

PENSIONS IN THE CHINESE COMMUNITY

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Abstract

This thesis investigates and compares the development and characteristics of the pension systems in China, Hong Kong, Singapore and Taiwan. It uses a policy index to compare the inputs of these four pension systems as well as their social outputs.

The thesis starts by reviewing the ancient Chinese welfare and political ideologies and practices and the Western welfare ideologies and regimes to discover the core values behind the Chinese Community pensions. Four country case studies examine the development and performance of these state pension schemes in the context of the family support system and demographic trends. They explore the sustainability of pension provisions, the adequacy of public pensions, personal and private sources of retirement income. The problems of these four pension provisions are thus revealed. The policy index constructed through the radar chart and Surface Measure of Overall Performance (SMOP) approaches is used to compare the performances of these four pension systems on policy inputs and social outputs.

The conclusion of the research is that Confucianism and capitalism integrate into a new paternalism through the patriarchal values they share and which dominate the Chinese Community nowadays. But the features of these four pension systems vary due to the different political, historical, economic and social contexts of each state. The findings show that none of these pension provisions can effectively prevent elderly people from poverty in old age. They all rely on personal social security responsibility and the continuation of the family support system. This thesis concludes that all these states lack a needs-based basic pension system to secure retirees' income level.

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Declaration

I declare that this thesis originated from and was composed by myself. The work contained herein is my own except the parts cited from others' works and specifically stated in the text. In addition, this work has never been submitted for any other degree or professional qualification.

Chapter One Introduction

This thesis aims to compare the pension systems in the Chinese Community states and answer the following questions:

- Does the World Bank's report of 1994 drive the direction of pension reforms in the Chinese Community states?
- Is there an ideology shared by the Chinese Community states that influences the processes of pension policy-making? If so what is its essence?
- How, and to what extent, do these core values influence the development of pension provision in the context of the economic, social and political circumstances at different time points?
- To what extent do the pension provisions in the Chinese Community reduce old-age poverty and secure retirees' income at a specific standard of living?
- How do the Chinese Community pensions compare to each other?

The "Chinese Community" in this thesis refers to the states that have the Chinese/Han language (or Mandarin/Pekingese) as one of the main official languages and are greatly influenced by Confucianism. The reasons for applying both these criterion are, on the one hand, the countries that are affected by Confucianism not only include China, Hong Kong, Singapore and Taiwan but also Japan, Korea, Macau, Vietnam and even a part of Malaysia. On the other hand, it would not be accurate to define the people in Hong Kong, Singapore and Taiwan as Chinese in ethnic terms because, in fact, Singaporeans and Taiwanese might not agree that they are Chinese and indeed Chris Patten (1998), the last Governor of Hong Kong, called the people as Hong Kongers instead of Chinese. In addition, Hong Kong will be called a state or country due to, on the one hand, it not being too verbose (e.g. three countries and one region) and, on the other hand, beyond the political concern, it certainly operates a different pension system from China, despite the fact that Hong Kong has been a special administration region (SAR) of the People's Republic of China (China) since mid-1997 (Holliday 2003).

Why should one want to do a thesis evaluating and comparing the pensions in the Chinese Community states? There are two main reasons: first is the demographic

situation in these countries. Second, as this thesis will show, the policies developed so far to meet the needs of an ageing population are neither adequate nor sustainable.

Demographic Ageing

The proportion of elderly people to the whole population in oriental countries is predicted to grow faster than some Western industrialised countries as demonstrated in Table 1.1. It shows that the ageing people in the five selected Western countries constitute from 12.5% to 18.9% of the national population in 2005 and will go up to between 20.3% and 34.8% in 2050. While the picture in the East illustrates that the ratio of old age population will increase significantly from less than or around 10% in 2005 to more than 35% in 2050. Although the growth in China (from 7.7% to 26.8%) and Japan (from 19.8% to 37.7%) seems not as sharp as the four Tigers (i.e. Hong Kong, Korea, Singapore and Taiwan) between 2005 and 2050, China will be challenged by having the largest elderly population in the world (349.5 million¹) and Japan has to face the problem that 37.7% of people are in old age in 2050.

	East						West				
	CH	HK	JAP	KOR	SIN	TWN	GER	SP	SWE	UK	US
2005	7.7	12.7	19.8	9.2	8.1	9.8	18.9	17.6	17.4	15.8	12.5
2025	14.3	24.1	29.4	19.7	19.6	19.1	24.7	22.8	23.2	20.5	17.9
2050	26.8	39.7	37.7	36.2	37.4	34.7	30.3	34.8	26.0	25.9	20.3

Note and Source: The numbers are calculated from the statistics provided by the International Data Base (IDB) of the US Census Bureau (<http://www.census.gov/ipc/www/idb/>) [accessed: 19.05.10]. The old age population is defined as people attain sixty-five years old and over. All the numbers are in percentages and rounded up.

It is also likely that dependency ratio will deteriorate markedly in the East. The ratio here is defined as “economically active people divided by ageing population” to express the number of gainful people to take care of one elderly person. Table 1.2 illustrates a clear trend that the dependency ratio in the West decreases from between 3.5 and 5.4 working people to support one elderly person in 2005 to between 1.5 and 3.0 in 2050; while in the East the dependency ratio drops from between 5.8 to 9.4 in 2005 to between 1.1 and 2.2 in 2050. It deserves to be noted that the level of dependency ratio was around double that in the West in 2005, but it is projected to be lower than the Western industrialised states in 2050. Because dependency ratio takes the changes of fertility rate and life expectancy into account, they show that the problem of the replacement of working population in the East may become severe.

¹ The number is calculated from IDB’s data and is rounded up.

Although Japan's dependency ratio was close to the West in 2005, it falls more than the Western counterparts and becomes 1.1 active people to one elderly person.

Table 1.2 Dependency Ratio in the East and West, 2005, 2025 and 2050											
	East						West				
	CH	HK	JAP	KOR	SIN	TWN	GER	SP	SWE	UK	US
2005	9.3	5.8	3.4	7.8	9.4	7.3	3.5	3.9	3.8	4.2	5.4
2025	4.8	2.7	2.0	3.5	3.5	3.6	2.5	2.8	2.6	3.1	3.5
2050	2.2	1.3	1.1	1.5	1.4	1.6	1.9	1.5	2.3	2.3	3.0

Note and Source: The numbers are calculated from the statistics provided by the International Data Base (IDB) of the US Census Bureau (<http://www.census.gov/ipc/www/idb/>) [accessed: 19.05.10]. The dependency ratio is defined as economically active population (15-64) divided by elderly population (65+). All the numbers are in percentages and rounded up.

Pension² Reform

The World Bank (1994) praised the privatisation of the pension system in Chile in the early 1980s and promoted this idea to the rest of the world, as it claimed, in order to solve the problems such as deterioration of dependency ratio, population ageing, insufficiency of benefit level and vulnerability of pension finance. In East Asia, the reforms ranged from non-privatisation, e.g. Korea (Kwon 2002: 29-30), partial privatisation, e.g. China (Williamson and Deitelbaum 2005: 263), Japan (Katagiri 2002: 114) and Taiwan (Kuo, et al. 2005), to fully privatisation, e.g. Hong Kong (Mok 2000). An interesting similarity is observed in that the privatisation adapted to China (individual account scheme; IA), Hong Kong (Mandatory Provident Fund; MPF) and Taiwan (Labour Pension scheme; LP) from mid-1990s were all statutory and centrally-managed savings schemes that to some extent resembled Singapore's Central Provident Fund (CPF) established in mid-1950s. The CPF system is a compulsory savings scheme that collects contributions from employers and employees. Participants' accounts and records as well as the funds are centrally managed and controlled by a governmental organisation. The CPF members can withdraw the deposits before retirement for approved means such as managing investments, paying tuition fees, purchasing medical and annuity insurances, and topping up family members' retirement accounts. Despite the similarity in the centralisation of pension fund management, the policy designs are, more or less, different (e.g. in China, Hong Kong and Taiwan, the pre-mature withdrawal of

² The pensions systems that will be analysed in this thesis will exclude the schemes covering civil servants, servicemen, faculty members and minority groups in terms of the total number of the working population but mainly focus on the provisions for labourers and the non-working population. It is true that, for instance, the governmental employees in Taiwan enjoy a much better pension programme than other social classes and Hong Kong also provides a separate pension system for civil servants. So, governmental employees are not considered in this research.

deposits is not allowed and the savings are for retirement payments only). This corresponds to Gough's (2000: 20) arguments that even if these four countries share similar backgrounds, their policy designs are not necessarily the same because subtle differences in social, economic and political settings may dominate social policy-making processes. With regard to the pension reforms in Asian Pacific Rim states, Béland (2005: 173) debates that the privatisation may be inspired by the World Bank's report of 1994, and these countries may become guinea pigs for this policy proposition especially as it is not implemented in the USA. While Kuo (2009) argues that there may be something driving the policy transfer or learning process among them rather than simply applying similar strategies by chance.

The establishment of provident-fund-like pension schemes in the Chinese Community indicates the fact that there may be an ideology generally possessed by these four countries that leads the development of social policy and pension provisions. But, why did it occur in the 1990s and 2000s rather than earlier or later? It might have been triggered by the World Bank's promotion of privatisation and the governments sensed the irreversibility of demographic trends. However, the comparison of the World Bank (1994) and Chinese Community's privatisations illustrates that these two ways may be essentially different. The World Bank's method is to fully privatise pension provisions. That is, to establish individual retirement accounts in approved privately-run financial institutes according to participants' choices and the choices are normally based on, for instance, the quality of services, return rate of investments and administration costs. The Chinese Community's version is to centrally manage individual retirement accounts by a governmental organisation and to operate the funds through financial and capital markets or the government's mandates.

It is possible that the ideology leading the introduction of provident-fund-like pension provisions does not suddenly come and go. Rather, it, as if the soul of the Chinese Community, may already exist in these societies for a long time and command the ways to achieve a specific goal under a specific combination of economic, social and political situations. Thus, this thesis intends to find out the nature of the ideology shared by the Chinese Community states, and the way it dominates the development of pension provisions along with the changes of economic, social and political settings in respective societies. Besides, it attempts to investigate whether these pension systems can fulfil the main aim: reduction of old-age poverty. Case studies and comparative evaluations will be performed in order to understand, compare and assess the performance of these pension systems and its social outputs.

The Methods for Comparative Evaluation

The comparative evaluation in this thesis can be divided into two parts. They not only qualitatively examine Chinese Community states' development of pension provisions in order to trace the core value of the political and welfare ideology, but also apply both qualitative and quantitative methods to build up a policy index.

The first section of comparative studies of this thesis is constituted by case studies which provide a yardstick to understand how well these Chinese Community states are doing in pension provisions respectively. The first half of the case studies will apply the micro comparative framework suggested by May (2003) which helps thoroughly comprehend these pension systems in terms of: 1) the extent and nature of the "need" and/or "problem" in each society; 2) the overall retirement payment context; 3) the range of provision; 4) the aims of retirement payments; 5) policy-making processes; 6) their origins and development over time; 7) entitlement criteria; 8) the provider structure (statutory/non-statutory); 9) the resource structure; 10) the administrative structure; 11) allocation processes; 12) the regulatory processes; 13) the efficacy of current provision; 14) pressures for change; 15) policy proposals. The second half of case studies will focus on the abovementioned inputs and outputs of pension provisions, and the results will be the basis for establishing policy index in the comparative research of this thesis.

The second part of the comparative study in this thesis consists of an index system for measuring the performance of pension systems, which is established by the radar chart and Surface Measure of Overall Performance (SMOP) approaches. The radar chart method is capable of converting both qualitative and quantitative information into standardised statistics (e.g. between zero and one) and demonstrating the results on a radar chart to depict the strengths and weaknesses of a pension system on selected policy dimensions. The SMOP method is then introduced to calculate the area obtained by a pension system on the radar chart. Two league tables of the performance of Chinese Community states' pension systems based on the radar chart and SMOP scores are thus established. In this way, the performance of input and output indicators of a pension system can be standardised and digitised and the policy index can be organised. Furthermore, the advantages and disadvantages of the inputs and outputs of pension provisions in these four Chinese Community states can therefore be compared. The radar chart and SMOP approaches as well as the definition of the input and output factors of pension systems will be detailed in this thesis. The British pension system will be applied in this comparative evaluation as the control group because there is lack of a widely-agreed standard for understanding the performance

of Chinese Community's pension provisions. The reasons for choosing the UK will be elaborated in the methodology chapter of this thesis.

The statistics for the case studies and comparative evaluations are derived from national statistics (i.e. Ministry of Civil Affairs and National Bureau of Statistics of China; MPF Authority and Census and Statistics Department of Hong Kong; Singapore Department of Statistics and CPF Board of Singapore; Directorate- General of Budget, Accounting and Statistics, Council of Labour Affairs, Bureau of Labour Insurance and Ministry of Interior of Taiwan; and Department for Work and Pensions and National Audit Office of Britain) as well as scholarly research due to the inconsistency of the governments' emphases on statistics, the information they are willing to reveal, and the content and form of a specific item of statistics in these countries. For these reasons, panel data for most of the selected indicators are not available. When these issues occur, this thesis may have to pick the second best information to manage the comparison. For example, because the details about income components are unavailable or inaccessible in China, Hong Kong and Singapore, relevant academic studies will be adapted to the evaluation for these three countries. Moreover, for instance, the replacement rates of pension benefits are estimated for all these systems because the replacement rate is not officially defined as well as age-specified income and age-specified account balance for savings pension plans are unavailable. Nevertheless, the thorough review of the case studies helps comprehend these systems and minimise the biases due to the assumptions given by this thesis. This will be elaborated in the methodology chapter.

Thesis Outline

Chapter Two will partly answer the first two questions of this thesis. This chapter reviews the ancient Chinese welfare ideologies, contemporary Western welfare ideologies, research into welfare state typologies in the East and West, pension reforms and relevant debates. Besides, the welfare ideologies in the West will be reviewed because it may help find out the core value of the Eastern political and welfare ideology through contrasting the differences between East and West.

The four case studies of Taiwan, Hong Kong, Singapore and China in Chapter Three through Six can each be divided into two parts per chapter: historical and analytical. These chapters start from the historical accounts of the development of pension systems in order to understand how the core value of the political and welfare ideology affects the development of pension provisions in each society. The historical reviews of these case studies help the thesis answer the first three questions, which

focus on the factors that drive the development of pension provisions in these countries. Moreover, some evaluations by reviewing the statistics about income components, demographic trends, pension payments and poverty reduction in these countries will be shown in the latter half of each case study chapter. The analytical part of these chapters helps respond to the fourth question that emphasises the performance of each pension system.

