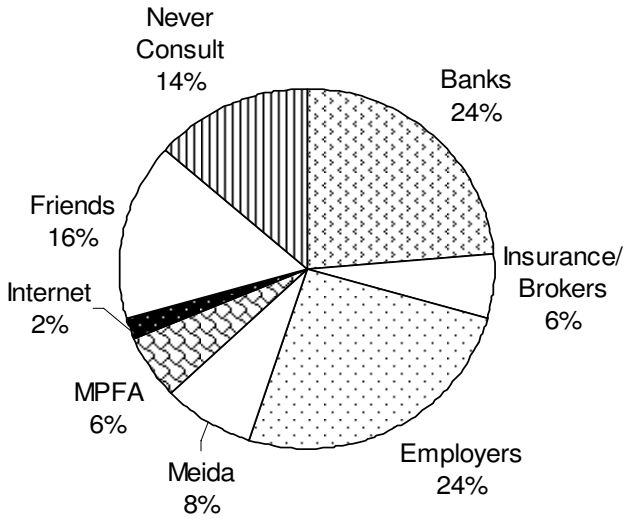
	Value	Sig. Value (2-tailed)
Independent t-test	1.945	.043

A five-scale question was asked whether investing in stock is risky. Fig 5.6 shown hypothesis 3: there is a significant relationship between the understanding of risk and saving behaviour ($t=1.945$, $p<.05$). People with retirement saving (mean = 4.0) are more understanding of risk than those people without retirement saving (mean =2.45). The difference of the mean score is 1.55. People with savings tend to be more conservative and less willing to face an unstable retirement life. Thus, they tend to save for retirement. However, people without retirement savings may spend their money in other ways. This finding is probably consistent with the low saving rate in the USA may be due to people accumulating wealth through investment (Lusardi et al, 2001). However, other factors like education and income may also affect the low saving rate.

5.2.3 Investment Knowledge

MPF Talks/ Seminars

Graph 5.1 The Main Information Source Consultation on MPF Investment



We now consider how people decided how to invest their MPF funds. Consultation seems to be critically significant when it comes to MPF investment. Over 86 percent of respondents consulted different parties. Banks and employers were the most common channels for consultation. About one quarter of respondents consulted each of them respectively. Discussions with friends (16 percent) also play a critical role in MPF investment. Insurance/ Brokers (6 percent), MPFA (6 percent), and media (8 percent) share the same levels of consultation. The internet was the least popular way to obtain MPF investment knowledge, only 2 percent of people used this medium.

Fig 5.7 The Relationship between attending MPF talks and Understanding of MPF funds

	Number	Mean	S.D.
Attending MPF Talk	22	3.89	1.358
Non attending MPF Talk	31	2.82	1.259

T-Test

	Value	Sig. Value (2-tailed)
Independent t-test	2.548	.012

Less than half of respondents attended MPF seminars/ talks (41.5%, n=22). Attendees of MPF talks (n=22, mean = 3.89, SD=1.358) scored with better understanding of different kinds of MPF funds than non-attendees (n=31, mean =2.82, SD=1.259) (fig 5.7). This means that MPF talks tend to help the understanding of MPF funds. In addition, there is a strong correlation between peoples understanding of MPF funds and either receiving clear MPF related information and advice ($r=2.548$, $p<.05$). Thus, MPF seminars seem to be an effective way of educating the public to improve their knowledge of the MPF.

The Relationship between Understanding of MPF funds and making additional voluntary savings

Fig. 5.8 The Relationship between People with/without additional voluntary saving and poor Understanding of MPF funds

	Number	Mean	S.D.
With Additional Voluntary Saving	11	1.27	.14
Without Additional voluntary Saving	42	1.48	.02

T-Test

	Value	Sig. Value (2-tailed)
Independent t-test	1.206	.233

The MPF is a type kind of long term investment. However, only 56 percent of respondents answered correctly that MPF capital preservation fund may suffer loss. It seems that MPF investment knowledge is not adequate. Poor understanding of investment issues is not only found in Hong Kong, it also happens in other countries which provide pension schemes (Anon., 2000). An independent-samples t-test is conducted, to test hypothesis 4: people understanding of MPF funds in relation to, no additional saving, or additional voluntary saving in MPF accounts (Fig. 5.8). There is no significant difference between two groups, people with additional voluntary saving ($M=1.27$, $SD=.14$) and people without additional voluntary saving ($M=1.48$, $SD=.02$; $t=1.206$, $p>.05$), in respect of their understanding of MPF funds. The result is consistent with the previous finding,

the MPF scheme is insignificant in encouraging people to save, partly due to the low level of understanding of MPF related issue.

Stock Holders

Fig. 5.9 Relationship between Stock Holders and Understanding of MPF Funds

	Number	Mean	S.D.
Stock Holders	30	2.83	.887
Non Stock Holders	23	2.70	.998

T-Test

	Value	Sig. Value (2-tailed)
Independent t-test	-.481	.633

57 percent of respondents are stock holders (n=30). Their scores of understanding MPF funds (mean = 2.83) is slightly higher than non-stock holders (mean = 2.70, p>.05) (fig. 5.9). Hence, there is not a statistically significant difference in the mean scores of understanding of MPF between stock and non-stock holders. Stock holders may tend to short-term speculation rather than long term investment. Thus, stock holder does not imply investment knowledge. MPF Funds are monitored under the MPF ordinance, which is not the same as the security ordinance. Thus, it is not a surprise that even stock holders may not fully understand MPF funding. Hence, hypothesis 5: there is a significant relationship between the understanding of MPF funds and stock holding. This is invalid (t=-.481, p>.05).

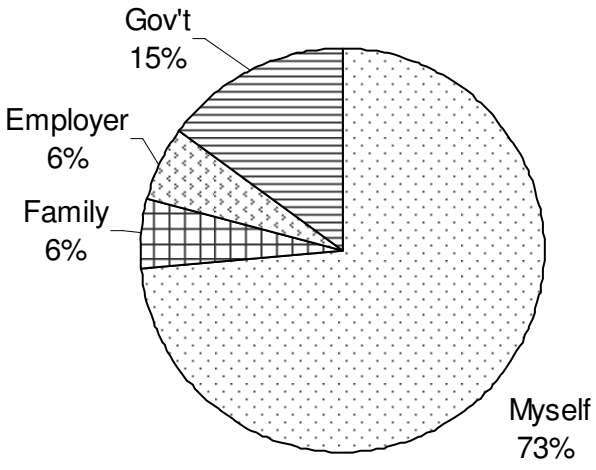
5.2.4 Retirement Behaviour

In this research, the average expected retirement age is 58. This age is lower than the MPF normal retirement age of 65 years. Female expected retirement age is slightly earlier than male by three years (male=60 years old, female=57 years old). 60 percent of respondents prefer retirement benefit as in lump sum rather than an annuity (n=32). They attempt to

enjoy more flexibility in spending their retirement benefits. This may be a risky strategy if the retirement benefit is not enough to cover their whole life.

Less than half of respondents (43 percent, n=23) expect that their children will provide future financial support. The traditional custom of raising children as an insurance against old age, is breaking down. In Hong Kong, one person families and families without children are becoming more common. The average household size was 3.1 in 2004 (Census and Statistics Department, 2004). Graph 5.2 showed that over 73 percent of respondents agreed that individuals should bear the greatest responsibility for retirement. 15 percent of respondents agreed that the government should take the greatest responsibility. Not many people agreed that employer (6 percent) and family (6 percent) should take the greatest responsibility. Once they use up the benefit, 83 percent of respondents expect to apply for social security from the government. This means that people in Hong Kong attempt to be self reliant, but the responsibility of the government to care for the aged is still inevitable.

Graph 5.2 The greatest Responsibility for Retirement



When contemplating retirement, not many people worry about their savings. Only 15.1 percent of respondents do not have enough confidence to save money for a comfortable retirement. Half of the respondents (49 percent) are confident and save enough. One third of respondents (35.8%) are neutral. The means score of confidence towards saving for retirement is 2.43 (S.D. = 1.01). As the living standard after retirement, less than one third of respondents expect their retirement income will be lower than their final salary. 64 percent of respondents expect that their retirement income will be higher or the same as their final salary.

Fig. 5.10 The Relationship between Applying for Social Security and Confidence of Saving Enough for Retirement

	Number	Mean	S.D.
Attempt to Applying for Social Security	44	2.25	.149
Do not Attempt to Applying for Social Security	9	3.33	.167

T-Test

	Value	Sig. Value (2-tailed)
Independent t-test	-3.179	.003

An independent t-test was conducted testing the relationship between people who expect to apply for social security, and those with enough confidence to save for their retirement. There is a significant difference between two groups. People who expect to apply for social security will have a lower level of confidence towards saving enough for retirement (N=44, M=2.25, SD=.149), people who do not expect to apply for the social security have higher level of confidence in saving enough for retirement (N=9, M=3.33, SD=. 167) (fig. 5.10). Hypothesis 6 is valid that there is a significant relationship between the expectation to of social security and the level of confidence to save enough for retirement ($t=-3.179$, $p<.05$). If people do not have enough confidence, they are more likely to apply

for social security in their old age. Thus the burden government social security expenditure will be increased in the future.

To sum up, the MPF seems to be ineffective in encouraging people save for retirement. This may be due to the fact that the scheme has only just been implemented in December 2000. The levels of understanding of the MPF and investment knowledge are low which is not sufficient to promote saving and a better financial preparation for retirement. This research showed an important finding that of the low level of confidence to save enough for retirement (m=2.43), and will be more likely to cause people to apply for social security. Hence, it is critical to explore further whether demographic factors have significant influence on three particular aspects including voluntary contribution, saving purpose, and forms of retirement benefits.

5.3 Demographic Analysis

5.3.1 Additional Voluntary Saving

According to these findings, voluntary saving is not popular, only 20 percent of respondents have made a voluntary contribution (n=11). Hence, it is critical to identify which demographic factors affects people making voluntary contributions, in order to design more attractive and appropriate voluntary saving products.