Chapter Seven introduces the operation of the radar chart and SMOP approaches in detail, discusses the division of input and output indicators, which will be used in the evaluations of Chapter Eight and Nine, and the weaknesses of the methodology of assessment. The radar chart and SMOP methods enable this thesis to answer the fifth question that stresses managing a comparative study of these four pension systems as well as the similarities and differences between them by establishing pension policy indices. The division of input and output factors, suggested by Atkinson and his co-workers (Atkinson 2004; Atkinson, et al. 2002), not only facilitates this research to build up two sets of policy indices to measure the inputs and outputs of pension policy, but also helps this study look deeper into whether, and to what extent, the institutional settings help fulfil the general goal of pension provisions in these four Chinese Community states.

Chapter Eight and Nine also aim at answering the fifth question of this thesis with the assistance of radar chart and SMOP approaches. Chapter Eight investigates the performance of the inputs of pension systems in these four Asian states including: arrangement of pension system; mechanism of indexation and status of vested rights; ratio of pensioners to ageing population; ratio of contributors to employed population; system dependency ratio; and two aspects of administrative costs. Chapter Nine examines the social outputs of the pension systems in these four Asian societies containing: poverty reduction; family solidarity; gender inequality; redistributiveness of the pensions; public and private social expenditures to the scale of GDP; and evasion of social security obligations. The UK's pension system is taken as the control of the analyses. The reasons for choosing Britain's pension system will be elaborated in Chapter Eight.

The conclusion, Chapter Ten, will explore whether there is a core value that drives the pension policy-process in these four Chinese Community states, and to what extent these countries are influenced by it. Besides, the propositions for further reforms that aim at strengthening the current pension systems and improving the adequacy of benefit payment will be discussed.

Chapter Two Review of Ideas and Typologies of Welfare State and Comparative Pension Studies

This chapter attempts to answer two main questions of the thesis: whether or not the World Bank (1994) has influenced the pension reforms in the Chinese Community states? And, is there any ideology possessed by these countries that dominates the pension policy-making? If so, what is its essence? For this sake, this chapter is going to discuss the ancient Chinese political and welfare ideologies, the development of pension policies in ancient China, Western welfare thought, and the welfare regimes in the East and West in this order.

The logic here is: if the pattern of policy-making in these four Chinese Community states persisted for a long period of time before the propositions of the World Bank's report, then the report may have simply brought about the discussions of privatisation in these countries rather than playing the main role of driving the reforms. Specifically, there is something shared by the Chinese Community states that leads the development of pension policy in these states. In this sense, the review of ancient Chinese political and welfare thought as well as the development of social policy that this chapter is going to illustrate below will not only manifest the extent to which the World Bank affects the pension policy process in the Chinese Community, but also indicate the core value of welfare thought in the Chinese Community. In addition, the discussions about the welfare typologies in the East and West as well as Western welfare thought help this thesis understand the similarities and dissimilarities between the East and West and extract the value shared by the Chinese Community states.

Besides, the last part of this chapter will review and discuss the comparative studies to help answer the questions: how to compare these four pension systems and how good or bad is their performance? In this part the emphasis is on the indicators and policy indices that are employed to measure welfare efforts and evaluate the performance of pension systems. This will not only help the thesis to organise the review and analyses in the case studies between Chapter Three and Six, but also help select indicators in Chapter Seven and develop the index system which is going to evaluate the input and output factors of pension provisions in Chapter Eight and Nine.

2.1 Ancient China's Welfare Ideologies

This section will introduce four main political and welfare ideologies in ancient China. It will start with Confucianism and progress through Taoism, Mohism and Legalism in sequence.

2.1.1 Confucianism

Confucius (551-479BC) himself recommended that rulers implement benevolent policies as rites, such as those introduced by the Western Chou dynasty (1045-771BC) which in order to develop a welfare society provided in-kind assistance and welfare services to children, elders, the destitute and sick, as well as reduced income, land and custom taxes, less severe punishments for crimes, a decrease in conscript labour and the arrest of robbers (Lin 1994: 147). However, it was still debatable whether the abovementioned provisions were available to the whole population or merely the privileged class because the Classic of Rites stated that in Western Chou society “senior officials are not sentenced to punishments, and the vulgar are not awarded rites”. About this, Wang (1982: 63) comments that Confucius intended to beautify the feudalism and draconian rule of the Western Chou dynasty to promote a hierarchical system that would help Emperors to rule the state. The hierarchical society that Confucius emphasised was self-sufficient, self-regulating, self-governing and dominated by filial piety. Family served as the prototype of the Chinese society in which the junior members of a household were morally obligated to respect and support, both materially and financially, the senior members. Likewise, the Emperor was the son of Heaven who ruled the world, the local officials were the parents of local residents and people were brothers. Besides, people had to behave appropriately according to the relationships defined by Confucianism: king and officials; father and children; husband and wife; elder and younger brothers (also sisters); and friends and friends. Within this framework, people knew the behaviour that was expected of them and roles they should play amongst specific groups of people as well as the social distance between each person. They were also aware that the relationships between individuals and friends or neighbours were weaker than those between family members or relatives in what was a family-centred society. The social exchange system was thus established according to aforementioned rules and through the delivery of assistance from one person to another, the other being obligated to return the favour in the future. The decision to help others was based on the relationships between individuals, which means an individual would be unlikely to render assistance to a stranger and vice versa. The nature of the agrarian economy (i.e. self-sufficiency) further reinforced the family-centred support system which was usually organised by people with the same surname or kinship. Therefore, villages or neighbourhoods met their demands with the products they produced. The state was not expected to intervene in domestic affairs, except when disasters came and households suffered great losses (Leung and Nann 1995: 1-6).

Confucius’ utopia – great unity – shows his concern for people’s welfare, which is

clearly evident in the quotation below:

“Thus, people not only take care of their relatives and their own children but also relatives and children of others. Let the old people live good lives, let those in working age to contribute to the society, and let children be well educated. Let the bachelors, widows, lonely people, disabled and patients be well arranged. Men and women have their own roles (Classic of Rites, The Conveyance of Rites, Great Unity).”

However, Confucius realised that in practice society was far from reaching this ideal and was instead a “minor peace” society in which everyone fought for their own interests, which in turn caused frequent disagreement whenever these interests collided:

“Nowadays the great unity seems not feasible because people pursue benefits for one’s own family, people support one’s own household members and relatives, people nourish one’s own children, people produce products for one’s own profits, and Emperors inherit positions from generation to generation...Tricks are applied in order to acquire benefits, and fights are therefore caused...It is called a minor peace society (Classic of Rites, The conveyance of Rites, Great Unity).”

In order to bring the minor peace society back to the great unity, Confucius encouraged Emperors to establish order to stabilise society and carry out benevolent policies for reducing the harm of selfishness, self-interest and calamities to people. This was the most feasible way, he believed, to achieve a society that resembled the ideal of great unity in a minor peace society. Beyond that, the Analects, a book finished by Confucius’s followers, points out Confucius’s concern about inequalities during the Spring and Autumn Periods (770-476 BC) that:

“...I heard that some countries are resourceful but unequal in distribution, and some are wealthy but the societies are turbulent. Thus, when the equality of distribution, harmony of social relationships and peace of the social order are achieved, then the destitution and scarcity of resources and the unrests will be eliminated (Analects, Chapter Sixteen, Chief of the Chi Clan).”

This shows that inequality of wealth distribution was a problem in the minor peace society and rulers were urged to remove these obstacles and help advance the society

toward the great unity. However, Huang (2007) argues that Confucius's ideology on great unity was not found elsewhere in any of the Confucian classics. With regard to the fact that the Classic of Rites was finished by Confucius's followers as well as the similarity between Moh's welfare ideology and Confucius's great unity, it is likely his followers may have borrowed welfare ideologies from Mohism in order to show Confucius's awareness of people and to contrast it with the minor peace to make the arguments more convincing.

When society is in a state of great unity according to Confucian philosophy, it is already in harmony and equilibrium as people are willing to share and help each other. On the contrary, because people are selfish in the society of minor peace, welfare services and in-kind and cash assistance should be rendered to deserving people, mostly the old, the young and the disabled, through family-centred rather than state social networks. Besides, care and concern, rather than the redistribution of income and wealth, were the main purpose of welfare provisions and should be dispensed on a voluntary basis - the reason being that assistance was not a right but something which stemmed from the grace of other people in the social network (Chan and Tsui 1997: 179-80). Davis (1983: 528) notes that filial piety was the origin of humanitarianism and empathy amongst the Chinese population, engendering commiseration and philanthropic behaviour. On the one hand, it is clear this benevolence of mind not only helped to develop the present family support system, but also to some extent encouraged the government to assist people by establishing the granary system and operating governmental and private benevolent organisations and activities. On the other hand, Confucius held that "Heaven assists those who are self-reliant". That is, only those self-responsible people will receive help from family members and even the son of Heaven (Mo 2007: 119, footnote 13). It is also pointed out that benevolent policies are simply reciprocal relationships between autocrats and the population or amongst people, an idea which has been repeatedly cultivated under the guise of Confucianism in order to cover up the exploitative nature of the ruling (Mo 2007: 116). Therefore, the art of ruling proposed by Confucianist suggested not only to apply benevolent policy to gain trust from people and solidify the legitimacy of the administration, but also the king should be self-disciplined (Drengson 1983: 42-3).

2.1.2 Taoism

Another ancient Chinese philosopher, Lao Tsu (600-470BC) - whose real name was Lee Er and who lived during the Spring and Autumn and Warring States Periods - believed that government should not meddle in society and posited that:

“...the sage said: ‘I take no action and the people of themselves will be transformed, I am fond of keeping still and the people of themselves will act properly, I engage in no activity and the people of themselves will become prosperous, and I manifest no ambition and the people of themselves will stay in simple life’ (Lao Tsu, Section Fifty-Seven).”

In other words, everything has its own order and equilibrium will be achieved when the government withdraws. It is true that the more regulations are enforced by the government the more corruption and disorder occurs. But this does not mean Taoists are recluses and promote an ideology of withdrawal. Instead, it simply suggests Emperors to follow the nature of the world and rule it with non-interference (Bey 1991: 69 & 86; Dorn 1989: 605) because it is believed anomie derives not from freedom but from over-regulation imposed by the government (Dorn 1998: 135). Regarding this, both Boaz (1997: 27) and Rothbard (1990: 44-6) assert that Lao Tsu was possibly the world’s first Libertarian and Hayek’s “spontaneous order” exactly corresponds to Lao Tsu’s ideology. Graham (1989: 215-9) and Long (2003: 39-40) meanwhile believe that Confucius was the first Libertarian although not as radical as the Taoists because of the anarchist and Libertarian ideas expressed during the Hundred Schools of Thought Period. Nevertheless, this is not sufficient for us to reason that, as Long argues, the Taoists borrowed the Libertarian idea from Confucianism. It simply illustrates how at the time the advocates of each philosophical school were striving to persuade autocrats to apply their art of ruling that the Confucians did not honestly reveal their anti-statist and Libertarian ideas. Alternatively, it could be that, as is argued in last section, it was Confucians who borrowed the spirit of Libertarianism from Taoism. Thus, the debates persist.

Lao Tsu describes his utopia as follows:

“It will be a small state with a little population. The people here will not labour for life...The people will live a primitive and simple life. They will have to imagine the food is sweet and the cloth is beautiful, and they will settle down and enjoy folk activities here well. Even though there is another state in sight, the people will never come into contact with each other (Lao Tsu, Section Eighty).”

The life favoured by Lao Tsu was an isolated and primitive style of living. Man-made institutions, e.g. welfare provisions, are discarded because they may hinder people from pursuing the nature of mind. Shih (1988: 619-20) finds that the praise for nature and the value of labour in Taoism are parallel to that of Marxism in the way that

labourers are not selling their products for a living but simply developing their nature and living a simple life. The difference is that Taoists will not involve in the struggle between classes because it to some extent is recognised as human-made regulations and violates the nature they pursue.

2.1.3 Mohism

Mo Tsu (about 479-381BC) earned his living as a carpenter and became the philosopher representing the artisan class during the Warring States Period. The main ideas of Mohism were universal love, mutual assistance, peace and thrift. Besides, Mo Tsu argued that people should take care of each other and the government should redistribute resources from the better-off to the worse-off in order to ensure a basic standard of living, and universal love and mutual aid were the answers. Thus, utopia could be approached:

“...People will treat others countries as their own country, people will treat others families as their own family, and people will treat others as themselves ... [Thus] people in the world will love each other regardless of classes, the strong will not insult the weak, the majority will not plunder the minority, the rich will not insult the poor, the honourable will not disdain the humble, and the cunning will not deceive the simple...” (Mo Tsu, Universal Love II, Section Three)

The quotation suggests that social solidarity was more important to the Mohists than the other political schools of thought at the time and Mo Tsu believed that peace and stability could be achieved this way. Mencius (372-289 BC) a famous Confucian after Confucius, was highly critical of the Mohist emphasis on universal love and posited that “... Mo Tsu’s ideology about ungraded love denies the special affection for the father. However, to acknowledge no father ... is to be in the state of a beast.” (Mencius, Duke Wen of Teng, 14th Chapter) This clearly shows the differences between Confucianism and Mohism: the former asserts that one should fulfil one’s responsibilities towards one’s parents, the greatest love, and only then extend one’s love to others; while the latter argues that filial piety will be performed naturally when universal love is accomplished (Bellah 1999: 287; Ciprut 2008: 20-1; Gier 2004: 184; Linklater 2007: 40). Some scholars argue that these two roots i.e. the love of close kin and love of the whole population, contradict with each other. Universal love leads to a fatherless world in Confucian ideology, which means it would be illogical for Confucians to put the two roots together or attempt to reach both states simultaneously. That is, if the love of one’s parents is deemed the greatest love, then it

is not necessary for Confucians to extend their love to the whole of humanity as is claimed. This to some extent proves that Confucians simply borrowed Mohist ideology to purport universal kindness as well as graded love (Kim 2008: 281; Liu 2001: 76-8; Liu 2004: 81-5; Liu 2006b: 184).

Mo Tsu goes on to state that countries will only achieve utopia if autocrats hire virtuous persons to assist them in devising regulations and ruling society. A “virtuous person” from this perspective is one that acts in the ways suggested below:

“Let able-bodied help the incapable right away, let the rich endeavour to share their wealth with poor, and let the well-comprehended with the nature of life teach less-educated. Thus, the hungry will be fed, the cold will be clothed, and the disordered will be regulated. When the hungry are fed, the cold are clothed and the disordered are regulated, then people can live the abundant life (Mo Tsu, Virtuous Person III, Section Four).”

In other words, a virtuous person loves the population indiscriminately and is merciful to everyone. Only this kind of person will do everything possible to assist and meet the needs of everybody, in ways that will eventually ensure a society where everyone is able to sustain themselves. Therefore, the welfare regime that Mohists advocated was universal provision solidified through boosting social solidarity, which was manifestly different from the Confucian family support system confined to one’s own close kin only.