Gender

Fig. 5.11 The Relationship between Additional Voluntary Contribution and Gender

			Additional Voluntary Contribution	
			Yes	**No**
Gender	**Male**	Number	5	17
		% within gender	22.7%	77.3%
		% of total	9.4%	32.1%
	Female	Number	6	25
		% within gender	19.4%	50.6%
		% of total	11.3%	47.2%
Total		Number	11	42
		Percentage	20.8%	79.2%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	.089	1	.765

Gender is not a significant difference in additional voluntary distribution ($X^{2=}$ .089, p>.05) (fig 5.11). Nowadays, both males and females in Hong Kong probably enjoy equal status in education and work. Their levels of income and consumption are not in greatly difference. The low level of voluntary contributions may be due to various factors other than gender. There may be a lack of incentive to make a voluntary contribution, since only the mandatory contribution is exempt from tax, with a maximum limit of $12,000 per year. In addition, Hong Kong is an international financial centre. There are lots of investment products such as bonds, funds and securities. People in Hong Kong enjoy choice of investment. The MPF additional voluntary saving account seems to be less attractive than other investment instruments.

Age

Fig. 5.12 The Relationship between Additional Voluntary Contribution and Age

			Additional Voluntary Contribution	
			Yes	**No**
Age	**<20**	Number	0	2
		% within age group	0%	100%
		% of total	0%	3.8%
	21-30	Number	1	35
		% within age group	2.8%	97.2%
		% of total	1.9%	66.0%
	31-40	Number	5	5
		% within age group	50.0%	50.0%
		% of total	9.4%	9.4%
	41-50	Number	3	0
		% within age group	100%	0%
		% of total	5.7%	0%
	51-60	Number	2	0
		% within age group	100.0%	0%
		% of total	3.8%	0%
Total		Number	11	42
		Percentage	20.8%	79.2%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	31.889	4	.000

Age groups has a significant difference towards additional voluntary contribution ($X^{2=}$ 31.889, $p<.05$) (fig.5.12). The two youngest groups (below twenty years old, and between 21 and 30 years old), are the least likely to make voluntary contribution. This may due to low starting salaries, so they may not have much disposable income to make voluntary contribution. It is also explained by the life cycle model that youngsters are more likely to spend their money on studies, entertainment and housing rather than to save. The highest saving group is the middle aged between 31 and 40. At this stage, salary probably increases more rapidly than at other stages. Hence, they are more likely to have disposable income to devote to voluntary saving. The finding is consistent with Guariglia and Markose (2000) who stated that there is a strong positive relationship between this middle aged group and saving. They are more likely to make voluntary savings to

eliminate income shocks. The basic principle of the life time model is applicable to Hong Kong, saving increase is related to age. The peak time of making voluntary contribution arises earlier in the middle age rather than the life cycle theory assumed before retirement.

Income

Fig. 5.13 The Relationship between Additional Voluntary Contribution and Income

			Additional Voluntary Contribution	
			Yes	**No**
Income	**<HK$20,000**	Number	10	29
		% within income group	25.6%	74.4%
		% of total	18.9%	54.7%
	HK$20,000 - HK$39,999	Number	0	10
		% within income group	0%	100%
		% of total	0%	18.9%
	>HK$40,000	Number	1	3
		% within income group	25.0%	75.0%
		% of total	1.9%	5.7%
Total		Number	11	42
		Percentage	20.8%	79.2%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	3.299	2	.199

Various income levels are not a significantly different in making additional voluntary contributions ($X^{2=}$ 3.299, p>.05) (fig.5.13). Thus the hypothesis that there is a significant difference in making voluntary contribution across different age groups is rejected. Since the MPF has only operated for four years. Respondents tend to take a "wait and see approach" regarding additional voluntary contributions. Only one out of four respondents from the high income group (>HK$40,000) has made voluntary contributions. They may have already been a target customer for banks and financial institutions to promote different investment products before the implementation of the MPF. Additional voluntary saving is relatively less attractive for them compared with other means of investment. As for the low income group (HK$<20,000), they may be excluded from the products of the financial companies. The low earners are less likely to receive marketing

material and to access financial institutions. Thus, voluntary contributions are not a suitable option for them.

Education

Fig. 5.14 Relationship between Additional Voluntary Contribution and Education

			Additional Voluntary Contribution	
			Yes	**No**
Education	**Degree Holders**	Number	8	30
		% within education	21.1%	78.0%
		% of total	15.1%	56.5%
	Non-degree Holders	Number	3	12
		% within education	20%	80%
		% of total	5.7%	22.6%
	Total	Number	11	42
		Percentage	20.8%	79.2%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	.007	1	.932

The proportion of degree holders who made additional voluntary contributions is not significantly different from the proportion of non-degree holders that made contributions ($X^{2=}$ .007, p>.05) (fig. 5.14). The hypothesis that making additional voluntary contributions towards the MPF account is significantly different across differently educated people is not valid. It may be true that education is not a significant difference in making contributions. MPF is a kind of long term investment. Even degree holders may not fully understand investment issues and the importance of early and continual retirement saving. This result is consistent with the previous finding that nearly half of respondents could not answer correctly that the capital preservation fund may suffer loss. And over 90 percent of respondents do no know how to calculate savings needed for retirement. Thus, MPF education is needed regardless of peoples educational levels.

Marital Status

Fig. 5.15 Relationship between Additional Voluntary Contribution and Marital Status

			Additional Voluntary Contribution	
			Yes	**No**
Marital Status	**Single**	Number	5	36
		% within marriage status	12.2%	87.8%
		% of total	9.4%	67.9%
	Married	Number	6	6
		% within marriage status	50%	50%
		% of total	11.3%	11.3%
Total		Number	11	42
		Percentage	20.8%	79.2%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	8.067	1	.005

There is a statistically difference between marital status and additional voluntary contributions ($X^{2=}$ 8.067, p<.05) (fig.5.15). Single people are less likely to make additional voluntary contributions. Only 12 percent of single people have made voluntary contributions, in contrast 50 percent of married people have made voluntary contributions. This means that people who are married are more prepared to plan for their retirement. And that single respondents without family responsibilities are less likely to make voluntary contributions. Especially, the young single person may think retirement saving is an issue for the distant future. This is explained by the life cycle model that youngsters have immediate goals to achieve regarding studies, marriage and home purchase, and are thus less likely to save for retirement.

Children

Fig. 5.16 Relationship between Additional Voluntary Contribution and Children

			Additional Voluntary Contribution	
			Yes	**No**
Children	**Have**	Number	6	1
		% within children	85.7%	14.3%
		% of total	11.3%	1.9%
	Do not have	Number	5	41
		% within children	10.9%	89.1%
		% of total	9.4%	77.4%
Total		Number	11	42
		Percentage	20.8%	79.2%

Chi-Square Tests

	Value	d.f.	Asymp Sig. (2-sided)
Pearson Chi-Square	20.602	1	.000

The proportion of people who have children and who made additional voluntary contributions is significantly different from the proportion of people without children who made contributions ($X^{2=}$ 20.602, p<.05) (fig. 5.16). People having children (85.9 percent) are more likely to make additional voluntary contributions than those without children (10.9 percent). As mentioned above, marital status is a significant factor influencing voluntary contribution. This could be further explained as married respondents with children prefer to protect a more stable family life. Additionally, the average household size in Hong Kong has reduced from 3.4 in 1991 to 3.1 in 2004 (Census and Statistics Department, 2001). This means many families have on average only one child. Parental expectation of family size has changed. Parents do not rely on one child to keep them in retirement. Hence, people with a small family attempt to plan for their own retirements by making voluntary contributions.

Homeownership

Fig. 5.17 Relationship between Additional Voluntary Contribution and Home Owners

			Additional Voluntary Contribution	
			Yes	**No**
Home Owners	**Yes**	Number	1	17
		% within home owners	5.6%	94.4%
		% of total	1.9%	32.1%
	No	Number	10	25
		% within home owners	28.6%	71.4%
		% of total	18.9%	47.2%
Total		Number	11	42
		Percentage	20.8%	79.2%

Chi-Square Tests

	Value	d.f.	Asymp Sig. (2-sided)
Pearson Chi-Square	3.829	1	.05

There is a significant difference in home ownership and additional voluntary contribution ($X^{2=}$ 3.829, p=.05) (fig. 5.17). Home owners are less likely to make voluntary contributions. About 2 percent of home owners have made voluntary contributions, while about 29 percent of non home owners have made voluntary contributions. In Hong Kong, the relative property price is one of the highest in the world, housing expenses accounts for 32 percent of average monthly household expenditure such as mortgage, rate and management fee (Census and Statistics Department, 2001). Hence, home owners are less likely to have disposable income available for making voluntary contributions.

5.3.2 Saving Orientation

In this part, saving orientation will be tested to see if there is a significant difference across different demographic factors. A five scale score is used to ask respondents whether saving is for the short-term, but not for retirement. Score 5 implies saving for short time, while score 1 implies saving for retirement.

Gender

Fig. 5.18 Relationship between Saving Orientation and Gender

	Number	Mean	S.D.
Male	22	2	.873
Female	31	2.52	.996

T-Test

	Value	d.f.	Sig. Value (2-tailed)
Independent t-test	-1.955	51	.056

An independent-samples t-test is conducted to compare the significant difference in the mean of short term saving scores for males and female. There is no significant difference in scores for males (M=2, SD=.873) and females (M=2.52, SD=.996; t=-1.955, p>.05) (fig. 5.18). The hypothesis that saving for the short term, not for retirement is significantly different across gender is not valid. This finding is consistent with the previous finding

that there is no significant difference in making voluntary contributions between men and women.

Age

Fig. 5.19 Relationship between Saving Orientation and Age

		Number	Mean	S.D.
Age	<20	2	4.00	.000
	21-30	36	2.39	.964
	31-40	10	2.10	.738
	41-50	3	1.33	.577
	51-60	2	1.50	.707
	Total	53	2.30	.972

ANOVA

	d.f.	F	Sig. Value (2-tailed)
Between groups	4	3.277	.019

Multiple Comparisons

(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.
<20	21-30	1.611	.652	.114
	31-40	1.900	.695	.063
	41-50	2.667(*)	.819	.017
	51-60	2.500	.897	.056
21-30	<20	-1.611	.652	.114
	31-40	.289	.321	.895
	41-50	1.056	.539	.302
	51-60	.889	.652	.653
31-40	<20	-1.900	.695	.063
	21-30	-.289	.321	.895
	41-50	.767	.590	.693
	51-60	.600	.695	.909
41-50	<20	-2.667(*)	.819	.017
	21-30	-1.056	.539	.302
	31-40	-.767	.590	.693
	51-60	-.167	.819	1.000
51-60	<20	-2.500	.897	.056
	21-30	-.889	.652	.653
	31-40	-.600	.695	.909
	41-50	.167	.819	1.000

* The mean difference is significant at the .05 level.

A one-way between-group ANOVA analysis of variance is conducted to explore the impact of age on levels of saving orientation (fig. 5.19). There is a statistically significant difference at the p<.05 level in a five-point score for the different age groups (F=3.277, p<.05). Despite reaching statistical significance, the actual difference mean scores between age groups are relatively large, since the eta squared is .21. Cohen (1988) stated that the value of eta sqared greater than .14 is a large effect size. Respondents who are younger than 20 years old are significantly different from the age group between 41 and 50. The youngest age group is the most likely to save for short term goal (M=4, S.D.=.00). The short term saving mean scores reduces along with the increase with age until the age of 50 years old. It is consistent with the life cycle hypothesis that youngsters are more likely to spend rather than to save. People in Hong Kong of this age group are more concerned about saving for marriage and home purchase (Siu, 2001). The mean score slightly increases for those aged between 51 and 60. People reaching retirement age may have less financial burdens from their families and children, who enjoy more flexibilities in consumption at this stage.

Income

Fig. 5.20 Relationship between Saving Orientation and Income

		Number	Mean	S.D.
Income	**<HK$20,000**	39	2.31	1.004
	HK$20,000 - HK$39,999	10	2.40	.996
	>HK$ 40,000	4	2.00	.816
Total		53	2.30	.972

ANOVA

	d.f.	Value	Sig. Value (2-tailed)
ANOVA	2	.237	.790

Multiple Comparisons

(I) income	(J) income	Mean Difference (I-J)	Std. Error	Sig.
<HK$20,000	**HK$20,000 - HK$39,999**	-.092	.350	.962
	>HK$ 40,000	.308	.518	.824
HK$20,000 -HK$39,999	**<HK$20,000**	.092	.350	.962
	>HK$ 40,000	.400	.584	.773
>HK$ 40,000	**<HK$20,000**	-.308	.518	.824
	HK$20,000 - HK$39,999	-.400	.584	.773

Different levels of income earned is not a significant difference towards the saving for a short-term goal (F=.237, p>.05) (fig. 5.20). Respondents tend to be neutral about whether their saving is for short term or for retirement (M=2.3). This may be due to the economic downturn after the Asian economic crisis; the unemployment rate has sharply increased from 2.3 percent in 1997 to 5.7 percent in 2005 (Census and Statistic Department, 2005). Even high earners worry about losing their jobs. Thus, employees have to save against both short term and long term uncertainties. Hence, education to save for the long term and to invest for a better return is required, in particular they need a hedge against of inflation.

Education

Fig. 5.21 Relationship between Saving Orientation and Education

	Number	Mean	S.D.
Degree Holders	38	2.34	1.047
Non Degree Holders	15	2.20	.775

T-Test

	d.f.	Value	Sig. Value (2-tailed)
Independent t-test	51	.476	.636

The level of education is an insignificant difference towards saving orientation (F=.476, p>.05) (fig.5.21). This finding is consistent with the result mentioned above education level is not a significant difference in making additional voluntary contribution. Even degree holders do not have a better understanding of MPF and investment issues than

non-degree holders. In addition, education in Hong Kong has changed from an elite education system to general education system; over 66 percent of youngsters can now achieve tertiary education. Hence, the difference between degree and non degree holders towards saving orientations may become anomalous.

Marital Status

Fig. 5.22 Relationship between Saving Orientation and Marital Status

	Number	Mean	S.D.
Single	41	2.39	.997
Married	12	2.00	.853

T-Test

	d.f.	Value	Sig. Value (2-tailed)
Independent t-test	51	1.259	.225

An independent t-test was used to test the different between single and married people in the mean of saving scores. There is no significant difference between the two groups ($t=1.259$, $p>.05$) (fig 5.22). This can be explained by similar reasons as mention above, economic downturn affects saving orientation regardless of marital status. Single persons have difficulty in saving enough for marriage. The marriage age was 30 years old for males and 27 for females in 1996, increasing to 31 for males and 28 for females in 2004 (Census and Statistic Department, 2005). Economic recession seems to be a barrier to marriage. Hong Kong's people are facing financial pressure from the external business environment, so they have to save without either a clear short term or a long term purpose.

Children

Fig. 5.23 Relationship between Saving Orientation and Having Children

		Number	Mean	S.D.
Children	Have	7	1.57	.535
	Do not have	46	2.41	.979

T-Test

	d.f.	Value	Sig. Value (2-tailed)
Independent t-test	51	-2.212	.031

The proportion of people with children is significantly different from the proportion of people without children regarding saving in the short term (t=-2.212, p<.05) (fig. 5.23). People without children (M=2.41, SD=.979) are more likely to save for the short term, whilst people with children are more likely to save for retirement (M=1.57, SD=.535). The magnitude of the difference in the mean is moderate (eta square =.088). Bring up children is a long term commitment, so respondents with children are less likely to save for short term goals such as travelling and car purchases. Parents are now less likely to rely on their children to support their retirement, and now have their own long term plans for the future. This is also consistent with the previous finding that parents are more likely to make additional voluntary contributions. Conversely, people without children are facing relatively less financial pressure. They are more likely to spend their savings in fulfilling their short-term needs.

Homeownership

Fig. 5.24 Relationship between Savings for short term and Home Owners

	Number	Mean	S.D.
Home Owners	18	2.78	.943
Non Home Owners	35	2.06	.906

T-Test

	d.f.	Value	Sig. Value (2-tailed)
Independent t-test	51	2.706	.009

There is a significant difference between the proportion of home owners (M=2.78, SD=.943) saving for short term goals and the proportion of non home owners (M=2.06, SD=.906, t=2.705, p<.05) (fig.5.24). Home owners are more likely to save for short term goal than non home owners, the mean score difference is about 0.78. The size of this effect size is moderate (Eta squred= .13). Since housing costs account for a third of total expenditure, home owners are less likely to worry about housing expenses in old age. Their saving tends to be short-term oriented. For instance, home owners are more likely to decorate their houses. Non-home owners without capital have to save more for their

retirement. Especially, they attempt to conserve more savings for their retirement to finance affordable housing in the future. Therefore, they perceive the need to pay rental for life whilst home owners discharge their mortgages after a period of years.

5.3.3 MPF Benefit Payment

MPF is repayable in a lump sum upon reaching retirement age at 65. When giving a choice of MPF payment either in a lump sum or an annuity to respondents, 38 percent of them prefer an annuity. The annuity is calculated by the insurance company or other financial institutions. For example, they would offer a lower annuity to a female than a male (for a given lump sum) to reflect females' longer life expectancy. In this section, demographic factors in relation to forms of retirement benefit payment will be analysed.

Gender

Fig. 5.25 Relationship between MPF payment and Gender

			MPF Payment	
			Lump Sum	**Annuity**
Gender	**Male**	Number	20	2
		% within gender	90.9%	9.1
		% of total	37.7%	3.8%
	Female	Number	13	18
		% within gender	41.0%	58.1%
		% of total	24.5%	34.0%
Total		Number	33	20
		Percentage	62.3%	37.7%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	11.134	1	.001

The proportion of males preferring a lump sum is significantly different from the proportion of females who prefer a lump sum ($X^{2=}$ 11.134, $p<.05$) (fig. 5.25). 91 percent of men and 42 percent of women choose a lump sum. This can be explained as females live longer than males. Life expectancy for females was 85 years old and for males, was 79 years old in 2004 (Census and Statistics Department, 2005). 58 percent of females

choose annuity to cover for their whole life. In contrast, 90 percent of males choose a lump sum, which implies that they are more likely to arrange retirement benefits by themselves.

Age

Fig 5.26 Relationship between MPF Payment and Age

			MPF Payment	
			Lump Sum	**Annuity**
Age	**<20**	Number	1	1
		% within age group	50.0%	50.0%
		% of total	1.9%	1.9%
	21-30	Number	21	15
		% within age group	58.3%	41.7%
		% of total	39.6%	28.3%
	31-40	Number	9	1
		% within age group	90.0%	10.0%
		% of total	17.0%	1.9%
	41-50	Number	1	2
		% within age group	33.3%	66.7%
		% of total	1.9%	3.8%
	51-60	Number	1	1
		% within age group	50.0%	50.0%
		% of total	1.9%	1.9%
Total		Number	33	20
		Percentage	62.3%	37.7%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	4.836	4	.305

There is no significant different among different age groups towards payment of MPF in lump sum or annuity ($X^{2=}$ 4.836, p>.05) (fig. 5.26). This may be due to the fact that MPF benefits have only accumulated for four years, the amount of accrued benefits between various age groups are similar. Thus, there are no apparent preferences towards MPF payment in a lump sum or in an annuity. In long run, the MPF contribution will accumulate for several decades, the amount of accrued benefit will be large enough to induce a different preference towards MPF payments for different age groups.