2.1.4 Legalism

Han Fei Tsu (280-233BC) was the most famous Legalist of the late Warring States Period (475-221BC). Although his theses were all about the art of establishing institutions to help autocrats rule the country and unify the world, Han Fei Tsu was generally against institutional welfare provisions. He believed welfare would eventually lead to the downfall of the state because kind-hearted policies would create chaos rather than prosperity:

“ ... Some rulers nowadays strive for a reputation as benevolent welfare providers but overlook the practical side of it. In the major cases the states may die out and the rulers are killed, while in the minor cases the territories may be reduced and the rulers insulted. How is this argument extended? Providing welfare to the poor is called benevolence and righteousness; while pitying people and remitting them from punishments is called kindness and love. Therefore rendering assistance to the destitute means awarding people

who make no contribution to society; while forgiving people for the crimes they have committed and sparing them of the punishments they have been condemned to means the unrest in society will never cease. If some people are awarded welfare without contributing to the state... then the number of selfish and treacherous subjects will be boosted significantly and that of violent gangsters will multiply. How is it possible that this state will not fall immediately? ...Therefore, the rulers who are good at ruling people will establish regulations and award people according to their contributions to the state instead of rulers' benevolence and fairness; and the rulers can halt violence by punishing criminals for the crimes committed rather than lessening the punishments out of autocratic kindness (Han Fei Tsu, Chapter Fourteen, Section Five)."

Fu (1996: 73) and Winston (2005: 332) point out that Han Fei Tsu did agree with rewarding loyal subjects and meritocrats with welfare provisions but universal welfare provisions would encourage those who try to take advantage of the state and result in disorder and the demolition of society. Besides, redistributiveness was not allowed by Legalists because:

"If government levies taxation from the rich and redistributes it to the poor, it means removing resources from the thrifty to subsidise corruption and squander." (Han Fei, Chapter Fifty, Section Three)

Han Fei Tsu deemed benevolent policies evil and argued that they should be banned; relieving famines with crop surpluses and tax revenues the government levied from the population was acceptable but the main purpose of stockpiling resources was to prepare for warfare. That is to say people are expendable when the maintenance of regime is at stake (Fu 1996: 73; Lin 1994: 148). Han Fei Tsu was basically opposed to welfare provisions that rewarded the population indiscriminately in the name of benevolence and equality rather than according to their contributions to the state and society; at that time the idea of mandatory contributory social security schemes such as those adopted by most countries nowadays were not considered.

Nevertheless, among the four dominant schools of political philosophy in ancient China, Legalism is the one that might have supported contributory social security schemes because of their institutional and contributory characteristics. As for the other three, Confucians emphasised family-centred benevolence and fairness and Mohists believed in universal benevolent policies, while Taoists tended to reject the introduction of any man-made institution into society.

2.2 Welfare Provisions in Ancient China

The Warring States Period was ended by the Imperial Ch'in in 221 BC which applied Legalism to every aspect of government administration and left alone the welfare provision system during the Ch'in (221-206BC) was underdeveloped. After the Han Dynasty (202BC-220AD) came to power, the first four rulers, Emperor Gao (206-195BC), Emperor Hui (195-188BC), Emperor Wen (180-157BC) and Emperor Jin (157-141BC), adopted Taoism and tended to believe that society would naturally rehabilitate from long periods of wartime. The fifth ruler, Emperor Wu (141-87BC) appointed a famous Confucian, Tung Chung-Shu (179-104BC) prime minister who convinced the ruler to apply Confucian principles to political administration and from that time (134BC), the ideas that a family should meet household members' physical and material needs, and that autocrats should show mercy and relieve the population when calamities occurred gradually became rooted in people's minds and dominated people's behaviour for thousands of years (Liu 2006a). Two streams of poor relief were thus developed: the Granary Policy and official and private benevolent activities. The Granary Policy was established to store crops for wars and disasters as well as to control grain prices; while the benevolent associations were publicly or privately organised to assist families that were unable to support their members and individuals that were incapable of caring themselves. These two systems will be introduced and discussed separately in the following sections.

2.2.1 The Granary Policy

The Granary Policy was introduced by Kuan Chung (725-645BC) during the Spring and Autumn Period in order to stabilise grain prices and avoid merchants hoarding and cornering crops. He further argued that people would have time to develop morality and cultural life only if a subsistence level of living is achieved. This system (named Ever-normal Granary Policy) was also implemented in the states Wei (Hui 2005: 61) and Chu (Weld 1999: 85) during the Warring States Period (475-221BC). The Granary Policy was then implemented on and off during the Ch'in and Han China (Davis 1938: 13; Lin 1994: 149) not until the Emperor Wen of the Sui Dynasty (581-604AD) who not only continued the Ever-normal Granary Policy but also established the Charitable Granary Policy in 585 AD. The Charitable Granary Policy was the first granary system to deal with poverty relief in ancient China, but the contributions to the charitable granaries were not institutionalised until the reign of the Emperor T'ai-Tsung (626-649AD) of the Tang Dynasty (618-907AD). Since that time, the contribution rate of charitable granaries was specified on the basis of income, but nobles were excluded from the system. The charitable granaries were widely established by provincial and county governments thereafter and the grain was only

used when local charitable granaries were exhausted. The difference between the Ever-normal and Charitable Granary programmes at that time is the former scheme was established by the government mainly for the purpose of war and price stabilisation, while the latter system was funded by local people to relieve disasters and poverty. However, during the Sung China (960-1279AD) the Emperor T'aichu (960-976AD) turned the charitable granaries to official use and reduced the emphasis on benevolence from then onwards (Lin 2006: 283). Some community granary systems were then introduced from early 1150s because the existing Granary Policy failed to ease the fluctuation of grain prices and relieve the poor during the rice riots, and Chu Hsi further promulgated the Community Granary Law to promote and regulate the system in 1181 AD (Birge 2002: 22-3; Bodde 1946: 413-4; Tillman 1990: 8-10; 2002: 15-6).

The Granary Policy was still important means for regulating the supply and demand of grain and relieving poverty and starvation in the Yüan (1271-1368AD), Ming (1368-1644AD) and Ch'ing (1644-1912AD) China. The ever-normal granaries served the same role of mitigating the fluctuations in grain prices in national and local marketplaces, while the roles of community and charitable granaries were reversed with the change from the Sung to Ming and Ch'ing. Smith (2009: 179-80 & 206-9) depicts the debates about the role of the Charitable Granary system and how it should cooperate with the Community Granary scheme among the Ming officials. It turned out that the charitable granaries were assigned to be managed by local people while community granaries were mutually supervised and administered by officials and local people in order to reduce the abuses. During that time, some intellectuals proposed to implement the Community Granary Policy as a nationwide programme and reduce the coverage of households per barn. As a result, the accessibility to and distribution of the grain was improved and the Granary Policy also became strategies to reduce riots from the grassroots (Hauf 1996: 16 & 24). Due to the Ming government became weaker year after year, the management and supervision of community and charitable granaries were gradually authorised to local people in the late sixteenth century and local intellectuals, particularly those who engaged in benevolent activities and organisations, took over the responsibility for managing the operation of granaries (Smith 2009: 44).

Similarly, the Granary Policy remained the scheme for poor relief and provided empire-wide grain banks in Ch'ing China. The ever-normal granaries were monitored by the central government and the operation of community and charitable granaries was supervised together by local officials and residents for the reason that the grain in these granaries was collected from the public by official covenants and belonged to

the public sphere (Rankin 1990: 50-1). However, from the late eighteenth century the granary system was not as sturdy as it was because of a series of disasters, rebellions, abuses, food riots as well as the invasions from the West. As a result, central and local governments were unable to participate in the administration of local granaries and the system was less capable of rendering help to the poor but turned to chiefly focus on natural calamities (Wong 1982: 768-72; Wong and Perdue 1983: 315-21). Because most of the granaries were depleted after the mid nineteenth century, monetary relief became more popular. But, most importantly, the availability of grain still depended on the price and quantity in local marketplaces (Edgerton-Tarpley 2008: 28-30).

The Granary Policy gained its importance on poor relief and grain price stabilisation throughout the long history of China. It was extended to several kinds of granary and served different missions in central and local areas. The establishment of official granaries was originally a benevolent policy to control the grain price and relieve the public during disasters. The programmes then transformed into an insurance-like system and developed a limited scale of social solidarity in local areas, collecting grain from the rich and rendering help to the poor in bad years until the whole system was demolished in the late Ch'ing.

2.2.2 Officially and Privately Organised Benevolent Activities

Aside from Granary Policy, the philanthropic activities organised by official and private benevolent associations provided another source of public assistance, covering a wider range of needs such as poverty caused by old age, disability, illness and orphanage. The governmental philanthropy organisations initiated from the Southern and Northern Dynasties Period (220-589AD) were officially funded and delivered by Buddhist monks and nuns (Leung 1986: 52). Although Buddhism was introduced in China from the late Han Dynasty, it was particularly promoted by some emperors of the Southern and Northern Dynasties Period and thrived from that time. The keys to Buddhism being accepted in China were, on the one hand, the Emperor Wu of Liang's (502-549AD) promotion of Buddhism, Confucianism and Taoism together with a heavy emphasis on Buddhism, although the tendency was to integrate them into one religious philosophy (Runyan 1972: 37). On the other hand, some traditions, e.g. the worship of heaven, earth, ancestors and sages, were shared by these three popular philosophies plus Buddhism was not invasive. Although Confucianism was the weakest in terms of religiousness among them, its multidimensional influences on people's beliefs, thoughts and behaviour in ancient China caused scholarly researchers to believe that Confucianism was more a religion and less a philosophy (Chen 2009: 104; Kitagawa 1962: 3). As a result, the cooperation between the government and Buddhists on social assistance from the late Southern and Northern Dynasties Period

denoted autocrats' benevolence and Buddhists' devotion to the society (Chan 1992: 351; Mei 1986: 161). This model was gradually transformed from the mid Tang (717AD) because the prime minister of the Emperor Sh'uan-Tsung of Tang (712-756 AD), Sung Ching, proposed that the government should take full responsibility for helping the needy directly instead of funding Buddhist monks and nuns to deliver the services (Scogin 1978: 30). The first state-run benevolent association did not appear until 845 AD when the Emperor W'u-Tsung of Tang (840-846AD) demolished Buddhist temples and took over the asylums. Since that time the official benevolent associations were operated by local officials and gentry (Lin 1994: 151-4).

Private beneficence was initiated from the mid eleventh century by Neo-Confucians such as Su Shih's (1037-1101A.D.) philanthropy actions (Smith 1995: 373), Fan Clan's estate (Twitchett 1959), Liu Tsai's (1165-1238AD) soup kitchens (Liu 1978) and, as discussed earlier in this chapter, Chu Hsi's community granaries. Su's benevolence included building public hospital, bridges and other infrastructure and discouraging infanticide during the mid eleventh century, but he begged intimates to keep it secret. The founder of the Fan Clan's estate, Fan Chung-Yen (989-1052AD), devoted his wealth and energies to the welfare of the Fan kinship and intended the family's economy to last forever; therefore Fan established a village to accommodate his clan members and to maintain a self-sufficient system. Liu Tsai provided gruel and food to orphans and victims of disasters in order to fill the gap in poverty relief that official benevolent activities were unable to make up. Chu Hsi's idea of a multi-functional community containing granaries to supply food in bad times and stabilise grain prices as well as schools to convey Confucian teachings was further developed by Lü Kun (1536-1618AD) and Chen Hong-mou (1696-1771AD) in the Ming and Ch'ing China respectively (De Bary 1998: 49-53). Liu (1978: 25-7) argues that, for one thing, private charitable actions in Sung China remained individual philanthropic behaviour. Neo-Confucians felt a greater responsibility towards the broader population but the traditional family-centred ideology was still rooted in people's minds. For another thing, it is true that the government were not favourable towards public organisations in welfare services because they were afraid of rebellions at the grassroots. As a result, organised benevolent activities did not occur until the late Ming because the atmosphere at that time had changed towards praising good deeds publicly and local gentlemen were glad to set up associations and donate beneficences. Meanwhile, widespread acceptance of good-doers to some extent compelled the rich to contribute to the society and local areas (Lam 2006: 45-7; Smith 1995: 373-8). The first private benevolent society for the poor, T'ung-Shan Hui, was established in the late Ming (1590AD) by Yang Tung-ming who believed that philanthropic actions would save ten thousand people in his area. It was a voluntary

association and the participants were all wealthy people in local areas. This idea of privately organised benevolent societies spread to other regions, the most famous cases being Kao P'an-lung and Ch'en Lung-cheng whose deeds were then echoed by many other intellectuals and rich people (Smith 1987: 311-5). This not only indicates that a transformation of welfare ideology had taken place and the responsibility shifting from the state to local intellectuals and gentry, but also that from the late Ming onwards the official benevolent organisations were incapable of satisfying, and relieving, needy people who suffered from calamities, poverty, illness, disability and orphanage. Similarly, the activism of local people to establish charitable granaries and promote organised beneficences during the late Ch'ing denotes that the literati class now saw self-help as the appropriate way to intervene in urgent situations, to stabilise society and continue their lives even though the effect may be minor for the country as a whole (Edgerton-Tarpley 2008: 143).

The development of beneficence and benevolent societies, particularly those that emerged in late Sung China, illustrates that these activities were no longer seen as trivial mercies as was argued in the Tang Dynasty. Not only were benefactors now admired by the public but private benevolence was also recognised and partially funded by local officials. As a result, official and private associations covered different groups of the needy. That is, the official benevolent organisations assisted the most destitute population, while private philanthropic societies helped those excluded from the official poorhouses. Moral standards were applied to define the deserving by private beneficent associations and virtuous and filial persons were welcome. Therefore, private benevolent societies to a degree served as an institution of social control because means- and morality-tests were the preconditions of being entitled to assistance rather than need per se (Lin 1994: 157-8; Smith 1998: 443-5).

2.3 Western Welfare Ideologies

An increasing number of theories about the origins of the welfare state, the level of distribution and redistribution, the mode of interaction between the state, market and family, and the degree to which the government should intervene between the capital and labour to maintain harmony in society were espoused after World War II. Lee and Raban (1983: 23) define the spectrum of political values expressed by these theories as Anti-State and Pro-State and this thesis arranges the different theories into five classes according to the year they were proposed (Table 2.1).

Table 2.1 Welfare Ideologies by Anti-State and Pro-State Dimensions						
	Anti-State				Pro-State	
George and Wilding (1976)	Anti-collectivism	Reluctant Collectivism	Fabian Socialism	Marxism		
Mishra	Residualism	Institutionalism	Socialism			
Pinker	Classical Economic Theory	Neo-Mercantile Collectivism	Marxian/Socialist			
Taylor-Gooby and Dale	Individualism	Reformism	Structuralism	Marxism		
George and Wilding (1994)	New Right	Middle Way	Democratic Socialism	Marxism	Feminism	Greenism

Notes and Sources: The ideological polarisation is derived from Lee and Raban (1983: 23), and the categorisations of welfare ideologies in this table are derived from George and Wilding (1976; 1994), Mishra (1977), Pinker (1979) and Taylor-Gooby and Dale (1981).