Income

Fig. 5.27 Relationship between MPF Payment and Income

			MPF Payment	
			Lump Sum	**Annuity**
Income	**<HK$20,000**	Number	29	10
		% within income group	74.4%	25.6%
		% of total	54.7%	18.9%
	>HK$20,000	Number	4	10
		% within income group	28.6%	71.4%
		% of total	7.5%	18.9%
Total		Number	33	20
		Percentage	62.3%	37.7%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	10.287	1	.002

Different income groups exposed a significant difference towards preference of MPF benefit payment ($X^{2=}$ 10.287, $p<.05$) (fig. 5.27). The lowest income group with less than HK$20,000 per month are more likely to choose a lump sum payment, 74 percent of them expect to have a lump sum. This may be due to their disposable incomes being relatively low. They would enjoy more flexibility in deploying lump sum benefits when retired. The higher income group monthly salary above HK$20,000 expect to have an annuity, since they tends to have a longer life expectancy. Hence, most of them prefer annuity for a life long coverage. In addition, the maximum amount of the MPF contribution is HK$1,000 per month, which is relatively insignificant for high earners. The way that MPF payments impact on their retirement life is relatively less critical.

Education

Fig. 5.28 Relationship between MPF Payment and Education

			MPF Payment	
			Lump Sum	**Annuity**
Education	**Degree Holders**	Number	24	14
		% within education	63.2%	36.8%
		% of total	45.3%	26.4%
	Non-degree Holders	Number	9	6
		% within education	60.0%	40.0%
		% of total	17.0%	11.3%
	Total	Number	33	20
		Percentage	62.3%	37.7%

Chi-Square Tests

	Value	d.f.	Asymp Sig. (2-sided)
Pearson Chi-Square	.046	1	.831

The level of education is not a significant difference regarding MPF payment in lump sum or annuity ($X^{2=}$ .046, p>.05) (fig. 5.28). As mention previously, retirement and investment issues are contained to professional knowledge. Neither degree nor non-degree holders have sufficient knowledge and understanding towards MPF. Hence, a significant difference between two groups toward MPF payment cannot be determined. Hence, public education about the MPF should be provided to all people regardless the level of their education.

Martial Status

Fig. 5.29 Relationship between MPF Payment and Marital Status

			MPF Payment	
			Lump Sum	**Annuity**
Marital Status	**Single**	Number	23	18
		% within martial status	56.1%	43.9%
		% of total	43.4%	34.0%
	Married	Number	10	2
		% within martial status	83.3%	16.7%
		% of total	18.9%	3.8%
Total		Number	33	20
		Percentage	62.3%	37.7%

Chi-Square Tests

	Value	d.f.	Asymp Sig. (2-sided)
Pearson Chi-Square	2.931	1	.087

There is no statistically difference between marital status and MPF payment ($X^{2=}$ 2.931, p>.05) (fig. 5.29). Apart from the changes from extended family to nuclear family, the traditional family bond is weakening. The number of divorces increased five times from 2,062 cases in 1981 to 32,869 cases in 2001 (Census and Statistic Department, 2003). People in Hong Kong are losing confidence in marriage, and thus are less likely to rely on their families. The influence of marital status on MPF payment is not obvious.

Children

Fig. 5.30 The Relationship between MPF Payment and Children

			MPF Payment	
			Lump Sum	**Annuity**
Children	**Have**	Number	7	0
		% within children	100%	0%
		% of total	13.2%	.0%
	Do not have	Number	26	20
		% within children	56.5%	43.5%
		% of total	49.1%	37.7%
Total		Number	33	20
		Percentage	62.3%	37.7%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	4.888	1	.027

The proportion of people with children who choose a lump sum is significantly different from the proportion of people without children who choose a lump sum ($X^{2=}$ 4.888, $p<.05$) (fig. 5.30). All respondents with children prefer a lump sum, while only 56.5 percent of respondents without children choose a lump sum. The life cycle hypothesis suggested that by the time of retirement, individuals' wealth will maximize when the children grow up. Hence, people with children are more likely to choose a lump sum benefit, so as to reserve some benefits as bequests for children. Though people's reliance on the family is not strong, people without children are more likely to prefer an annuity, since they do not have children as a buffer to offer support in their retirement. Having children seems to be an influential factor towards additional voluntary saving, saving orientation and MPF payments.

Homeownership

Fig. 5.31 Relationship between MPF Payment and Home Owners

			MPF Payment	
			Lump Sum	**Annuity**
Home Owners	**Yes**	Number	10	8
		% within home owners	55.6%	44.4%
		% of total	18.9%	15.1%
	No	Number	23	12
		% within home owners	65.7%	34.3%
		% of total	43.4%	22.6%
Total		Number	33	20
		Percentage	62.3%	37.7%

Chi-Square Tests

	Value	**d.f.**	**Asymp Sig. (2-sided)**
Pearson Chi-Square	.522	1	.470

There is no significant different between home owners and non home owners regarding MPF payment ($X^{2=}$ .552, p>.05) (fig. 5.31). Owning a property seems to be one of the factors in securing retirement. Home owners are relatively more secure, they do not have a distinct preference for receiving the MPF benefit in either a lump sum or an annuity. Non home owners are relatively more concerned about saving enough for their retirement. They need to be more financially prudent rather than to rely on the benefit payment alone for a secure retirement. Hence, neither MPF payments in lump sum nor an annuity is significant for home owners or non home owners.

5.4 The Future of MPF

5.4.1 Expectation of MPF Development

After analysing factors affecting saving, this section will examine people's expectations of MPF development. It is crucial as a reference for future reform. The MPF scheme is a new retirement benefit system in Hong Kong, which is under review by the MPFA. In the previous few years, some amendments have been made. For instance, the minimum relevant income level has been adjusted from HK$4,000 to HK$5,000 per month in 2003.

Employees and self-employed person earning less that the minimum level are exempted from contributions to alleviate their financial burdens. In this research several questions have been asked regarding future development of the MPF. However, respondents were not very supportive towards the expansion of the scheme including coverage, contribution rate and age of contribution. Under the existing MPF schemes, certain groups are exempted from contribution such as domestic helpers, hawkers and housewives. For a comprehensive retirement scheme, these vulnerable groups need to be protected by the scheme. However, only 43 percent of respondents support extended the coverage of the scheme to these groups. About a third of people disagreed with covering them. 26 percent of respondents are neutral towards the extension of coverage. People in Hong Kong seem apathetic about protecting low income groups and unpaid housewives, these groups of people also serve to help society develop. Their rights and benefits seem to be neglected. The MPF may further intensify exclusion of the poor from retirement protection.

5.4.2 Reversing the Early Retirement Trend

In the past 20 years, the labour participation rate among elderly has been dropping in OECD countries, which has induced a higher cost of social welfare to cater for the unemployed elderly. Thus government policy has now to focus on how to encourage the older worker to be active in the labour market. For instance, the New Deal 50-plus and the age discrimination act in the UK; gradual retirement and wage subsidies for the older employees in Finland and Germany, and job seeking advice in Netherlands. All these measures aim to encourage the older worker to remain in the labour market so as to reduce the burden on social welfare (Taylor, 2001). In this research, the average expected retirement age is at 58 years old. Nearly all respondents (98 percent) do not expect to continue with MPF contributions when over 65. Raising the MPF contribution age may

not be feasible to solve the demographic problem. It is doubtful whether people at this age are still required in his work place. In Hong Kong, the peak unemployment rate reached 5.7 percent in 2005, even middle age group cannot find a job easily (Cense and Statistics Department, 2005). If individuals do not expect to work longer, they may consider increasing the contribution rate. Otherwise, the living standard after retirement will fall.

The MPF contribution rate is 10 percent in total from employers and employees. The rate is relatively low compared with other Asian countries. In China, the contribution rate is about 25 percent of income (Asher M.F. and Newman D.D. 2002). In Singapore, the central provident fund (CPF) contribution rate is about 40 percent. In Malaysia, the Employee Provident Fund (EPF) is about 23 percent. (Lindeman, 2002). In the Asia Pacific Region, the average contribution rate is about 14 percent of income (Asher M.F. and Newman D.D. 2002). In this research, more than half of respondents (57 percent) expect the MPF contribution rate will have to increase in the next 10 years. This is consistent with the finding that 58 percent of respondents agreed with the inadequacy of MPF. The MPFA should review the contribution rate in order to ensure that the MPF can protect peoples for retirement. Though there would be strong opposition from employers. If MPF is insufficient to provide adequately for retirement, people will have no option but to rely on social security. When the government faces higher expenditure, higher tax rates will become unavoidable. Finally, employers will share the cost burden, either through their share of direct taxation or through an increasing share of the costs of the MPF scheme.

5.5 Conclusion

To a certain extent, the MPF seems to be ineffective in promoting a saving culture. Due to the low level of MPF and investment knowledge, poor understanding of MPF, this does not encourage to encourage saving for retirement. Even though individuals realise that the MPF is inadequate to protect retirement, and they agree retirement protection is a personal responsibility. However, respondents expected to apply for social security as a last resort, especially for those who have too low a confidence to save enough for retirement. Hence, it is important to investigate whether demographic factors have a significant effect on the economy, savings, and retirement, so as to formulate more effective measures in dealing with this problem more popularly called the demographic time bomb.

This research showed that having children is one of the most critical factors which encourage additional voluntary contributions and long term saving. Parents are more likely to prefer a lump sum MPF payment. Home ownership and age also have a substantial influence on voluntary contribution and saving orientation, but its impact on MPF payment is insignificant. Gender and level of income only have significant impacts on the method of MPF payment. Marital status is of only limited influence on the voluntary contribution aspect. The level of education has no significance in either payment method or savings strategy. It is an interesting finding that gender and marital status play a limited impact, this may be due to the social culture of female reliance on the family is declining. Most individuals now enjoy more equal opportunity in Hong Kong.

On considering future development the MPF scheme is inadequate and cannot save enough for peoples retirement, especially for the low income group. Most respondents do not support increased coverage, higher contribution rates and increased age of

contribution. Government intervention may be needed to implement MPF reform; otherwise the living standards and the retired will fall to an unacceptable level.

Chapter 6 Discussion

The advantages of the MPF scheme will be firstly explained in this chapter. However, there are several drawbacks with the MPF schemes such as exclusion of the poor, investment returns and charges, and the lack of competition. The concluding section will recommend providing more education, information and investment instruments, in order to encourage people to save. In the long run, the MPF should change in tandem with social security reform.

6.1 Advantages of the MPF

6.1.1 Equitability

MPF is equitable to each member, since their amount of accrued benefit is based on the contributions made. This is a positive incentive which should encourage scheme members to make additional voluntary contributions in order to prepare for a better retirement. By the end of March 2005, HK$2,368 million of voluntary contribution has been made (MPFA, 2005).

6.1.2 Cost-effectiveness

MPF schemes are operated by various trustees in a freely competitive market, which should be an incentive to efficiency and lower cost. The MPFA plays a regulatory role in ensuring the MPF system operates effectively and takes advantage of economic of scale (MPFA, 2002). Scheme members can enjoy benefits from lower administration costs which are about 2 percent per year (Ho, 1997).

6.1.3 Benefits to Hong Kong's Economy

The MPF contributions support the financial sector in Hong Kong. The amount of annual contributions is about HK$10 billion. After 30 years, the amount will increase to HK$60 billion annually (MPFA, 2002). This substantial amount of funding has not previously been available before the implementation of the MPF. The retirement assets facilitate the development of Hong Kong's financial markets. Particularly the demand for bonds and equities will increase. All the MPF's are managed by approved trustees. The MPF assets are protected and kept by qualified custodians, independent from employers, trustees and services providers. These increasing assets increase the demand for security, investment and scheme administration services. The MPF market attracts both local and international service providers. Their participation further improves the standard of pension services.

6.1.4 Appropriate for Hong Kong

Hong Kong is an international and renowned financial centre, which is effectively regulated and highly trusted by investors. The Basic law provided a legal foundation to implement the MPF scheme. The Law guarantees the system in Hong Kong will remain unchanged for 50 years since 1997. A privately managed retirement scheme is the most appropriate to operate in a well established and stable environment.

6.2 Criticisms of MPF schemes

6.2.1 Exclusion of the Poor

The MPF may and does lead to financial exclusion for certain groups including the low income group, self employed, exempted person and unemployed. In the UK, individuals cannot access financial services through appropriate means and channels such as face to face services and internet banking (Devlin, 2005). Low income people who earn less than

HK$5,000/ month are exempted from contribution and therefore benefits, since the payments may be unaffordable. Self-employed persons cannot benefit significantly from the scheme due to their small contributions. A low level of contribution does little to improve lifetime retirement funding. Thus, the MPF neither supports retirement, nor improves the current living standard. Conversely, it may detract from their standard of living both now and in the future (Ho et al., 2004).

According to the MPF Ordinance, certain workers are excluded from the scheme including domestic helpers, hawkers, employees working fewer 60 days and workers aged below 18 and over 65. About 1.2 percent of employees, those aged below 18 and over 65 are exempted from the scheme. In addition, married women have a disincentive to stay at work and be covered by the MPF scheme as the social security system does not provide adequate child and old people care whilst the women are at work (Chow, 2002). Therefore, the employment based MPF system cannot protect economically inactive participants. It is not a risk-pooling approach to redistribute wealth. Retirees rely on their own contribution rather than share the entire social contribution. The market based MPF scheme adversely selects and discriminates against workers and non workers, and between the young and older workforce (Chan, 2003).

6.2.2 Lack of Incentive

In the late 70s the British government cultivated a savings-friendly environment by tax incentives to encourage more saving in pension accounts. However, the tax advantage of the MPF is not attractive because only the mandatory contribution is subject to a tax allowance. It is even worse for low income earners as most of them are free from tax after deducting the basic allowance, and thus receive no tax allowance at all. Therefore, the

MPFA not only penalises those who fail to make contributions, it offers no incentive for people to make voluntary contribution.

In each scheme, the capital preservation fund (CPF) must be provided to offer a low risk protection for the low income group. It is doubtful whether this economic factor alone is the determinant in making a fund choice decision. For low earners, the cost of taking high risk investment may be low, since they can apply for CSSA. Means-tested social security will not only discourage the low income group to make additional saving, but will also encourage opportunistic behaviour. The retirement benefits reform should incorporate social security reform together as well.

6.2.3 Withdrawal of MPF Benefits

An underdeveloped defined contribution national provident fund provides a basic social security protection in a lump sum payment (Mckinnon et al, 2000). The MPF scheme is only a foundation for saving, but not for generating income after retirement. Scheme members may withdraw lump sum benefits in order to enjoy the freedom of spending. The government has a minimal intervention policy in how benefits are withdrawn. However, it seems to conflict with the rationale of compulsory saving, which takes into account that individuals are self serving (Siu, 2001). In this research, 83 percent of respondents indicated that they would apply for social security, when the benefits are used up. In fact, the lump sum withdrawal method is already abused. Between 2001 and 2004, over HK$19 hundred million MPF benefits were claimed for various reasons. Over 8 hundred million was withdrawn on the grounds of permanent departure from Hong Kong. Scheme members may withdraw the benefit easily, by claiming that they will go to China. They can then return to work in Hong Kong without violating any legislation. It is

a concern that a substantial number of MPF members withdrew their benefit at the same time that this would affect the stability of the financial market. Hence, the existing schemes seem to encourage myopic, morally dubious and opportunistic behaviour to obtain and then spend benefits rapidly in order to apply for social assistance later.

6.2.4 Contribution Rate

As mentioned in the previous chapter, the 10 percent MPF contribution rate is lower than most Asian countries. Individuals may face short term interruptions from work, so extra saving is needed as a complement to avoid lower living standard after retirement (Deaton, 1992). The UK pension group suggested defined contribution scheme members should contribute at least 10 percent of their income for an adequate pension. The top income quintile individuals save more than 10 percent. Based on 'rule of thumb', 15 percent of earning is required to save for a comfortable retirement (Pension Provision Group, 1998). In the MPF, which is only 4 years, older age groups are required to make a higher contribution rate as showed in fig 6.1 (Blake, 1997).

Fig 6.1 Additional voluntary Contribution Rate for different age groups

Contribution needed to achieve a pension of two-thirds final salary

Age Commencement	Required contributions (% of salary)
25	10.90
30	13.41
35	16.81
40	21.66
45	28.92
50	40.81
55	64.15
60	129.83

Assumptions: Male retiring at age 65; no previous contribution into any other pension scheme; salary increase by 3% p.a.; investment return 6% p.a.
Source: Blake (1997)

However, to substantially increase the contribution rate may not be feasible in Hong Kong. People aged about 30 are planning to save for contemporary needs including marriage, home purchases and having children. An increase in the MPF contribution

would be a heavy burden for this age group to bear, and could induce them to take a high interest loan or to defer their family plans (Siu, 2001). These would induce counter effects to retirement protection, since people would delay marriage and the starting of family life. The number of future workers will drop, and dependency ratio will further increase.

With reference to Singapore, the Central Provident Fund (CPF) contribution rate is relative high at 40 percent including mandatory healthcare savings. CPF members can borrow money from the account to buy residential units. However, retirees complain that they are rich in assets but poor in income (Lindeman, 2002). Housing can be part of personal wealth and promote saving and asset accumulation, but it can also be a burden and a negative asset. The property price in Hong Kong dramatically dropped 70 percent from 1997 to 2003. Therefore, encouraging additional voluntary saving is more sensible. Individuals can rely on their own financial abilities and have their own saving plan.

6.2.5 Management Fee

The MPF management fee is not high, ranging between 2 to 3 percent of contribution per year, but a one percent increase of the annual management fee would substantially reduce an amount of accrued benefits by 20 percent after 40 working years (Diamond, 1999). However, the MPFA cannot control the fee. Because of the low MPF profit margins, service providers are keen to acquire a strong client base by merger and acquisition to benefit form subsequent economies of scale and scope. For instance, AIA is allied with Jardine Fleming, and HSBC took over Pacific Century's MPF services (Ho et al., 2004). It is a concern that when only a few providers survive in the market, they could use their oligopoly powers to increase the fees due to MPFA cannot regulate the fee.

6.2.6 Investment Return

Fig 6.2 Annualised Rate of Return of the MPF System Weighted by Net Contributions

	Annualised Rate of Return	**Annualized Composite Consumer Price Index % Change**
1.4.2001 - 31.3.2002	-2.9%	-2.15%
1.4.2002 - 31.3.2003	-12.1%	-2.09%
1.4.2003 - 31.3.2004	19.2%	-2.13%
1.4.2004 - 31.3.2005	4.0%	0.87%
1.4.2001 - 31.3.2005	4.3%	-1.38

This method calculates the rate of return, net of expenses, of the whole MPF System over a particular period by taking into account the timing of contributions into and benefit withdrawals from the System.

Source: MPFA Annual Report (2005)

The MPF investment return fluctuates, as shown in fig. 6.2. In year 2002/03 the annualised rate of return dropped over by 12 percent, and then rose to over 19 percent in the next year 2003/04. If a member retired at the time of the economic downturn, their accrued benefit will be greatly reduced. For instance, the Dutch pension funds achieved high returns in the stock market in the 90s. Employees enjoyed better pension benefits without paying extra contributions. The financial downturn in 2002 resulted in falling in bond yields and thus an increase in liability. The financial buffer was exhausted (Els et al, 2004). Also, fund managers may have moral hazard problem. The MPF contributions are not their money, they would not caution about investment returns. MPF service providers, trustees and fund managers are required to have a sense of corporate governance and social responsibility, but fund management is particularly difficult to police

6.2.7 Capital Preservation Fund

The CPF is mostly invested in low risk products such as short-term Hong Kong Dollar bank deposits and high quality debt security. According to the MPF ordinance, administrative expenses can only be deducted from a CPF when the returns of the fund for the month exceed the monthly savings rate prescribed by the MPFA. However, the saving rate has been at a low level 0.83 percent in 2005 July (Fig 6.3). Under certain circumstance, it is possible that the administrative fee charged will exceed investment return. Hence, the name of CPF is misleading. It does not only guarantee any return, but

may also induce loss. In this research, 43 percent of respondents did not understand that the CPF could suffer loss. The CPF is probably neither attractive nor a hedge against inflation to protect retirement.