George and Wilding proposed two classifications of welfare ideologies in 1976 and 1994 respectively and the contents are different. In 1976, George and Wilding (1976: 16) chiefly employed a conflict approach and divided welfare ideologies into four groups: anti-collectivists, reluctant collectivists, Fabian socialists and Marxists. In 1994, they saw a broader feature of welfare ideologies with a revised conflict approach and categorised them into: New Right, Middle Way, Democratic Socialism, Marxism, Feminism and Greenism (George and Wilding 1994). Because the 1976 version better fits Lee and Raban’s ideological spectrum in Table 2.1, it will be discussed further below.

George and Wilding (1976: 35) state that Anti-Collectivists support freedom or liberty, individualism and inequality and therefore argue that its main feature “is a residual, means-tested or income-tested, locally administered conception of the welfare state” in order to reduce coercion as Hayek (1960: 133) notes. The Reluctant Collectivists believe that capitalism dominates economic development but needs the government to correct the disadvantages that occur because the system is not self-regulating. George and Wilding (1976: 58) propose that they support for a problem-centred welfare system that targets on the benefits and services that are not adequately provided by private suppliers. Both Fabian Socialists and Marxists believe that the society will eventually transform into socialism, but the latter argues that the transformation will be done radically while the former sees the processes will be peaceful. In order to make their goals, Tawney (1982: 38) and George and Wilding (1976: 71) note that, now that the markets are unable to be self-regulated and there is no clear rule for the distribution of resources, welfare states should intervene in the disorder and reduce poverty through providing benefits and services. While Marxists argue that, on the one hand, liberty does not exist in capitalist society for people do not really have the right to choose (Laski, 1943: 316; quoted from George and Wilding 1976: 86). On the other hand, it is true that most social reforms are the result of the working class winning the right to vote. It is also true that the ruling class usually makes concessions

when the economy is prosperous (George and Wilding 1976: 100-1). Nevertheless these events repeat frequently nowadays, it seems that the movements and demands of the working class actually challenge the ruling class's position.

Mishra (1977: 7-19) applies a social administration approach to argue that every state has its own unique political, cultural, social and economic background which may not appear elsewhere and this method can thus to a degree specify the similarities and dissimilarities between nations. Besides, Mishra concentrates on "facts" rather than theories and interpretations of welfare. Although there are political, historical, social and economic reasons to doubt the information obtained, Mishra emphasises that "the lack of theoretical orientation should not be allowed to obscure the strengths of the 'empirical' tradition." The social administration approach to some extent implies a multi-disciplinary approach which exactly corresponds to Titmuss's (1968: 23) idea that social administration "has borrowed heavily from different disciplines in the social sciences, and now faces the tasks of refining, extending and adapting insights, perspectives and methods so as to further our understanding of, and to teach more imaginatively about, the roles and functions of social services in contemporary society." As a result, Mishra employs the traditional dichotomy of welfare regimes, residual (conservative) and institutional (liberal/social democratic) models, and proposes the additional model – socialism (normative) – to complete his system. Among these three regimes, the residual welfare state has a minimal welfare scope in which "social services (that is other than Poor Law type of assistance) are largely undeveloped and non-statutory forms of welfare are relatively more prominent" (Mishra 1977: 90-1); while most welfare services and provisions are statutorily defined in the institutional welfare model. Besides this, Mishra points out that the guiding principle of collective distribution in the socialist welfare model is "need". Mishra (1977: 122) maintains that "collective consumption – that is, typically universal, comprehensive and free social services such as health and education – constitutes the basic model of distribution under socialism." The characteristics of these three welfare models are listed in Table 2.2.

Table 2.2: The Mishra's Three Welfare Models			
Main features	Residualist	Institutionalist	Socialist
1. State responsibility for meeting needs (ideology of state intervention)	Minimal	Optimal	Total
2. Need-based distribution as a value (ideology of distribution)	Marginal	Secondary	Primary
3. Range of statutory services (other than the Poor Law)	Limited	Extensive	Comprehensive
4. Population covered by statutory services	Minority	Majority	All
5. Level of benefits	Low	Medium	High
5a. Proportion of national income spent on state services	Low	Medium	High
6. Use of means test	Primary	Secondary	Marginal
7. Nature of clients	Paupers/the Poor	Citizens	Member of the collective
8. Status of clients	Low	Medium	High
9. Orientation of the service	Coercive	Utilitarian	Solidaristic
10. Role of non-statutory agencies in welfare	Primary	Secondary	Marginal

Source: Mishra (1977: 91 and 123).

Pinker (1979: 5) believes that the aim of typologies of welfare thought is not “merely to make judgments about the anomalies and paradoxes of our social welfare system but to describe as fairly as possible the scope and limits of social welfare and to account for the phenomena which we are describing.” He applies a dichotomous approach and places the egoism and individualism (of the residual welfare state) opposite to altruism and collectivism (of the institutional welfare state): collectivism representing altruism whereas individualism resembles selfishness. He denotes that, on the one hand, institutional welfare states simply redistribute resources from one person or group to another; while, on the other hand, the resources allocated in the residual model are decided by market prices and demands, and equilibrium, it is believed, will be reached automatically as well as adjusted by “the work ethic of an economic market in which...the exchange relationship based on reciprocity and bilateral transfers.” Therefore, Pinker (1979: 6) concludes that in the residualist model “the economically motivated citizens...are acting out of self-interest...rather than altruism.”

Besides the abovementioned dichotomous approach applied by Pinker, he proposes three normative assumptions to explain and evaluate the relationship between order, change and welfare in a society in order to reduce the oversimplification of the dichotomy (Pinker 1979: 233). These three assumptions form his classification of welfare thoughts as classical economic theory, Marxism and other streams of socialism and mercantile collectivism. As Pinker puts it, the classical economic theory is “based on the premise that there is no basic incompatibility between the competing interests and loyalties which characterise a free society” (Pinker 1979: 233). Pinker

justifies that the distinction of socialists with the other two welfare thoughts is that they not only believe that “these interests and loyalties are incompatible but that only through the intensification of such conflict and the heightening of class conflict in particular is change possible and real freedom attainable. The ultimate objective of change is the abolition of the forms of property and the division of labour out of which sectional interests and inequalities arise” (Pinker 1979: 233-4). Pinker (1979: 235) comments that mercantile (Neo-Mercantile) collectivists hope to construct a world integrating classical economic theory and Marxism, namely capitalism and communism, together. Nevertheless, the idea that government should intervene in markets dominates the world which makes it more a capitalist and less a socialist model.

Taylor-Gooby and Dale adopt Mishra’s social administration approach to evaluate “social needs, and arrangements for meeting them from the standpoint of the modern welfare state” (Taylor-Gooby and Dale 1981: 11 and 20) and four types of welfare ideologies are therefore classified. Taylor-Gooby and Dale define individualism as underlying “the view that holds collective action through the state in the regulation of economic system, in particular for welfare ends but also as part of more general management, to be undesirable, at any rate above a certain minimum level (Taylor-Gooby and Dale 1981: 58).” The institutional reformists suggest that the most of the problems in the society can be remedied by the institutionalised welfare provisions, and those welfare institutions are usually based on idealism (Taylor-Gooby and Dale 1981: 70). As for structuralism and Marxism, Taylor-Gooby and Dale (1981: 117) argue that structuralism “tends to a materialism that sees the social whole as the generator of recognized problems” and therefore the conflicts will be solved and become the energy to improve the development of society as a whole; while Marxists believe capitalism produces conflicts and eventually leads to societal change.

2.4 Welfare State Typologies in West and East

2.4.1 Typologies of the Western Welfare State

As Kennett (2001: 77-9) points out, cross-national social policy studies have gradually shifted from ranking welfare ideologies according to their welfare efforts to recognising different types of welfare state. Among these researchers, Titmuss is one of the initiators who have devised a complete system for categorising welfare states. His system derives from Wilensky and Lebeaux’s (1965) dichotomous approach

which classifies welfare states into residualist and institutionalist but adds industrial achievement-performance model to enrich the typology (Titmuss 1974: 30-1).

- Residual welfare model: People's needs are met through the private market and family. In Titmuss's (1970: 239) scheme, the function of markets is to "free men from any sense of obligation to or for other men regardless of the consequences to others who cannot reciprocate" because profit, instead of the quality and quantity of welfare services provided, is the thing that markets pursue. Thus, only when markets and families do not work properly and unable to satisfy people's needs the state will intervene but "only temporarily" (Titmuss 1974: 31).
- Industrial achievement-performance welfare model or "Handmaiden Model": In this model, "social needs should be met on the basis of merit, work performance and productivity. It is derived from various economic and psychological theories concerned with incentives, effort and reward, and the formation of class and group loyalties" (Titmuss 1974: 31).
- Institutional redistributive welfare model: This "sees social welfare as a major integrated institution in society, providing universalist services outside the market on the principle of need" and "is basically a model incorporating systems of redistribution in command-over-resources-through-time". (Titmuss 1974: 31). Mishra (1990: 65-6) cites Sweden as the best example of this model because it not only "weather[ed] the storm in 1970s and 1980s without sacrificing economic efficiency and social justice", but also "*per se* introduce[d] an egalitarian" society.

Mishra's (1977) research on welfare ideologies, illustrated in Table 2.2, not only classifies three different types of welfare thought but also denotes the characters of each ideal regime by the performance in each dimension of social policy. Moreover, in the early 1990s, two dominant welfare state typology systems were proposed by Gøsta Esping-Andersen (1990) and Stephan Leibfried (1993).

Esping-Andersen (1990: 19) maintains that expenditure approach may be misleading because "expenditures are epiphenomenal to the theoretical substance of welfare states. Moreover, the linear scoring approach contradicts the sociological notion that power, democracy and welfare are relational and structured phenomena." He therefore takes two elements into account i.e. the classical distinction between residual and

institutional welfare states, and the theoretical selection of criteria on which to judge types of welfare states. The first element is based on Titmuss's typology and Esping-Andersen believes that this approach "forces researchers to move from the black box of expenditures to the content of welfare states" and contains some elements that are not considered by existing approaches such as "targeted versus universalistic programs, the conditions of eligibility, the quality of benefits and services, and ... the extent to which employment and working life are encompassed in the state's extension of citizen rights" (Esping-Andersen 1990: 20). While the second component is used to analyse some selected programmes and to categorise states by the scores derived from this study.

Besides this, Esping-Andersen concentrates on the coverage, redistribution and accessibility of pensions, sickness and unemployment benefits as well as adopts de-commodification and equality in his study to build up an index system to classify three welfare regimes. The de-commodification index is the critical part of his study. The level of de-commodification increases as social provisions become rights ensured by the state and not reliant on markets, thus "citizens can freely, and without potential loss of job, income, or general welfare, opt out of work when they themselves consider it necessary" (Esping-Andersen 1990: 22-3). Three concerns are related to the level of de-commodification. Firstly, as mentioned, "if access is easy, and if rights to an adequate standard of living are guaranteed regardless of previous employment record, performance, needs-test, or financial contribution" then the programme has higher level of de-commodification. Secondly, the level of income replacement is taken into account for the reason that if the level of benefits is below regular earnings then the one will be pulled back to work inevitably. Thirdly, the coverage of social risks is considered (Esping-Andersen 1990: 47-50).

Esping-Andersen's typology of welfare regimes are based on different arrangements of market, state and family and are classified as liberal, corporatist and social democratic welfare states.

- Liberal welfare states: The typical cases are the United States, Canada and Australia. This group is characterised by its means-tested nature, modest universal transfers or social insurance plans. Social policy reforms are frequently confined by "traditional, liberal work-ethic norms" of which "limits of welfare equal the marginal propensity to opt for welfare instead of work." Therefore, the conditions for entitlement are stricter than the other two types. Besides, the states usually encourage, either passively or actively, the markets to provide minimal

level of welfare services or insurance policies, or to subsidise private welfare schemes (Esping-Andersen 1990: 26-7).

- Corporatist welfare states: Austria, France, Germany and Italy are included. Also called conservative welfare regimes, these intend to improve market efficiency but may reduce the level of de-commodification. On the one hand, social right is defined by one's working status which is stated by law and, on the other hand, it is "strongly committed to the preservation of traditional family-hood". That is, the system "excludes non-working wives, and family benefits encourage motherhood" being dependent on breadwinner's salary and benefits received from the state. The government will intervene only when breadwinners are incapable of sustaining their status (Esping-Andersen 1990: 27).
- Social democratic welfare states: The Scandinavian countries are included. This type of welfare regime pursues a society that "promote[s] an equality of the highest standards, not an equality of minimal needs as was pursued elsewhere" (Esping-Andersen 1990: 27). It is a fusion of liberalism and socialism and the market and family can both fulfil their functions because provisions are universal and people are free to choose from to work or to stay at home to the nurse elderly or care for children. Besides, the combination of welfare and work are well balanced because "on the one side, the right to work has equal status to the right of income protection. On the other side, the enormous costs of maintaining a solidaristic, universalistic, and de-commodifying welfare system means that it must minimize social problems and maximize revenue income" (Esping-Andersen 1990: 28).

Leibfried's (1993: 133-4) typology focuses on poverty reduction policies and establishes the concept of poverty regime to compare the different aims and methods that European countries adopted to diminish poverty. As a result, he classifies the selected countries into four clusters: Scandinavian welfare states, Bismarckian countries, Anglo-Saxon countries, and Latin Rim countries. The first three groups fit well with Esping-Andersen's three-model typology, while the Latin Rim chiefly refers to Spain, Portugal, Greece, southern Italy and part of France. The Latin Rim states are characterised by residualist welfare provisions, pushing people back to the labour market as well as their lack of institutionalised promises of welfare rights (Leibfried 1993: 141-2).

2.4.2 Typologies of the Eastern Welfare States

As discussed above, although the study of the typologies of welfare regimes is well developed in the West, it concentrates narrowly on advanced capitalist parliamentary democracies that are mainly OECD member states. That is, those countries that do not belong to either Western parliamentary democracy or the capitalist economy will not be considered “welfare capitalist states” or examples of “welfare capitalism” (Walker and Wong 1996: 67-9). Alternatively, the governments that do not establish institutionalised schemes to intervene and reverse the inequality between groups or classes are not welfare capitalist states. Countries or economies like Hong Kong, Singapore and Taiwan which have highly developed economies and have implemented some social security provisions resembling the Western countries are still not classified as welfare states. This ethnocentrism, as Walker and Wong discuss, is further extended by attempts to understand the East Asian welfare systems in terms of Western welfare regimes - exemplified by Esping-Andersen’s research on Japan, a member state of the OECD, which argues that industrial countries in East Asia are based on the family support system and, in his state-family-market inter-causal triad, the family “is an all-important actor whose decisions and behaviour directly influence, and are influenced by, the welfare state and the labour market” (Esping-Andersen 1999: 34-5). Nevertheless, Esping-Anderson recognises that Japan resembles southern European countries which implement a mix of the residualist and corporatist welfare regimes (Esping-Andersen 1997: 185-8). This viewpoint is challenged by Castles’s (1994) study on Singapore’s welfare provisions published three years earlier, which claims that the main sources of welfare services and benefits in Singapore, the family and market, are significantly different from those in the West and a different type of welfare state can be clearly distinguished. It is true that the welfare services in Singapore are mostly purchased from private markets and the markets are regulated by the government. This to a degree parallels the ongoing welfare ideology, consumerism, developed from the 1960s in which the states mainly rely on full employment and protecting property rights in order to help people to acquire services from markets, but merely provide a limited level of welfare provisions to those in need (Greener 2007: 259).

Catherine Jones is one of the dominant scholars in the research of the East Asian welfare regime and names this cluster the “Confucian Welfare States” because the influence of Confucianism is commonly seen in this league of countries i.e. Hong Kong, Japan, Singapore, South Korea and Taiwan or, in terms of economic and welfare expenditures, a dragon head and four little tigers (Vogel 1991). Jones (1993: 199) observes that the social expenditures in these four tigers were minor with regard

to the whole governmental spending. As for society, Confucianism relies on groups, not individuals, which are formed hierarchically, and it has ascending values on duty and obligation instead of responsibility and care. The group-based society is further integrated with the values of a good society i.e. hierarchy, duty, compliance, consensus, order, harmony and stability, to solidify the reign of and develop the corporationist state, which is different from corporatism. The difference between corporationist and corporatist is that the former regime emphasises collective actions while the later one, developed by Bismarck, provides specific welfare provisions for specific statuses. Nevertheless, Jones sees the government's role in social policy as minimal because the "Chinese tradition has had no place for 'government' in the abstract". That is, the government is seen as a person i.e. the son of Heaven and governmental officials are community leaders (Jones 1993: 204). Accordingly, people must help each other and the government is not obligated to rescue them when disaster strikes which means community, rather than government, is the most important organisation in the management of local benevolent activities and granaries and maintaining the values of the good society and collective self-help. The family or community system in East Asia in fact speaks more than Esping-Andersen observes. Jones therefore tersely concludes that the Confucian welfare state is:

"Conservative corporatism without (Western-style) worker participation; subsidiarity without the Church; solidarity without equality; laissez-faire without libertarianism" (Jones 1993: 214).

Jones (1990) identifies this system as a "household economy" or "oikonomic" welfare state to project its family-centred nature. This family-centric value is interwoven with the necessity of applying capitalist methods of production throughout the process of state and citizenship formation and transformation, and further helps these countries survive in a competitive world. The integration of Confucianism and capitalism is, to some extent, achieved through the core value shared by each of these societies – paternalism – which is believed the very ideology that forms a new power to ease class struggle and avoids capitalism from being overthrown (Deyo 1992: 303; Polanyi 1944: 45-58). Standing (2002: 172) further argues, with paternalism, the current theories that encourage the workforce to enrich their human capital and thus "become more employable, be more flexible, [and] become more competitive" turn out to be the mainstream value. They enable the ruling and capitalist elite to "promote and facilitate a competitive open market economy" and even inform people's voting behaviour, thus further solidifying support for capitalism. This to some extent explains, especially in the East, the social solidarity and reciprocity among people are

always limited and welfare provisions may not fully respond to people's needs. As a result, the government can not only minimise its role in social policy and resort to collective action through the family and steadiness of society, but also make it possible, through paternalism, to operate the country as a company (see also Krugman 1996). Kuo (1997: 76; 1999: 265-7; 2005: 9) is therefore pessimistic about implementing Western-style welfare schemes in the East, for example in Taiwan, as there is little concept of vested social security rights and social, instead of kinship, solidarity. Other research that supports this cultural perspective apply terms such as "Japan-focused East Asian welfare regimes" (Goodman and Peng 1996) or simply the "East Asian welfare model" (Kwon 1997) to single it out from the West. Gough (1978; 2005: 7) notes that social policies and policy processes are normally led by values specific to a society and constitute the outcomes of what is morally right. Likewise, the Confucian values of the East produce the outcomes of what is morally right according to a specific logic.

Some studies argue that overemphasising Confucian values may overlook the similarities between East and West as well as the influence of the West, and consequently bias views on the development of East Asian welfare regimes. As Kwon (1998: 27) points out, on the one hand, the cultural background shared by the East Asian countries may not lead to the development of similar welfare systems in the region because the social values, political institutions, economic development and demographic profiles of individual countries vary and may produce different outcomes. On the other hand, the Confucian values are not unique to the East. Specifically, some core values such as diligence in the workplace and daily life, entrepreneurialism and the promotion of education and state coordination are also Victorian and American values, part of the Protestant work ethic, Third Way-ism and the New Labour project (Walker and Wong 2005: 9). Moreover, misinterpretations of Confucian values and the transformation of its political and welfare ideologies throughout the long history of Chinese society may have altered the values over time (Ornatorwski 1996: 573). Some scholars also note that industrialisation, urbanisation, Westernisation and globalisation has gradually permeated the East, bringing with them individualistic lifestyles and consumption patterns (Gough 2000: 3; Ramesh and Asher 2000: 34).

Holliday's (2000) typology of the East Asian welfare regimes – which he describes as Productivist Welfare Capitalism (PWC) – is intended to complete Esping-Andersen's thesis. Holliday observes that productivism pervades East Asia, causing its welfare regimes to be different from the West. Again, this characteristic is also found in Latin American states but here the political, social and cultural contexts are different from

East Asia (Castiglioni 2005: 116-8). Productivism in Giddens' (1994: 247) terms is an "ethos where work is autonomous and where mechanisms of economic development substitute for personal growth, for the goal of living a happy life in harmony with others...[it] stands close to capitalism, and it is important to ask how far the framework of radical politics portrayed here continues the long-established animosity of the left towards capitalistic enterprise." Holliday argues that the amalgamation of Confucianism and productivism dominates all sectors of East Asian society, taming its people and making its social policy inevitably subordinate to productivity and economic prosperity. Therefore, he concludes the nature of the PWC as "minimal social rights with extensions linked to productive activity, reinforcement of the position of productive elements in society, and state-market-family relationships directed towards growth (Holliday 2000: 708)." His model classifies five East Asian countries into three welfare regimes by four dimensions as illustrated in Table 2.3.

	Social policy	Social rights	Stratification effects	State-market-family relationship	Countries
Facilitative	Subordinate to economic policy	Minimal	Limited	Market prioritized	Hong Kong
Developmental-universalist	Subordinate to economic policy	Limited; extensions linked to productive activity	Reinforcement of the position of productive elements	State underpins market and families with some universal programmes	Japan, Korea and Taiwan
Developmental-particularist	Subordinate to economic policy	Minimal; forced individual provision linked to productive activity	Reinforcement of the position of productive elements	State directs social welfare activities of families	Singapore

Source: Holliday (2000: 710).

Holliday's model indicates that these five countries merely share the similarity of subordinating social policy to economic productivity, while the other three dimensions signify their difference.

- Facilitative regime: To some extent resembles to Esping-Andersen's liberalist regime, the difference is this group "espouses an overarching commitment to growth, which puts a different spin on things (Holliday 2000: 710)." Characteristics such as minimal social rights, limited stratification effects and the priority of market are similar to Liberalism (Castells 1992: 45-9; Leung 2005). Holliday sees Hong Kong as the typical case of this regime even though it implements some universal social allowance programmes.
- Developmental-universalist regime: This cluster "extends some social rights to

productive elements of the population and thereby creates a kind of aristocracy of labour. The state which is an important player in economic policy, is therefore of some social policy significance alongside the market and families” (Holliday 2000: 710). Therefore, the coverage of social provisions is limited to the workforce and the rest are dependent on wage-earners or, a relatively smaller number of people, the government (Katagiri 2002; Kuo 2002; Kuo, et al. 2005; Lee 2007).

- Developmental-particularist regime: Social rights are not eligible in this sort of society, but the level of private welfare provisions is satisfactory because “the state plays a directive social policy role alongside the market and families” (Holliday 2000: 710). That is, the government usually acts as an interventionist regulating the markets instead of securing and extending people’s rights to social security benefits, and families are obligated to render supports to their members (Fu 2003: 211-8).

Holliday (2005) re-examines the welfare regimes in Hong Kong, Korea, Singapore and Taiwan and finds that whilst globalisation and the rise of China in economic terms are causing some changes to the regional economy, politics and public relations the PWC is still valid but may vary to some extent. Among these four cases, Hong Kong is becoming liberal welfare capitalist according to Esping-Andersen’s (1990: 26) definition, and Singapore is the most inclined to liberalism due to the CPF system and is called a “hyper-liberal welfare state” (Ramesh 2003: 98). Korea and Taiwan are in a similar vein of social policymaking. They are still productivist welfare states because they focus on the “pre-eminent status of education, the routine privileging of industrial workers, and the limited attention paid to social security” (Holliday 2005: 156). In addition, both systems are gradually shifting towards conservative regimes because government is tending to displace the market as health services and pension benefits provider. The development of pension systems will be detailed in the following chapters of this thesis.

2.5 Review of Comparative Pension Studies and Criteria Applied

This section is going to review the indicators that are frequently applied to comparing the efforts of retirement payment schemes, which may help the thesis to find the appropriate criteria for evaluating the performance of pension systems in these four Chinese Community states as well as the comparative studies in Chapter Eight and Nine. The following discussions are derived from research that emphasises

thoroughly investigating social security systems with indicators defined by scholars as well as the studies on indicators intended to provide reliable and valid ways to assess the performance of pension systems. The review will start from Esping-Andersen's examination of OECD (Organisation for Economic Co-operation and Development) states' efforts on pension provisions, the World Bank and ILO's (International Labour Organisation) proposals for pension reform, and some projects aimed at pursuing the most suitable criteria for evaluating pension systems in order to improve elderly persons' income security among the member states of the European Union.

Esping-Andersen's (1990) seminal work is centred by his de-commodification index to evaluate the extent to which old-age, sickness and unemployment benefits can alleviate people's dependence on the labour market. The de-commodification indicator consists of five components: the replacement rate of minimum pension benefit; the replacement rate of standard level of benefit for single persons; the minimum years for being awarded the entitlement; the contribution afforded by employees; and the percentage of ageing people on pensions (Esping-Andersen 1990: 49-50). In order to stratify different welfare efforts and further classify the typology of welfare regimes, Esping-Andersen (1990: 69-73) applies the amount of means-tested and private social expenditures as a percentage of GDP to recognise the level of liberalism. That is, a welfare system that concentrates more on means-tested components and private sources of social expenditures tends to be more liberalism. In addition, Esping-Andersen (1990: 118-9) notes the importance of considering both public and private pensions for exhausting the influences of population ageing including social security pensions, public-employee pensions, occupational pensions and individual annuities. In order to comprehend people's sources of income, it is disaggregated into work incomes, property assets interest, private pension and social security transfers (Esping-Andersen 1990: 85-6).

The World Bank's (1994) report – *Averting the Old Age Crisis* – is one of the dominant publications that systematically review the weaknesses and strengths of Pay-As-You-Go DB (Defined Benefit) pension systems and promote its views about pension reform and privatising social insurance pension schemes. In order to achieve economic prosperity and retirement income security and minimise the influence of demographic changes, government intervention, elderly poverty and the family members' social security responsibility at the same time, a mandatory savings pension plan is the answer. This report's argument is based on the changes of demographic profile, the risk of poverty amongst ageing people and the growing social expenditures, therefore the dependency ratio of ageing to working population, fertility rate, life expectancy, old-age poverty rate and the social expenditure as a percentage

of GDP are applied as the indicators. In addition, the level of redistribution is an indicator in the World Bank's report. It points out that changes to demographic structure will result in inequality between generations. That is, the first generation of a Pay-As-You-Go pension programme may receive generous benefits but the following generations, due to the reduction in the fertility rate and prolongation of life expectancy, will suffer from the growing cost of the pension scheme in order to maintain the generosity for the increasing number of elderly people and the system may eventually break down. Besides, the report claims that the Pay-As-You-Go pension system does not accomplish intra-generational redistribution because earnings-related contributions and benefits are unable to achieve this goal (World Bank 1994: 135-8). The administration cost constitutes another dimension for the World Bank's research. It argues that the costs usually consist of ten to fifteen percent of annual pension expenditures among developing countries, compared to one to two percent amongst most OECD states, because they lack the human and physical infrastructure. In other words, the higher the cost ratio of a pension system the poorer the efficiency and the greater the burden of the participants (World Bank 1994: 149-50). The indexation mechanism is reviewed by this report. It points out that the adjustment of benefit level will keep pensioners' purchasing power along with the current working population but most governments are unable, or unwilling, to fulfil this mission especially in times of hyperinflation (World Bank 1994: 151-6). The compliance rate of a pension programme is proposed to evaluate the popularity and sustainability. The World Bank's report argues that the low compliance rate illustrates the low efficiency and capability of the regulatory systems to enforce statutory orders. Also, the high evasion rate of social security responsibility suggests that the government may leave a proportion of the population at risk of old-age poverty if there is lack of corresponding social assistance provisions to meet their needs (World Bank 1994: 227-9).

ILO's suggestions for pension reform – *Social Security Pensions* – were published in 2000 and compiled by Gillion, Turner, Bailey and Latulippe. This report confirms and responds to demographic, economic, political, institutional and individual risks proposed, and caused, by the World Bank's proposition and argues that “[n]o pension scheme in an unpredictable world can completely succeed in providing a predictable source of retirement income” (Gillion, et al. 2000: 12). In order to maximise the possibility of maintaining retirement income security, ILO examines the dimensions of pension provisions thoroughly and intends to strike a balance between the mix of public and private sources. The adequacy of the benefit is one of the most important goals that a pension system has to meet thus the replacement rate, the determination of the benefit level of savings pension plans (e.g. rate of return, inflation, lump-sum and

purchase of annuities), the minimum level of pension payment (e.g. to maintain the poverty level or other prescribed standards), payment methods (e.g. lump-sum and periodical) and cost-of-living adjustments (either to follow price or wage index) are the indicators to be concerned with (Gillion, et al. 2000: 45-67). In order to secure retirees' living standards, the take-up rate of means-tested programmes is investigated because non-take-up is caused by the design of the provisions, the administration and the way the potential beneficiaries perceive and reflect the benefits (e.g. stigmatisation) (Gillion, et al. 2000: 118-9). The authors also review economic, demographic and governance indicators that may affect the financial sustainability and strengths. The economic factors are related to the growth of the participants, their wage levels and the number of beneficiaries as well as the level of inflation, while the demographic criteria emphasise the changes in the number of participants and mortality and fertility rates. The influences from government are the design and maintenance of pension programmes containing the institutions about contributions, pension formulae, entitlement conditions, benefit levels, insured earnings and administration costs (Gillion, et al. 2000: 134). Besides, financial soundness lies in the institutionalisation of the actuarial review of pension fund finances, the competence of the government's regulating authorities concerned and ruling out corruption (Gillion, et al. 2000: 219-22). As a result, the state can improve the transparency, reliability, accessibility and efficiency of the pension system (Gillion, et al. 2000: 244-7). Coverage rate is the indicator measuring the popularity and the proportion of population whose contingencies are not covered by social security provisions. It is argued that the exclusion of coverage is caused by the covered risks and target people's capacity for paying contributions (e.g. old-age, work injury, survivor and death), legal restrictions (e.g. excluding the work units that hire less than five people), administrative bottlenecks (e.g. slow extension of coverage rate may be caused by the compromise between political and interest groups and where the government recognises that the cost for collecting contributions from specific groups is great) and evasion of employers and/or employees' social security responsibilities (Gillion, et al. 2000: 198-202). Inter- and intra-generational transfers are considered in the ILO report in order to comprehend the solidarity between and within cohorts. As the report points out, the transfers, for instance, between younger and older households and community members mainly serve the purpose of sharing resources and equalising wealth between cohorts, and the family transfer system in the East belongs to this kind. Inter-generational transfers can be accomplished by statutory social security programmes (Gillion, et al. 2000: 285-8); intra-generational transfers are achieved by social assistance programmes and contributions of social security schemes in order to reduce the inequality of income distribution among pensioners and the working

population. For example, the contribution rate can be fully earnings-related or progressive along with wage levels during working years, and the ceiling and floor of the benefit level can be prescribed to meet a certain standard of living (Gillion, et al. 2000: 288-9). The arrangement of pension programmes, that is the pillars of pension provision, is discussed in order to minimise all kinds of risks, maximise retirement income and achieve appropriate levels of redistribution between and within generations. Redistributiveness can be easily fulfilled by DB pension schemes, but transparency can be efficiently improved by DC (Defined Contribution) pension plans especially when these two elements are well balanced and organised (Gillion, et al. 2000: 295-8).