Fig 6.3 Capital Preservation Fund Prescribed Saving Rate

Year (Dec)	Prescribed Savings Rate (%)
2000	4.7500
2001	0.3333
2002	0.0100
2003	0.0100
2004	0.0100

Source: MPFA Annual Report (2005)

6.2.8 MPF Investment Knowledge

The poor investment knowledge may not only be caused by a lack of interest, but also by imperfect information. Symmetric information can help to balance the powers between service providers and scheme members. The MPFA has introduced a standardised fee table to facilitate comparison across funds and across schemes, and minimise the use of differing terminology, in order to facilitate understanding of fees and charges. Transparency of fund information has been improved. However, a MPF research found consumers still have difficulty in using information about percentages, compounding and mathematical interpretation of fees and charge (MPFAb, 2004). In this research, 90 percent of respondents also indicated that they did not know how to calculate retirement benefits. The mean score of understanding of MPF funds was 3.15. Though the ways of presenting data are in simple format, scheme members without basic investment knowledge are still having difficult in understanding MPF investment issues.

6.2.9 Minimum Voluntary Contribution Amount

The MPF scheme is a relatively low cost way of saving compared with other unit trusts annual charges range from 1.5 percent to 5 percent (Ho, 1997). Apart from the mandatory 5 percent contribution, scheme members may choose to buy additional voluntary contributions, but there is no tax allowance as an incentive on these voluntary contributions. Some schemes set a minimum contribution. For example, HSBC members must contribute at least HK$300 per month or HK$1,000 as an ad hoc lump sum (HSBC, 2005). The poor may face resource exclusion, as they lack enough disposable income to fulfil the minimum requirement. In addition, most service providers only allow existing scheme members to make a voluntary contribution. The unemployed person is excluded from this service.

6.2.10 Competition

Under the current MPF system, selection of services providers is the responsibility of employers. They have no direct interest in management fees and fund performance, since all MPF contributions are immediately vested to employees. Employers do not have an incentive to change service providers, since it involves complicated administrative procedures in termination of the old scheme, re-registration of all employees and fund transfer to the new scheme; hence there is an actual disincentive for an employer to do this. Not all employees will agree to change service providers, even those who are expected to make losses and affect fund redemption. Hence, scheme members may not benefit from direct competition, and have no direct method of changing an inefficient service provider.

6.3 Recommendation

6.3.1 Financial Inclusion

Lack of trust and understanding are a major barrier to the take up of financial services. People are much more likely to save, when they can see the value of their growing investment. The UK government introduced a Financial Inclusion Taskforce to improve accessible services, affordable products, and also face to face financial advice (Financial Secretary, 2004). The British government uses post offices and banks as delivery channels to reduce access exclusion (FSAa, 2000), but some pensioners who may distrust banks would prefer to collect their pensions from the post office. The MPFA could adopt a similar method to deliver retirement services via the post office and Housing Authority Branches. Specifically, the Hong Kong post office is now assisting in distribution of the CSSA payment, which could facilitate offering retirement services at the same time. Housing Authority Branches are also easily accessible to the low income group in public housing areas. The MPFA can be an independent adviser may address financial literacy, and work to restore trust and confidence in retirement protection.

6.3.2 Retirement Education and Information

In this research, peoples knowledge about MPF and investment issues remains low regardless of their demographic backgrounds. The MPF public education is needed by most people. Education helps consumers to make appropriate choices and to better manage their wealth. Education may be through various means such as brochures, leaflets, seminars and the internet. Bernheim and Garett (1996) found education can affect saving behaviour and increase contribution rates. Improving financial capability may improve the commitment of asset accumulation and saving. The US Employee Benefit Research Institute (2003) found that the value of education to people who took an interest in

planning their own retirement, and found it effective. Non savers needed a simpler message backed up with basic materials. Retirees need to know more about the efficient spending and lump sum retirement benefit, in order to avoid binge spending. A more pro-active action is needed to educate the youngsters in schools or to provide workplace education, so as to prevent financial exclusion being transferred to next generation. Partnerships between government and financial institutions are required to cultivate a saving culture and to improve financial capability.

6.3.3 Investment Knowledge and Information

The defined contribution scheme is self-directed, in which individuals bear investment risk of gain or loss. The asset allocation can make a great difference in retirement income. Usually, high risk investment is associated with high return. People equipped with more financial knowledge are more likely to invest in equities for their pension scheme. Economic theory also suggests that individuals need financial knowledge to choose an optimal portfolio.

According to the MPF ordinance, service providers should issue an annual benefit statement to members. The statement simply provides the contribution amount and investment return within a financial year. Scheme members cannot easily compare the cumulated investment return in total. Further improvement may be effected by clearly stating how much has been contributed since the account was opened, how much administration fee was charged, what is the expected amount which will be received on retirement. These amendments will improve the detailed understanding of the MPF account, and individuals may use their account performance in deciding to save more and to deploy an appropriate portfolio (Guariglia and Markose, 2000).

6.3.4 Risk Knowledge

Retirement investments involve several kinds of risk. Economic conditions cannot be predicted accurately. Economic downturn may greatly reduce the value of benefit by the time of retirement. Scheme members thus bear investment risk from their chosen investment portfolio. In addition, the only way to hedge against the risk of longer life spans will be to reduce benefits. In Japan, the life expectancy for males increase from 67 years old in 1953 to 82 years old in 1990, and the retirement benefit was reduced by 30 percent (Thompson, 1998). Annuities can be a way to hedge against longer life spans, but it is not a common investment vehicle in Hong Kong. In this research, only 38 percent of respondents choose an annuity. However, annuitisation also involves an interest risk. When there is a low real interest rate at the time of retirement, the amount of real annuity will be lower. Scheme members have to increase the portion of long term bonds in the investment portfolio to protect themelves from the risk (Siu, 2001). To assess the above risks, scheme members need professional advice in projection of the saving rate. The MPFA can teach the public to know more about risks, so as to enable employees to find suitable retirement products by themselves. Risk assessment can be done through the MPFA website to enable individuals to know their level of risk.

6.3.5 Lifelong Education

Middle aged people may face employment difficulties. Some of them are forced to retire early due to low education levels and lack of skills (Dohm, 2000). Once workers fall out of the labour market, they will lose the MPF protection. Thus, continuous education and returning is important to maintain these workers in the labour market (Chow et al, 2005). However, the government provides a Continuing Education Fund for those aged up to 60. Basically, MPF members can withdraw MPF benefits at aged 65. There is a gap between

working and retirement ages. Hence, the government should remove the age limit of the Continual Education subsidy in order to encourage unskilled and older workers to remain in the labour market and retirement schemes.

6.3.6 Sufficient Financial instruments

To avoid people taking opportunistic behaviour and withdrawing the lump sum benefits prior to retirement, using the reason of permanent departure, and to avoid the rapid spending of lump sum benefits in order to apply for CSSA. The MPFA may learn from the Chilean pension system where scheme members either purchase an annuity or are required to withdraw a portion of benefits periodically (OECE, 1997). Moreover, retirees need products such as high quality and fixed income vehicles like zero coupon bonds and annuities which pay out during retirement. The high quality bonds and fixed income markets are probably immature in Asia. The personal annuities in Hong Kong is very small, only 247 annuity schemes were taken up in 1998. Annuities are also expensive because of adverse selection, since insurers attempt to screen out bad risks. They are high earns who live longer. Most retirees may be priced out of the annuity market.

Thus HKSAR Government may consider intervention to facilitate the development of annuity and bond market, and thus address the adverse selection problem and pooling the mortality risks (Siu, 2001). The government can issue bonds to reduce default risk. For instance, the US government issued a 30-year Treasury Bond in 2001 in the low interest rate environment (Schich, 2004). In USA, UK and France, there are inflation indexed bonds.

6.3.7 MPF and Social Security Reform

A comprehensive pension system should provide saving, redistribution and insurance. However, MPF is mainly functioning as a saving system without redistribution and insurance effects (Siu, 2001). A carrot and stick approach can be used to encourage people to make voluntary contributions. For the low income group, incentives rather than a tax allowance would be more effective. In the UK, Save Gateway pilots were launched to match savings pound for pound up to 25 pounds per month. Sui (2001) also suggested the government uses a top up approach to provide a top up contributions for the low earners. For instance, those people who are earning less than HK$5,000 per month, and are employees do not pay into the MPF scheme. The government could pay that portion in order to enable every scheme member to have contribution worth 10 percent of income from employers and employees in total. In fact, the top-up contribution is a kind of long term investment rather than expenditure for the future.

To conclude, education and information plays an important role in improving understanding and saving with the MPF. It facilitates financial inclusion, improves knowledge of risk and investment, offering more investment instruments and encouraging life long learning are critical to raise the awareness of MPF, in order to increase the commitment of workers and enable them to value the MPF scheme. Co-operation is required between the MPFA, academics, trustees and consultants in introducing these measures. In future, retirement benefit reform should be incorporated with social security reform in order to offer more incentives for individual saving and to eliminate opportunistic behaviour.

Chapter 7 Conclusion

7.1 Conclusion

In conclusion, understanding of the MPF and investment issues remains at a low level in Hong Kong. This could neither help improve the saving habit nor better planning for retirement. Current saving and level of voluntary contribution is probably below an adequate level. Age, having children and home ownership are the most influential factors causing people to save for retirement. People in Hong Kong look forward to retiring early. They wish to take personal responsibility. If individuals cannot be self-reliant, they will ultimately rely on social security. Hence, government responsibility for the aged is inevitable.

In dealing with the demographic challenges, the MPF is only a basic retirement saving system, helping to shift the burden of retirement protection towards the individual. HKSAR government does not regard it as its duty to ensure individuals have adequate savings for retirement. Instead it acts as a regulator to maintain a simple and transparent market in pension products, in order to develop more simple, risk-controlled and low cost products.

In addition, the MPF does not any guarantee investment returns or does not offer annuitisation, redistribution or insurance. If Scheme members hope to have comprehensive retirement protection, they should purchase insurance or increase their contribution rate. Saving has become part of investment through retirement schemes. Institutionalised saving facilities a more liquid and efficient financial market. In future, investment companies, banks and insurers will play a critical role in promoting retirement benefit.

Finally, increase of the mandatory rate may not be feasible, as it may not be affordable for the younger age group. The CSSA provides a safety net for vulnerable people and the means tested old age programmes provide a disincentive and encourage opportunistic behaviour by the low earners. In the long run, the government requires to develop cooperate responsibility with employers, financial institutions and individuals, and to conduct a comprehensive funding reform incorporated with both the MPF and old-age schemes.

7.2 Limitation and Direction of Future Research

In this research, questionnaires were distributed through companies. Respondents are therefore employees, with no involvement from any self employed person, exempted persons or housewives. All the participants were aged below 60 years, since they have only been in the scheme a short time they have few accrued benefit. The older age group are not motivated to participate. Further research can be targeted on the low income and excluded groups to investigate how to improve the coverage of the scheme.

Saving and pensions are complicated issues interlinked with economics, social and political aspects. It is unlikely that the old age problem would be solved by any one of these disciplines. Because of limited time and resources, this research only focuses on quantitative methods. A more exploratory and in depth investigation would give greater insight. A mixture of qualitative and qualitative research could be conducted in future by asking respondents reasons and barriers for retirement savings. The level of risk, trust and security which may affect saving orientation can be further evaluated.

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Appendix 1

List of Approved Trustees

American International Assurance Company (Trustee) Limited

AXA China Region Trustees Limited

Bank Consortium Trust Company Limited

Bank of Communications Trustee Limited

Bank of East Asia (Trustees) Limited

BOCI-Prudential Trustee Limited

China Life Trustees Limited

Cititrust Limited

CMG Asia Trustee Company Limited

Dexiz Trust Services Hong Kong Limited

HSBC Institutional Trust Services (Asia) Limited

HSBC Provident Fund Trustee (Hong Kong) Limited

ING Pension Trust Limited

Manulife Provident Funds Trust Company Limited

Massmutual Trustees Limited

MLC Trustees (Hong Kong) Limited

Pacific Century Trustees Limited

Principal Trust Company (Asia) Limited

Royal Bank of Canada Trust Company (Asia) Limited

Source: Mandatory Provident Fund Schemes Authority Annual Report 2004-05

Appendix 2

MPF Schemes and Constituent Funds

MPF SCHEME	UNDERLYING CONSTITUENT FUNDS
AIA-JF Comprehensive Capital Retirement Benefit MPF Scheme	Preservation Portfolio Guaranteed Portfolio
AIA-JF Mandatory Provident Fund Scheme	Asian Equity Fund Fund Scheme Balanced Portfolio Capital Preservation Portfolio Conservative Portfolio European Equity Fund Greater China Equity Fund Growth Portfolio Guaranteed Portfolio Hong Kong Equity Fund Japan Equity Fund North American Equity Fund
Bank Consortium Industry Plan	BCT Asian Equity Fund BCT Balanced Fund BCT Capital Preservation Fund BCT Global Bond Fund BCT Global Equity Fund BCT Growth Fund BCT Hong Kong Equity Fund BCT Stable Fund
Bank Consortium MPF Plan	Bank Consortium Asian Equity Fund Bank Consortium Balanced Fund Bank Consortium Capital Preservation Fund Bank Consortium Global Bond Fund Bank Consortium Global Equity Fund Bank Consortium Growth Fund Bank Consortium Hong Kong Equity Fund Bank Consortium Stable Fund
BCOM Joyful Retirement MPF Scheme	BCOM Guaranteed (CF) Fund MPF Scheme BCOM Joyful Capital Preservation (CF) Fund
BCOM Prosperous Retirement BCOM Balanced (CF) Fund MPF Scheme	BCOM Balanced (CF) Fund MPF Scheme BCOM Prosperous Capital Preservation (CF) Fund BCOM Stable Growth (CF) Fund
BEA (MPF) Industry Scheme	BEA (Industry Scheme) Balanced Fund BEA (Industry Scheme) Capital Preservation Fund BEA (Industry Scheme) Growth Fund BEA (Industry Scheme) Stable Fund
BEA (MPF) Master Trust Scheme	BEA (MPF) Balanced Fund BEA (MPF) Capital Preservation Fund BEA (MPF) Growth Fund BEA (MPF) Long Term Guaranteed Fund BEA (MPF) Stable Fund

MPF SCHEME	UNDERLYING CONSTITUENT FUNDS
BOC-Prudential Easy-Choice Mandatory Provident Fund Scheme	BOC-Prudential Balanced Fund BOC-Prudential Bond Fund BOC-Prudential Capital Preservation BOC-Prudential Global Equity Fund BOC-Prudential Growth Fund BOC-Prudential Hong Kong Equity BOC-Prudential Stable Fund
China Life MPF Master Trust Scheme	China Life Balanced Fund Trust Scheme China Life Capital Preservation Fund China Life Growth Fund China Life Guaranteed Return Fund
CMG Rainbow 65	CMG Balanced Portfolio Fund CMG Capital Preservation Fund CMG Fixed Income Fund CMG Hong Kong Equity Fund CMG Progressive Growth Fund CMG Stable Income Fund
Double Easy Mandatory Provident Fund	Double Easy Balanced Fund Double Easy Capital Preservation Fund Double Easy Cash Fund Double Easy Growth Fund Double Easy Guaranteed Fund Double Easy Stable Fund Double Easy Top Select Fund
Dresdner RCM MPF Master Trust	Balanced Fund Capital Preservation Fund Capital Stable Fund Growth Fund Stable Growth Fund
Dresdner RCM MPF Plan	Absolute Return Fund Asian Fund Balanced Fund Capital Preservation Fund Capital Stable Fund Growth Fund Hong Kong Fund Stable Growth Fund
Eagle Star MPF Scheme - Advance Planner	Eagle Star Accumulation Fund Eagle Star Capital Preservation Fund Eagle Star Global Growth Fund Eagle Star Guarantee Fund Eagle Star HK Dollar Savings Fund
Eagle Star MPF Scheme –Security Planner	Eagle Star Capital Preservation Fund Eagle Star Guarantee Fund Eagle Star HK Dollar Savings Fund
Elite Mandatory Provident Fund	Capital Preservation Fund Multi-Manager Balanced Fund Multi-Manager Growth Fund Multi-Manager Hong Kong Equity Fund Multi-Manager Stable Fund

MPF SCHEME	UNDERLYING CONSTITUENT FUNDS
Fidelity Retirement Master Trust	Balanced Fund Capital Preservation Fund Capital Stable Fund Global Equity Fund Growth Fund Hong Kong Bond Fund Hong Kong Equity Fund Stable Growth Fund World Bond Fund
Hang Seng Mandatory Provident Fund – SuperTrust	Balanced Fund Capital Preservation Fund Growth Fund Guaranteed Fund Hang Seng Index Tracking Fund
Hang Seng Mandatory Provident Fund – SuperTrust Plus	Asian Equity Fund Balanced Fund Capital Preservation Fund European Equity Fund Growth Fund Guaranteed Fund Hang Seng Index Tracking Fund Hong Kong Equity Fund North American Equity Fund Stable Growth Fund
HSBC Mandatory Provident Fund – SuperTrust	Balanced Fund Capital Preservation Fund Growth Fund Guaranteed Fund Hang Seng Index Tracking Fund
HSBC Mandatory Provident Fund – SuperTrust Plus	Asian Equity Fund Capital Preservation Fund European Equity Fund Growth Fund Guaranteed Fund Hang Seng Index Tracking Fund Hong Kong Equity Fund North American Equity Fund Stable Growth Fund
ING MPF Master Trust Basic Scheme	ING MPF Balanced Growth Basic Scheme Basic Portfolio ING MPF Basic Scheme Capital Guaranteed Portfolio ING MPF Basic Scheme Capital Preservation Portfolio ING MPF Basic Scheme Hong Kong Equity Portfolio ING MPF Basic Scheme International Equity Portfolio ING MPF Basic Scheme Stable Growth Portfolio
ING MPF Master Trust ING Comprehensive Scheme	ING MPF Comprehensive Scheme Asian Equity Portfolio ING MPF Comprehensive Scheme Balanced Growth Portfolio ING MPF Comprehensive Scheme Capital Guaranteed Portfolio ING MPF Comprehensive Scheme Capital Preservation Portfolio ING MPF Comprehensive Scheme Growth Portfolio

	ING MPF Comprehensive Scheme Hong Kong Equity Portfolio ING MPF Comprehensive Scheme International Equity Portfolio ING MPF Comprehensive Scheme Stable Growth Portfolio ING MPF Comprehensive Scheme Stable Portfolio
INVESCO Strategic MPF Scheme	Balanced Fund Capital Preservation Fund Capital Stable Fund Global Bond Fund Growth Fund Guaranteed Fund Hong Kong Equity Fund
Jones Lang LaSalle Property Management Division Mandatory Provident Fund Scheme	Jones Lang LaSalle Capital Preservation Fund Jones Lang LaSalle Guarantee Fund
Kingsway MPF Master Trust	Kingsway Asia Pacific (excluding HK) Fund Kingsway Capital Preservation Fund Kingsway Global Diversification Fund Kingsway Hong Kong SAR Fund Kingsway Korea Fund
Manager Elite Master Trust	AXA Balanced Fund BNP Capital Preservation Fund Dresdner RCM Balanced Fund Fidelity Balanced Fund INVESCO Balanced Fund Managed Capital Stable Fund Managed Growth Fund Managed Stable Growth Fund Schroder Balanced Fund
Manulife Global Select (MPF) Scheme	Manulife MPF Aggressive Fund Manulife MPF Capital Preservation Fund Manulife MPF European Equity Fund Manulife MPF Fidelity Growth Fund Manulife MPF Fidelity Stable Growth Fund Manulife MPF Growth Fund Manulife MPF Hong Kong Bond Fund Manulife MPF Hong Kong Equity Fund Manulife MPF Interest Fund Manulife MPF International Bond Fund Manulife MPF International Equity Fund Manulife MPF Japan Equity Fund Manulife MPF North American Equity Fund Manulife MPF Pacific Asia Equity Fund Manulife MPF Stable Fund
Manu-Lifestyle (MPF) Scheme	Manulife MPF Aggressive Fund Manulife MPF Capital Preservation Fund Manulife MPF Growth Fund Manulife MPF Interest Fund Manulife MPF Stable Fund