In addition to the three studies discussed above, some seminal scholarly works propose the inclusion of some indicators to enrich and complete the comparison of pension provisions. Bonoli's (2007: 36-8) research debates whether Esping-Andersen's de-commodification index and the social expenditures his work includes tell the whole story, particularly, of Continental and Southern Europe countries because the higher the de-commodification score may not necessarily mean greater generosity of payments. Besides, some other channels that render incomes to pensioners may not be exhausted when a research places more emphasis on institutionalised provisions and less on traditional routes. For this reason, Bonoli picks the pension expenditures as a percentage of GDP, average pension as a proportion of average wage and retirement age as the indicators to illustrate that the Nordic pension system's generosity is not as great as Esping-Andersen argues. In fact, nevertheless Continental and Southern European states obtain lower de-commodification scores, their average level of the pension expenditures as a percentage of GDP and replacement rate of pension benefits are higher than their Nordic counterparts, and the effective age of retirement is even lower than in Nordic countries. De Deken and Kittel (2007: 85-6 and 96-8) find that aggregate social expenditure as a percentage of GDP can be a good indicator in comparing welfare efforts across countries because it is easy to understand and to some extent can omit the institutional differences. However, the weaknesses are, on the one hand, different databases may have different definitions of a specific term thus have different components. On the other hand, aggregated and disaggregated social expenditures may acquire different results on correlation tests to the same set of variables and bias the findings. Besides, De Deken and Kittel (2007: 82-3) propose the ratio of the amount of pension expenditures to that of pension receipts for examining the soundness of the finance of a pension system. According to this criterion, a pure Pay-As-You-Go pension system may maintain at one level while a partially-funded Pay-As-You-Go scheme or a pure savings plan may fluctuate most of the time.

A book based on the studies presented in the workshop “Sustainable Ageing Societies: Indicators for Effective Policy-Making” in 2004 and edited and published by the European Centre in 2007 proposes some indicators that are helpful for researchers and policy-makers to assess, monitor, adjust and even reform present pension provisions. Each researcher has different views on measuring the adequacy of pension provisions and selecting indicators. Rose’s (2007: 267-78) work tries to concentrate on, and exhaust, retirees’ sources of income from state, market and individual/household to argue that the state’s pension scheme is not the only source of pensioners’ income, which may come from any of the abovementioned three main providers depending on one’s career life. Rose divides these sources into: cash incomes; assets; age-related benefits and contingent safety nets. Cash incomes include employment earnings, pension provisions, investments, family transfers and social assistance benefits, while income from assets contains rents, care from children and interests of savings. The components of age-related benefits consist of medical treatment and concessions on travel; and the contingent safety nets refer to the receipt of unpaid help from outside the household and borrowing money for emergencies. The number of sources of income is added up to acquire the average sources of retirement income and a social survey on the perception of adequacy is employed. Bontout’s (2007: 286-97) idea is to focus on the examination of adequacy of pension provisions and emphasise defining the eligible and acceptable indicators for investigating the replacement rate. The aggregate replacement ratio is adapted to measure empirical replacement rate by dividing pensioners’ benefit level by individual earnings; while the theoretical replacement rate is defined as, “at the moment of take-up, the ratio of pension income in the first year of retirement divided by work income during the last year before retiring” (Bontout 2007: 290). Bontout suggests researchers separate the replacement rates of different pillars of pension schemes to see the effect on poverty reduction of each component. In addition, the theoretical replacement rate can also be adjusted by some assumptions and variables to forecast, for instance, the changes of replacement rate in ten years or a longer period of time from now.

Chlon-Dominczak (2007) employs demography-related and pension-system related indicators to assess the performance and demographic structure of pension schemes. The demography-related criteria consist of dependency ratio and life expectancy at retirement. The former indicator is affected by changes to the fertility rate and longevity, while the latter indicator reflects longevity and predicts the processes of population ageing. The advantage of demography-related indicators is that they provide a basis of comparison that can be used worldwide although some countries may have different definitions of working and ageing population due to their different demographic profiles and life expectancy rates. Chlon-Dominczak’s pension-system

related indicator considers six aspects. The system dependency ratio examines the dependency ratio (i.e. the number of pensioners to the number of contributors) in a pension system. This means that the closer the ratios of old-age dependency and system dependency then the greater the efficiency of a pension scheme because the pension provision covers as large a target population as possible. The exit age from the labour market is closely related to people's life expectancy at retirement because it to some extent determines the liability of a pension system. The current and future values of replacement rate are applied to detect the sufficiency of pension provisions and indicate to policy-makers the influence of policy design. The current and future values of total pension expenditures show the changes of the scale of pension systems as well as foresee the influences of pension reform and sustainability of the whole system. Chlon-Dominczak (2007: 549) points out that the adjustment of pension payments is an important variable in this computation because, as the findings illustrate, countries that apply a Notional Defined Contribution (NDC) system (e.g. Sweden and Poland) to bring life expectancy into the indexation mechanism may gradually reduce public pension expenditure in the following decades, while others that consider price and/or wage indices only may not. The implicit pension debt is employed to evaluate pension system's liability by putting current pension debt and net present value of pension obligation in a specific period of time. As a result, the impacts caused by changes to pension provisions and demographic structure can be assessed. However, this indicator needs to be further researched and developed because the method of reporting the implicit pension debt is not standardised. Lastly, Chlon-Dominczak fixes the elements that may determine benefit level (e.g. replacement rate for a DB pension scheme and investment return for a DC pension scheme) to calculate contribution rate. In this way, financial sustainability and efficiency can be maintained.

The indicators that are normally applied to comparative pension studies can thus be summarised into two groups as Chlon-Dominczak proposes: demography-related and pension-system related criteria. The former category contains dependency ratio, life expectancy and fertility rate, while the latter group includes a few dimensions to evaluate pension provisions. The aggregate and disaggregated pension expenditures, replacement rate and coverage rate are the most used indicators in comparative pension studies, and administrative costs, projected contribution rate and pension debt, indexation of pension benefits, evasion of social security contribution, level of redistribution, level of poverty reduction and the arrangement of pension mix are suggested when reviewing one or more pension systems thoroughly. In addition, disaggregated personal income is employed to examine the number of sources of income and income levels of pensioners then a series of poverty reduction schemes

can be properly designed.

The characteristics of welfare thought in the East which are reviewed in this chapter will help comprehend the political and welfare ideologies applied and the development of welfare provisions in these four Chinese Community countries in the following four case study chapters. The indicators, i.e. income components, dependency ratio, fertility rate, replacement rate, poverty reduction, administrative efficiency and private sources of retirement income will be adopted to evaluate the performance of these four case studies. Besides, the abovementioned criteria usually employed by comparative pension studies will be applied in the comparative analyses of pension provisions in China, Hong Kong, Singapore and Taiwan in Chapter Eight and Nine in order to compare the performance of these four pension systems. In addition, the evaluations underpin the suggestions for further amendments and reforms of these pension schemes made in Chapter Ten.

Chapter Three Taiwan

Taiwan, also known as Formosa, is an island country located on the western rim of the Pacific Ocean. The Taiwan Strait lies between Taiwan and China, and the country is situated in the middle of the island chain which stretches from Alaska to Southeast Asia. The Philippines is south of Taiwan, with the Bashi Channel between them. Taiwan is around 3,600 square kilometres in area and has a population of about twenty-three million. The population is mainly composed of four ethnic groups: Taiwanese (70%); Hakka (15%); Chinese (12%); and Aborigines (3%).

This chapter intends to answer two questions raised by the thesis: firstly, to what extent the Taiwanese government's ideology or the core values of the society affect the development of its pension system in the context of political, social and economic situations at different time points? Secondly, do these pension provisions fulfil the basic goal – reduction of old-age poverty? For this purpose, this chapter consists of two main parts: historical and analytical sections. The historical accounts will answer the first question and the evaluation will respond to the second.

The review of the development of pension policy in Taiwan not only helps this thesis look into the relationship between the changes to the economic, political and social contexts and the development of pension provisions, but also to investigate the influence of the government's welfare ideology throughout the policy process. For a clear view of the development, this chapter will divide the timeline, as Kuo (2002: 121-4) suggests, into three periods: prior to the Labour Insurance Act (-1949), from the Labour Insurance Act to the Labour Standards Act (1950-1984), and after the Labour Standards Act (1984 to the present). The two time points selected, 1950 and 1984, denote the establishment of the two most important employees' pension provisions, Labour Insurance and Labour Standards schemes, in Taiwan. The observation of the interaction between the government, employers and the public during the transformations will provide the answer to the first question. Besides, the description of current pension schemes that comes after the historical review helps comprehend the current system and initiate the following assessment.

The evaluation of the retirement payment schemes intends to respond to the question of to what extent the Taiwanese pension system reduces the risk of old-age poverty. For this sake, the section starts with a review of the income components of elderly people to show the relative importance of each source of income, concentrating on the incomes that constitute the largest proportions of retirement income. The development of the dependency ratio and total fertility rate of the population is considered

alongside the review of the family support system in Taiwan because the demographic profile and attitudes towards the traditional family are the key factors in whether the family income transfer will remain strong or not. In addition, public pension arrangements and their coverage, scale of expenditure, administration costs and replacement rate are examined in order to investigate the system's popularity, finance, administrative efficiency and the sufficiency of the payments. The level of poverty reduction of the aggregate retirement payments is investigated by comparing the aggregate benefit level and the minimum level of living. Lastly, the findings on Taiwan's retirement payment schemes will be concluded.

3.1 Historical Review of Retirement Payment Policy

3.1.1 Prior to Labour Insurance Act (-1949)

Although Taiwan has been a part of Chinese history since 230 AD during the Three Kingdoms period (220-280AD), Han Chinese did not begin settling in Taiwan until the 1700s (Shepherd 1993). Before that, in the 15th century, the Portuguese passed by Taiwan on their way to Japan and named it "Ilha Formosa" meaning "Beautiful Island". In 1624 the Dutch established a colony called Fort Zeelandia in the southern part of Taiwan (Huang 1981; Metraux 1991; Winckler 1988). Before the Dutch arrived, the Chinese people were mostly confined to the off-shore Pescadores islands, leaving the main island to the aboriginals. The Dutch colony attracted Chinese who were unable to make a living on the mainland to settle in Taiwan.

The Dutch forces were defeated by the troops of Cheng Cheng-Kong, also known as Koxinga, in 1662. Cheng established the Kingdom of Tungning and ruled Taiwan until 1683. Admiral Shi Lang defeated the forces of Cheng's grandson in 1683 and was stationed in Taiwan after that (Manthorpe 2005: 83-124). It was not until 1887 that Taiwan was separated from Hokkien Province and upgraded to a province with its own capital at Taipei. In the same year, the construction of the first railroad in Taiwan began and a post service was introduced. Eight years later, in 1895, the Ching Dynasty was defeated by Japan in the First Sino-Japanese War and signed the Treaty of Shimonoseki ceding Taiwan and the Pescadores permanently. Taiwan was released from Japanese colonisation according to the Allied Nations' consensus on self-determination, and the leader of the Kuomintang (KMT) Chiang Kai-Shek was appointed by the Nations as temporary governor of Taiwan. Because of the maladministration of Chen Yi, the governor and chief of the garrison in Taiwan, which led to the so-called 228 Incident in 1947, there was been confrontation between the (Chinese) KMT and native Taiwanese people ever since.

The 228 Incident was the most severe uprising in the early stage of the Nationalist government's rule of the island. It was caused by the improper punishment of a widow who sold cigarettes on the street and took place on 27th February 1947. One of the officials fired his pistol in order to escape from the crowd who gathered in support of the widow and the incident escalated into a standoff between the Nationalist government and local people. Martial law was declared by Chen Yi the next day (28th February) and there was indiscriminate shooting, raping and bayoneting in the following four weeks by the Nationalist troops who landed in both the north and south of Taiwan. According to official statistics, around 28,000 Formosans were killed in the 228 Incident, and most of them were intellectuals (Ferdinand 1996: 4; Kerr 1965; Lee 1993; Manthorpe 2005: 191-4). Mendel (1970: 120; cited in Gates 1981: 267-8) further points out that, between 1945 and 1955, it was estimated that around 90,000 political prisoners were jailed and half of them were executed.

Between 1945 and 1949, Nationalist military oppression as well as the massive export of Taiwan's agricultural products to China to support the Nationalists in the Civil War against the Communists led to a great deal of unrest. In order to consolidate this last stronghold of the Nationalist government after they withdrew to Taiwan in 1949, introducing social provisions was a practical strategy at the time. The only action applied to stem the uprisings was to declare the "Social Security Guiding Principles" in 1947 which proposed the steps of performing social provisions in Taiwan, but few schemes were established as a result of these (Lin 1994: 179-80).

3.1.2 From the Labour Insurance Act to the Labour Standards Act (1950-1984)

The most important event between 1950 and 1984 was the formation of three classes and the establishment of social insurance schemes along with the classes.