MPF SCHEME	UNDERLYING CONSTITUENT FUNDS
Mass Mandatory Provident Fund Scheme	Asian Balanced Fund Capital Preservation Fund Global Bond Fund Global Equity Fund Global Growth Fund Global Stable Fund Guaranteed Growth Fund
MLC MPF Master Trust Scheme	Templeton Global Equity Fund Balanced Fund Capital Preservation Fund Growth Fund
New-Alliance Mandatory Capital Growth Fund Provident Fund Scheme	Capital Growth Fund Capital Preservation Fund Global Balanced Fund Income Fund
PCI Master Trust MPF Scheme	PCI Capital Preservation Fund PCI Fixed Income Fund PCI Global Balanced Fund PCI Hong Kong Fund
Principal MPF Scheme Series 200	Principal Capital Preservation Fund Principal HK Dollar Savings Fund Principal Long Term Guaranteed Fund
Principal MPF Scheme Series 500	Aggressive Growth Fund Balanced Growth Fund Capital Preservation Fund Guaranteed Fund Stable Growth Fund
Principal MPF Scheme Series 600	Principal Capital Preservation Fund Principal Global Growth Fund Principal HK Dollar Savings Fund Principal Long Term Accumulation Fund Principal Long Term Guaranteed Fund
Principal MPF Scheme Series 800	Principal Asian Equity Fund Principal Capital Guaranteed Fund Principal Capital Preservation Fund Principal Global Growth Fund Principal HK Dollar Savings Fund Principal International Bond Fund Principal International Equity Fund Principal Long Term Accumulation Fund Principal Long Term Guaranteed Fund Principal Stable Yield Fund Principal US Dollar Savings Fund Principal US Equity Fund
Principal MPF Scheme Series B300	Principal Balanced Fund Principal Capital Preservation Fund Principal Conservative Fund Principal Growth Fund Principal International Bond Fund Principal Long Term Guaranteed Fund Principal U.S. Equity Fund

MPF SCHEME	UNDERLYING CONSTITUENT FUNDS
Schroder MPF Master Trust	Schroder MPF Asian Portfolio Schroder MPF Balanced Investment Portfolio Schroder MPF Capital Guaranteed Portfolio Schroder MPF Capital Preservation Portfolio Schroder MPF Capital Stable Portfolio Schroder MPF Growth Portfolio Schroder MPF HK Dollar Fixed Income Portfolio Schroder MPF Hong Kong Portfolio Schroder MPF International Portfolio Schroder MPF Stable Growth Portfolio
SHKP MPF Sponsored Scheme	Dresdner Stable Growth Fund Fidelity Balanced Fund Fidelity Stable Growth Fund HSBC Capital Stable Fund New-Alliance Global Balanced Fund SHKP MPF Fund Standard Chartered Capital Preservation Fund – SHKP Standard Chartered Career Average Guaranteed Fund – SHKP
Standard Chartered MPF Plan – Advanced	Citi Balanced Fund Citi Conservative Fund Citi Hong Kong Equities Fund Dresdner RCM Balanced Fund Dresdner RCM Capital Stable Fund Dresdner RCM Growth Fund Fidelity Global Investment Fund – Balanced Fund Fidelity Global Investment Fund – Capital Stable Fund Fidelity Global Investment Fund – Growth Fund HSBC MPF “A” – Balanced Fund HSBC MPF “A” – Hong Kong Equity Fund HSBC MPF “A” – Stable Fund INVESCO Global Balanced Fund INVESCO Global Equities Fund INVESCO MPF Bond Fund Merrill Lynch Strategy Trust – Flexible Balanced Fund Merrill Lynch Strategy Trust – Flexible BondPlus Fund Merrill Lynch Strategy Trust – Flexible EquityPlus Fund Schroder MPF Asian Fund Schroder MPF Balanced Investment Fund Schroder MPF HK Dollar Fixed Income Fund Standard Chartered Balanced Fund – Advanced Standard Chartered Capital Preservation Fund – Advanced Standard Chartered Career Average Guaranteed Fund – Advanced Standard Chartered Growth Fund – Advanced Standard Chartered Stable Fund – Advanced Templeton MPF Asian Balanced Fund Templeton MPF Global Bond Fund Templeton MPF Global Equity Fun

MPF SCHEME	UNDERLYING CONSTITUENT FUNDS
Standard Chartered MPF Plan –Basic	Standard Chartered Balanced Fund – Basic Standard Chartered Capital Preservation Fund – Basic Standard Chartered Career Average Guaranteed Fund – Basic Standard Chartered Growth Fund – Basic Standard Chartered Stable Fund – Basic
Tai Ping Retire-Easy MPF Master Trust Scheme	Tai Ping Retire-Easy Balanced Fund Tai Ping Retire-Easy Capital Preservation Fund Tai Ping Retire-Easy Capital Stable Fund Tai Ping Retire-Easy Growth Fund Tai Ping Retire-Easy Guarantee Fund
Zurich-Chinese Bank MPF Scheme – Premier	Zurich-Chinese Bank Capital Preservation Fund Zurich-Chinese Bank Guarantee Fund Zurich-Chinese Bank HK Dollar Savings Fund
Zurich-Chinese Bank MPF Scheme – PremierDELUXE	Zurich-Chinese Bank Accumulation Fund Zurich-Chinese Bank Asian Equity Fund Zurich-Chinese Bank Capital Guarantee Fund Zurich-Chinese Bank Capital Preservation Fund Zurich-Chinese Bank Global Growth Fund Zurich-Chinese Bank Guarantee Fund Zurich-Chinese Bank HK Dollar Savings Fund Zurich-Chinese Bank International Bond Fund Zurich-Chinese Bank International Equity Zurich-Chinese Bank Stable Yield Fund Zurich-Chinese Bank US Dollar Savings Fund Zurich-Chinese Bank US Equity Fund

Source: Gadbury J., Taylor A., Watkin J. *(2004) Pensions and Retirement Funds in Hong Kong*, Hong Kong, ISI publication

Appendix 3
MPF Questionnaire

Mandatory Provident Fund (MPF)

Please CIRCLE the appropriate answers

Expectation about MPF	Strongly Agree				Strongly Disagree
1.MPF is adequate to protect a comfortable retirement life	5	4	3	2	1
2 MPF should be extended to cover all the population (including e.g. domestic helpers, hawkers, housewives).	5	4	3	2	1

3 Do you expect your retirement income to be higher / lower / same as the final salary? Higher ☐ Same ☐ Lower ☐

4 Do you expect the MPF contribution rate will increase 10 years in future? Yes ☐ No ☐

5 Do you expect people aged over 65 will continue MPF contribution? Yes ☐ No ☐

6 Have you ever attended any MPF seminars/ talks? Yes ☐ No ☐

7 Have you ever calculated how much you need to save for retirement? Yes ☐ No ☐

8 Do you know the amount of MPF accrual benefit will be accumulated when you retired? Yes ☐ No ☐

Saving Behaviour

9 Did you save before MPF came in? Yes ☐ No ☐

10 When MPF came in, have you saved less / the same/ more? Less ☐ Same ☐ More ☐

11 Have you yourself made any additional voluntary contributions towards your MPF account? Yes ☐ No ☐

12 How much do you save a month for retirement? HK$ ☐ / month

Please CIRCLE the appropriate answers **Saving Behaviour**	Strongly Agree				Strongly Disagree
13 Most of my saving is for the short-term, not for retirement	5	4	3	2	1
14 Personal savings is needed to supplement MPF	5	4	3	2	1
15 I am confident to save enough money for a comfortable retirement life.	5	4	3	2	1

Investment

16 Which is the main information source you consult on MPF investment?

a. Banks	b. Insurance / brokers	Ans: ☐
c. Employers	d. Media (TV, newspaper)	
e. MPFA	f. Internet	
g. Friends	h. Never Consult	

17 Have you ever invested in stock market? Yes ☐ No ☐

18 Will Capital preservation fund suffer loss? Yes ☐ No ☐

Please CIRCLE the appropriate answers **Interest and preference regarding MPF**	Strongly Agree				Strongly Disagree
19 I understand the differences among different kinds MPF funds	5	4	3	2	1
20 I have received clear and easy understanding MPF related information and advice	5	4	3	2	1
21 Investing in stock is risky	5	4	3	2	1

Retirement Attitude

22 What's your expected retirement age? ☐ Year old

23 Do you expect your retirement benefit will be in lump sum or annuity? Lump Sum ☐ Annuity ☐

24 Do you expect your children will provide financial support towards your retirement? Yes ☐ No ☐

25 If you use up retirement benefits, will you apply for social security from the government? Yes ☐ No ☐

26 Which one of the following has the greatest responsibility for retirement?

a. Myself b. Family Ans: [ ] / others [ ]

c. Employer d. Government

27 What is the maximum amount of MPF contribution per month according to MPF ordinance? Max HK$ [ ] /Month

28 What is the normal retirement age to claim MPF? [ ] Years old

Personal Information

29 Gender Male ☐ Female ☐

30 Age < 20 ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ 60 > ☐

31 Income <$20,000 ☐ $20,000- $39,999 ☐ >$40,000 ☐

32 Education qualification Below Primary ☐ Primary ☐ Secondary ☐ Tertiary/ University or above ☐

33 Marital Status Single ☐ Married ☐

34 Children Have ☐ Don't have ☐

35 Home owners Yes ☐ No ☐