When the Nationalist government was defeated by the Communists on the mainland, they realised that Taiwan was the last piece of territory left for them and that the most important thing was to enhance the legitimacy of KMT rule on the island. However, the situation was bad for the Nationalist government. Obviously, the relationship between the KMT and local people, which was essential for building a solid base to retake the mainland, was impaired by the 228 Incident (Lin 1994: 180). Besides, the KMT learnt that the loss of the mainland resulted from the ignorance of the grassroots that was chiefly composed of low rank soldiers and police, peasants and labourers (Gates 1981: 269). Therefore the policies for enriching rural areas, known as the Land Reform, and for insuring labourers, known as the Labour Insurance scheme, became a priority (Myers 2009: 197). The Land Reform not only helped to develop rural areas

and the secondary industries that eventually led to Taiwan becoming one of the Asian Tiger Economies (Fei 1988: 37-8; Li 1988: 61), it also initiated the process of building a roughly tripartite-class society. Since then, social security schemes have developed accordingly.

The first stage of the Land Reform begun in 1949 and was aimed at reducing rents for tenants and subtenants. For this reason, the Regulations Governing the Lease of Private Farmlands in Taiwan Province were put into practice in 1949 and declared that rents should not exceed three-eighths of the crops reaped on any plot. The second phase of the Reform strengthened the Regulations introduced in the first stage and encouraged peasants to rent public plots to farm, which were levied from landlords and repaid by government bonds and the industrial shares of some companies previously owned by the Japanese. The last stage of the Land Reform began with the promulgation of the Land-to-the Tiller Act in 1953. After this, almost every peasant became a landowner and had their own plot to cultivate (Myers 2009: 197). Evidently, the Land Reform not only boosted the agricultural population from 38% to 60% between 1949 and 1957 (Lee 1983: 1448-9), but it also increased the number of people who worked on their own farm from 36% in 1949 to 78% in 1971 (White 1980: 53).

Despite the success of the Land Reform, Ferdinand (1996: 39) argues that it was merely a measure to punish those landlords who supported the Taiwanese intellectuals against the KMT. Gates (1981: 269) adds that the 228 Incident “decimated” the landowner class and the Land Reform “undercut its economic base”. Also, ownership was not distributed evenly since the previous landowner class was replaced by new landlords and the operational size of farms was not restricted (Apthorpe 1979: 528-9). Therefore, a petty bourgeoisie class, which was constituted by the growing number of new landowners, was shaped. According to Gates’ (1979: 390) research, the difference between the grand and petty bourgeoisies was that the former class mainly consisted of the highest positions of government and top officials of state-owned enterprises. Hence, the underdevelopment of the peasants’ social security provisions was because the government provided various subsidies for purchasing seeds and productive assets, on the one hand, and classified the peasants as capitalists since most of them obtained their own farm after the Reform, on the other. A health insurance programme for peasants was finally launched in 1989 and a social allowance programme for elderly peasants in 1995.

Gates (1979: 391) classifies the proletariat as the people who sell labour and skills as well as the new middle class. The first group are predominantly manual workers and the second consists of low grade civil servants, servicemen and teachers and

managerial employees hired by private firms. With regard to Gates' (1979: 386-9; 1981: 260-6; 1992) seminal works, she observes that the differentiation of classes in Taiwan was, whether it was intentionally fostered by the state or not, based on education and ethnicity. For one thing, because the main languages spoken in Taiwan, including Taiwanese, Hakka and some aboriginal dialects, were banned and Chinese was the only language used in education, mainlanders were more competitive in acquiring higher positions in society than other ethnic groups. Because of this, people generally perceived mainlanders as highly educated. For another thing, the ethnic distinction between Taiwanese¹ and mainlanders was, as Gates (1979: 388; 1981: 269-70) argues, indirectly manipulated by the government. It differentiated the high (mainlander) and low (Taiwanese) classes and the state eventually distinguished social status by separating soldiers (higher class, which was mostly constituted by mainlanders) from peasants and labour (lower class, mainly composed of Taiwanese). Although more than half of civil servants and educators were Taiwanese, such a distinction made the masses perceive themselves as higher class. By the same logic, the governmental employees and labour applied to different social security programmes that provided different level of benefits.

The Labour Insurance scheme was piloted from 1950 and formally implemented in 1958. Kuo (1997: 54; 2006b: 338) claims that the establishment of the Labour Insurance scheme was partly the result of political considerations and a means of preventing labour revolts and partly in preparation for the reform of secondary industries later. Governmental employees' retirement benefits were paid from various sources but depended on one's status, namely, civil servants (Civil Servants Retirement Benefit scheme, 1943; Insurance for Civil Servants and School Faculty, 1958), servicemen (Insurance for Military Personnel, 1953; Military Service for Officers/Non-commissioned Officers of the Armed Forces, 1959) or educator (Statute Governing the Retirement of School Faculty, 1944; Insurance for Civil Servants and School Faculty, 1958). The difference in the benefit levels provided by labour and governmental employees is that Labour Insurance was merely a lump-sum payment while the other groups received periodical payments.

In fact, Labour Insurance was not the only retirement payment scheme at that time. Regulations Governing Taiwan Province Factory Workers Retirement and Regulations Governing Taiwan Province Miner Retirement were passed in 1951 which provided employer-sponsored old age benefits. Because they were not statutory schemes, employers did not need to abide by the rules. Furthermore, eligibility was low because

¹ The term "Taiwanese" here refers to the people who lived on the island when it was a Japanese colony.

workers were required to serve twenty-five years in one company before they were entitled. Plus, in order to boost prosperity, the government allowed the development of private businesses to increase foreign investment, which was not widely approved in the 1950s; meanwhile it suppressed unionisation and avoided policies i.e. retirement payment schemes, that were harmful to employers. As the advertisement posted by the Taiwanese government in the New York Times stated, these policies create an environment that was “the best bargain in Asia, if not the world, when efficiency as well as cost is taken into account...There are no strikes ("Free China Salutes the American Bicentennial", New York Times, July 4, 1976, p. 20; cited in Gates 1981).” The government’s resistance to promulgating another retirement benefit programme for labour did not last long. Although the Labour Standards (LS) scheme was introduced in 1984 due to public pressure, the regulations and requirements on old age benefits were identical to the abovementioned rules in 1951. In other words, the only improvement that the LS scheme achieved was to turn the obsolete rules into statutes.

The last class in Gates’ (1979: 389) research is essentially composed of the “un-productive lumpenproletariat of the chronically unemployed, beggars, and the underworld.” Although the government introduced the regulations for measuring the scale of poverty in 1963, the low poverty threshold applied possibly underestimated the chronic poverty in Taiwan. Moreover, despite the Social Assistance Act of 1980, the rule on poverty evaluation was not changed and the supporting regulations were not reinforced, so it was not much to help the people most in need.

3.1.3 Being a Developmental Universalist? (Since 1985)

As Chen (2001), Hill and Hwang (2005), Hsiao (1992) and Wong (2005) argue, democratisation and the pursuit of civil rights after the lifting of martial law in 1987 led to the transformation of Taiwanese society. Although demands for social provisions were made during this period, social policies were subordinated to economic policies because the government believed that substantial welfare reform would reduce prosperity (Holliday 2000). Therefore, most draft laws of social provisions and pensions were reviewed and proposed by the Council for Economic Planning and Development. However, the pressure of elections since the early 1990s forced candidates to consider welfare issues and put them into effect on coming to power, which moved Taiwan away from a class-specified regime and towards a more developmental-universalist welfare regime. Most of the changes after 1987 were, in fact, due to the triumph of the “out-of-party” movement.

Since the KMT was the only approved political party during the period of dictatorship,

all kinds of associations as well as freedom of speech, association and publication were banned. For this reason, some Taiwanese intellectuals initiated movements in the early 1950s to oppose the polity and challenge the prohibition of civil rights under martial law. In the 1970s, the out-of-party movement broadened out from parliament to more intense street protests seeking human rights. The efforts of the movement eventually opened up opportunities for organising their own political party, the Democratic Progressive Party (DPP), which was started in 1986 and took part in all levels of elections (except presidential election). In the following year, 1987, martial law was lifted.

Unequal treatment for different classes in various aspects of society soon became the target of social activists and the DPP. Accordingly, people's needs for social provisions came to be the main argument of elections in the 1990s. The DPP proposal to issue social allowances to the elderly population brought them their first triumph in the election of local governors in 1993. Although the KMT proposed the National Pension (NP) scheme to compete with the DPP, immediate benefits seemed to be favoured by people (Tang and Yeh 2006). Along with the DPP's success in 1993, the social allowance programme for senior peasants was passed in 1995, and the social allowances for senior citizens and aboriginals proposed in 2000 (and both were introduced in 2002) helped the DPP into power between 2000 and 2008 (Lin 2007). However, because these three allowance programmes were not based on statutes and the benefit level was adjustable, the increase of the benefit naturally became a hot issue in subsequent elections. Even though the expansion of social allowances gradually approached universal coverage, the difference between the benefit for peasants and the other two statuses was that the first programme was not means tested.

The establishment of the Labour Pension (LP) scheme was one of the achievements of the DPP government. Because the conditions for claiming the retirement payment of the Labour Standards (LS) scheme were hard to meet, as mentioned above, calls were made for its amendment or replacement with a new system from 1990. Some committees were organised for investigating the reform during the 1990s, but no consensus was reached because the discussions stopped at whether to apply the individual account defined contribution scheme or Pay-As-You-Go defined benefit scheme. This problem was raised at the Conference on Economic Development in 2001, which was arranged by the DPP government to negotiate some pending issues. At this meeting, participants agreed to put the individual account defined contribution scheme, Pay-As-You-Go defined benefit scheme and private insurance scheme together in practice. That is, workers would be able to choose the scheme on their own

behalf. However, the Council of Labour Affairs did not follow this consensus and abandoned the Pay-As-You-Go defined benefit scheme. Although legislators saved the defined benefit plan and held hearings to scrutinise the issues, the Pay-As-You-Go scheme was ultimately turned down without a sound reason (Fu 2007; Kuo 2006a). Notwithstanding the great differences of opinion on pension reform between the public, academia and relevant authorities, the LP scheme was finally passed on 11th June 2004. Since then, the LS retirement payment scheme has been gradually phased out and will be replaced by the LP scheme in the future, but the seniority earned under the LS scheme will not be transferred to the LP scheme. That is, the pension rights will not be renewed when one shifts jobs or quits the labour market before fulfilling the conditions.

The establishment of the National Pension (NP) system was another achievement of the DPP government that was originally proposed by the KMT government, in this case, in 1993. A first draft was proposed by the Council of Economic Planning and Development in 1995 but no further action was taken. National Pension Insurance was discussed under DPP rule in 2002 but was again put aside. The investigation was resumed in late 2004 and there were intensive debates on the coverage, contribution rate, replacement rate and the way to build the connection with other social insurance schemes (namely, Labour Insurance, Insurance for Military Personnel, and Insurance for Civil Servants and School Faculty). The NP system was eventually passed on 20th July 2007 and not only aimed to cover the non-working population, but also provided a minimum level of pension benefit and bridged the other three social insurance systems, therefore it could help the unemployed continue accumulating pension rights. It is a triumph for the Taiwanese welfare state because, most importantly, the NP scheme signifies the change of government ideology on pension policy from occupation- or class-based to nation-based albeit that it is virtually a class-based scheme because it serves those who are not categorised as any established class. Moreover, it transforms the temporary living allowance programmes into a statutory scheme which confirms the importance of maintaining retirement income security.

The amendment of the Labour Insurance (LI) system was another landmark of pension reform in Taiwan. Because the lump-sum retirement payment of the LI provisions could not deal with people's longevity risks, offset inflation and assure replacement rates, the DPP government intended to annuitise the LI benefits after they came to power. The investigation and hearings started in 2006 and concentrated on the replacement rate one could earn for each year of contribution, adjustment of payments, increase of contribution rate, and financing. The discussion became intense after the NP system was passed in mid-2007 because the public hoped the long-lasting problem

of the LI scheme could be solved at the same time. An amendment was eventually promulgated in late 2008 and the new scheme was implemented in 2009. Although this reform totally changed the payment method of LI benefits from lump-sum to annuity, the coming issue was about whether one could receive more in the new scheme than the old.

Clearly, private sector workers' retirement income security has greatly improved after 50 years of reform and the inequality between different statuses of employees has been reduced, but there are still some gaps to be narrowed such as those related to replacement rates. Moreover, although the NP scheme is designed to provide a solution for the problem of universal social insurance coverage, there are some potential deficiencies of the scheme such as the take-up rate and disincentives of participation. Thus, although it seems like the ambition of universal coverage is about to be realised, the relevant authorities still have to remain careful about finding faults and remedying them.

3.2 Retirement Payment Programmes

Because governmental employees constitute a relatively small number, 6.3%², of total insured employees and coverage is small in terms of the total elderly population, this thesis will chiefly focus on schemes for other groups. The schemes for governmental employees are briefly introduced in Table 3.1.

² The number is computed from CLA (2008: 78) and Bank of Taiwan (www.bot.com.tw) figure. As these official statistics demonstrate, the number of insured civil servants and the size of the labour force overall are 591,310 and 8,799,405 respectively at the end of 2007.

Table 3.1 Taiwanese Retirement Payment Programmes for Governmental Employees

Status	Military Servicemen	Civil Servants	Public and Private School Faculty
Coverage	Covers four kinds of servicemen who serve in Army, Navy and Air Force voluntarily or compulsorily.	Covers formally qualified public servants only.	The system covers both public and private school full-time faculty.
Rate of Contribution	The rate ranges from 8% to 12% of double one's basic salary. The contributions are afforded by government (65%) and insured people (35%).	Civil Servants and School Faculty Insurance: the rate ranges from 4.5% to 9%. Civil Servants Pension Plan: ranges from 8% to 12%. Government affords 65% of the contribution, and employees afford the rest (35%).	Civil Servants and School Faculty Insurance: Public faculty is the same as Civil Servants (i.e. Civil Servants Pension Plan), private schools and its employees afford 32.5% respectively. Private School Faculty Pension Fund: 2% plus 1% of tuition fees.
Requirement for Entitlement	a) Retirement Payment: 3 years to 20 years. service b) Retirement Pension: over 20 years service or over 15 years if one is over 60 years old. c) Both Retirement Payment and Pension: disabled or dead on duty.	These two schemes share the same requirements: a) Over 5 years of service and over 60 years old. b) Over 25 years of service. Compulsory retirement: a) Over 65 years old. b) Mental disorder or disability.	Both statuses share the same requirements: a) Over 5 years of service and over 60 years old. b) Over 25 years of service. Compulsory retirement: a) Over 65 years old. b) Unable to work because of mental or physical illness.
Payments	a) Retirement Pay: Up to 53 'Basic Points', which is equal to double basic salary. b) Retirement Pension: Up to 70% of 'Basic Point'. c) Compensation: Up to 50% of 'Basic Point'.	a) Lump-sum retirement payment. b) Monthly instalments. c) 1/2 lump sum and 1/2 monthly instalment. d) 1/3 lump sum and 2/3 monthly instalments. e) 1/4 lump sum and 3/4 monthly instalments.	Civil Servants and School Faculty Insurance: Same rules as Civil Servants. Civil Servants Pension Plan: Same regulations as Civil Servants. Private School Faculty Pension Fund: Up to 61 'Basic Points', which shares the definition with public schools faculty.
Organisation and Finance	The fund is administered, managed and invested by the Ministry of Public Services, and is supervised by its supervisory board.	Same as servicemen's insurance scheme.	Contributions collected for Civil Servants and School Faculty Insurance and Civil Servant Pension Plan to the Private School Pension Fund; private schools faculty scheme collect the fund to Private School Faculty Pension Fund which is administered by its supervisory commission.

There are three main occupational retirement payment programmes for the labour force: Labour Insurance Old-Age Benefits (LI), Labour Standards Retirement Payments (LS), and Labour Pension Retirement Payments (LP). Moreover, two supplementary systems, social allowances and the National Pension (NP) scheme were established to assure retirees' income security. Among these schemes, LI and LS are used to provide lump-sum payments, but LI was amended to issue periodical benefits in 2009. Although LP provides periodical payments as the government claims, the benefit is based on the account balance at retirement divided by the months one is expected to live. In addition, NP and social allowances guarantee a minimum level of pension for all the insured.

3.2.1 Labour Insurance Act (LI)

This fundamental social insurance for the labour force was introduced in 1950. After fourteen amendments over half a century, from 2009 it provides periodical payments to cover seven kinds of risks: maternity benefit; injury and sickness benefit; medical-care benefit; disability benefit; unemployment benefit; old-age benefit; and bereavement benefit. According to Article 5 of the Act, the Bureau of Labour Insurance is in charge of the administration, and the Labour Insurance Supervisory Commission and Labour Insurance Fund Advisory Board are in charge of managing and investing the fund. All three of these bodies are subordinate to the Council of Labour Affairs. Recently, the relevant authorities planned to entrust a larger portion of the fund to private financial institutes, but some legislators argued that the Council of Labour Affairs did not regulate those approved institutes prudently and may place the fund in great danger (Legislative Yuan 2005: 386).

The title of this programme characterises it as covering all the employees who are not insured by the other schemes. According to Article 6 of the Act, employees who are between fifteen and sixty years old and employed by the private sector, trade unions, non-profit organisations, and also those who are self-employed should join this programme. In addition, the workers who are employed by governmental departments but not have to pass examinations have to participate in LI. However, companies that hire less than five staff can decide whether to join LI or not.

The contribution rate is in accordance with the worker's status. Moreover, the portion that employers and employees afford is not evenly distributed, and central and local governments also subsidise a part of the contribution. Most of the employees working in the private sector, for instance, provide 20% of contributions while employers (70%) and central and local government (10%) offer the rest. People who are self-employed need to provide 60% of contributions and central and local governments cover the rest,

while fishermen could receive an 80% subsidy from the government and pay 20% of contributions themselves. After the amendment of 2008, the contribution rate of ordinary insurance was raised to 7.5% of monthly earnings from 2009.

The conditions for entitlement and the level of payment were changed a lot in the amendment of 2008. In the past, workers could claim retirement payments either if they had served in the same company over twenty-five years, or if they had been insured over twenty-five years and over fifty years old, or if they had been insured over fifteen years and is over fifty-five years old. Under the old rules, the lump-sum payment was the only option and the amount of the payment was at most equivalent to forty-five months of salary, which was based on the average of the last six months' earnings. Since 2009, a person who is over sixty years old, insured by LI for over fifteen years and proved as retired has been able to claim the periodical benefit until she/he passes away, while lump-sum benefit is the only option for those who are insured less than fifteen years. Under the new regulations, people can earn 1.55% of replacement rate for each year of contribution and there is no cap on the rate.

3.2.2 Labour Standards Act (LS)

The LS is administrated by the Council of Labour Affairs and its fund is under the custody of the Bank of Taiwan. The investment of the fund is determined by a supervisory commission which is composed of nineteen members and is subordinate to the Council of Labour Affairs. As discussed above, although the LS Act was passed in 1984, it simply inherited the 1951 rules. Although LS is a compulsory legislation, the government does not play the role of ensuring the sustainability of the fund but places the obligation solely on employers. Therefore, Kuo (1991) argues that the LS is a move away from the principle of social insurance, as declared by Constitution, to employer's responsibility. Although the nature of the LS is debatable, it standardises and improves working conditions for most employees.

According to Article 3 of the Act, most private sector employees are covered by the LS. The difference between the coverage of LI and LS is that LI covers employees, the self-employed and vocational workers who participate in the scheme through vocational trade unions, while LS covers employees only. Therefore, the coverage of the LI scheme is greater than the LS. The contributions are provided solely by employers and the rate is decided by employers between 2% and 15%.

According to Articles 53 and 54 of the Act, voluntary and compulsory retirement applies to different conditions. People who work in the same unit over fifteen years and are fifty-five years old, or who serve in the same company over twenty-five years, or who work in the same firm over ten years and are over sixty years old are qualified

as voluntary retirees. Workers who are over sixty-five years old or who suffer from mental disturbance or physical disability and cannot perform their jobs properly are forced to retire. The main problem of LS is the rules of serving in a company for either at least twenty-five years or over fifteen years and reaching fifty-five years of age to be entitled to retirement payment. Because more than 90% of companies are middle- and small-sized businesses and most of them survive for about thirteen years on average, abiding by the regulations is impractical (Kuo 2006a: 272, footnote 7) and employers can evade their responsibility by closing businesses or dismissing employees. This was also the main reason for establishing the LP scheme.

The LS provides lump-sum payments only and the level of payment is decided by one's years of service and last drawn salary (Basic Point). One can earn two Basic Points for each year of work in the first fifteen years, and one Basic Point in the following fifteen years of service. In other words, it is assumed that everyone works up to thirty years and obtains up to forty-five Basic Points.

3.2.3 Labour Pension Act (LP)

In order to solve the problems caused by LS, the debates about amending LS or establishing a new system to substitute LS began in 1990. After nearly fourteen years of the policy-making process this Act was passed despite strong opposition from the public. LP is administered by the Council of Labour Affairs and local government level Department of Labour Affairs, and the Labour Pension Fund Advisory Commission is assigned according to the Act to determine the investment of the fund. Each participant has a retirement savings account to collect contributions monthly, and the fund is managed by the Bureau of Labour Insurance.

Because LP is the alternative of LS, the coverage of LP resembles that of LS. Hence, the problem lies in the transition rules. As stated in Articles 8 and 9, people who shifted jobs or entered the labour market after LP was implemented have to apply for LP, while those who stay in the same company or entered the labour market before LP was put into practice can choose which scheme to apply for. Article 10 further points out that the decision is irreversible when one opts for LP. Official statistics showed that there were 4,573,412 participants in LP at the end of 2008 which constituted about 58.0% of employees. LP continues the ideology of LS as an employer-sponsored scheme that leaves the responsibility of offering retirement benefits to employers. In LP, the contribution rate is statutorily raised from the minimum of 2% in LS to 6% and is entirely provided by employers. Workers can also voluntarily contribute up to 6% of monthly wages to the account, which is free from income tax.

The conditions for claiming LP retirement payments are different from those of LS. In LP, with reference to Article 24, it is stated that the participants who are over sixty years old are eligible for the benefit but the method of payment depends on one's seniority. That is, if one is covered by either LS or LP and the aggregate seniority is over fifteen years, then she/he could choose to receive either periodical or lump-sum benefit. If one participates in either scheme for less than fifteen years in total, then lump-sum payment would be the only option. According to Article 23, the lump-sum payment is a one-time withdrawal from the account balance, while the periodical benefit divides the savings with life expectancy. In other words, if one's account balance is NTD 1,200,000 and one is expected to live ten years, then one could receive NTD 10,000 as retirement benefit per month.

3.2.4 Living Allowance Temporary Regulations (LA)

LA programmes were widely introduced before NP was established. Five LA schemes have been implemented since 1995: Living Allowance for senior peasants (1995), for middle- and low-income senior citizens (1998), for senior citizens (2002), for aboriginals (2002) as well as special (long-term) care living allowance for middle- and low-income senior citizens (2007). Among them, the scheme for senior peasants was the only universal provision and provided the highest level of benefit, while the rest were based on means tests. The term "senior" in LA refers to people over sixty-five years old. Thus, when people fulfil the means tests (except the allowance for farmers) and are over sixty-five years old, then they are entitled to the payments. The special care allowance is limited to adult children who are nursing the beneficiaries of middle- and low-income senior citizens' schemes.

The benefit level of LA for senior farmers was steadily raised from NTD 3,000 to NTD 6,000 between 1995 and 2007, while the level for both senior citizens and aboriginals has been NTD 3,000 since the beginning. The benefit levels for middle- and low-income senior citizens and its special care allowance are NTD 6,000 and NTD 5,000 respectively. Because these provisions are based on provisional rules rather than formal statutes, the benefit level is not adjusted by formulae but by government orders. In addition, allowances for senior citizens and senior aboriginals were terminated at the start of NP in 2008 and were replaced by the minimum benefit guarantee.

3.2.5 National Pension Act (NP)

NP was put into practice on the 1st October 2008. As the main theme of the Act claims, NP is to make up the shortfall of old age, disability, survivor and funeral benefits from other social insurance schemes. The Bureau of Labour Insurance administers NP

and manages the fund, and the representatives from government, policyholders and technocrats and researchers form the advisory board.

NP covers people aged between twenty-five and sixty-four years old and do not take part in any of the social insurance programmes. Namely, it mainly includes the non-working population, students and unemployed people. At the end of March in 2009, 4,213,056 people were insured by NP constituting around 18.3% of the populace. The contribution rate of NP is 6.5% in the first three years, then increases by 0.5% every two years up to 12%, and it assumes basic income as the insured earning. The contribution is normally provided by participants (60%) and government (40%), while people who are recognised as disabled or qualified as middle- and low-income earners are subsidised by both central and local governments. Insured people who are over sixty-five years old can claim for old age benefit. There are two formulae for calculating the level of payment and the higher level is applied.

Table 3.2 Taiwanese Retirement Payment Programmes for Labour and Non-Working Population			
Programmes	Labour Insurance Act (LI): Old	Labour Standards Act (LS)	Labour Pension Act (LP)
Coverage	Employees, self-employed, fishermen who are 15 to 60 years old could take a part in this scheme.	Employees who do not belong to public sectors or who serve in public sectors but are not covered by relevant programmes.	It covers those who were participants of LS but would like to join LP, and workers who enter the market or shift jobs after the new scheme introduced.
Rate of Contribution	5.5% for ordinary insurance and 1% for unemployment insurance. Employees (70%): ordinary workers (20%): government (10%). Self-employed (60%): government (40%). Fishermen (20%): government (80%).	The rate ranges from 2% to 15% that is totally afforded by employers.	At least 6% of current salary that is totally afforded by employers. Workers could voluntarily contribute up to 6% of salary which is exempted from income tax.
Requirement for Entitlement	a) Insured over 1 year and reach retirement age (male: 60; female: 55). b) Insured over 15 years and over 55 years old. c) Insured over 25 years and serve in the same firm. d) Insured over 25 years and over 50 years old.	a) Over 15 years of service and over 55 years old in the same undertaking. b) Over 25 years of service in the same firm. c) Over 60 years old or disabled.	a) Employees who are over 60 years old could apply to liquidate the accounts. b) One serves less than 15 years: lump-sum payments only. c) One serves over 15 years: lump-sum payment or periodical payments.
Payments	Only lump-sum payments. Up to 45 months of average insured wage.	Only lump-sum payments. Up to 45 months of average salary.	a) Lump-sum payment. b) Periodical payments, which is defined by one's balance and life expectancy.
Organisation and Finance	The Bureau of Labour Insurance (BLI) administers, manages and allocates the fund, which is supervised by the Supervisory Commission.	The Council of Labour Affairs (CLA) administers, manages and allocates the fund, which is supervised by its supervisory board.	CLA administers this system and authorises BLI to collect, manage and invest the fund. The investment of the fund will be scrutinised by its supervisory board.

Table 3.2 Taiwanese Retirement Payment Programmes for Labour and Non-Working Population (Continued)			
Programmes	Living Allowance (LA)	Labour Insurance Amendment	National Pension Act (NP)
Coverage	All peasants, citizens, aboriginals who are 65 years or older are covered by it.	The same as Labour Insurance.	NP covers people who are between 25 and 64 years old, and have never received from social insurance schemes other than LI. That is, it covers non-working people and unemployed.
Rate of Contribution	This programme is financed by the government's budget.	The contribution rate starts from 7.5% in 2009. The rate will be adjusted 0.5% each time, and the cap is 13%. The rules about the subsidy of premium are the same as LI.	The coverage rate starts from 6.5% and is up to 12%. The rate will be adjusted by 0.05% each time if the reserve of the fund is less than the amount of 20 years of payments. The premium is afforded by the state (40%) and insured (60%) in normal cases.
Requirement for Entitlement	Peasants: universal benefit for farmers 65 years old or over. Senior citizens and aboriginals: 65 years old or over and means tests Mid- or low-income household: 65 years old or over and stricter means tests.	Workers who are 60 years or older and are insured for more than 15 years are eligible for periodical benefit, while those who are insured less than 15 years can only receive lump-sum benefit. People who participate in this scheme before 2009 can choose a lump-sum payment or periodical benefit, but the choice is irreversible.	People who are insured and are 65 years old or more are entitled to old age benefit.
Payments	Peasants: NTD 6,000 Senior citizens and aboriginals: NTD 3,000 Mid- or low-income household: NTD 6,000 for the poorest, and NTD 3,000 for normal poor.	Periodical or lump-sum payment that depends on the requirements that one meets. Periodical benefit = [(average insured wage) * seniority * 0.775%] + 3,000; or = [(average insured wage) * seniority * 1.55%]	The payments are paid periodically. Benefit level = [(average insured wage) * seniority * 0.65%] + 3,000; or = (average insured wage) * seniority * 1.3%
Organisation and Finance	This scheme is administrated by the Ministry of Interior (MOI) and is financed by the budgets of central and local governments.	Bureau of Labour Insurance (BLI) administrates the system, keeps the records and manages the fund. The investment of LI fund is investigated by the Supervisory Commission.	MOI authorises BLI to administrate the system and manage the investment of the fund. A supervisory board is assembled by MOI to investigate the investment and finance.

3.3 The Sources and Performance of Retirement Income

This section will start with a review of the distribution of income components for people who are sixty-five years or older, then discuss the efficiency of familial transfers, earnings, public pension plans, social allowance programmes and private insurance pension benefits which together constitute more than 80% of retirement income in Taiwan.

3.3.1 Income Components of Old Age Population in Taiwan

Table 3.3 summarises the results of surveys of older people's source of income. It is worth mentioning that these surveys aimed at examining older people's perception of the importance of each income component. That is, this series of surveys was not based on the actual amounts they received from each source of income, but respondents' impressions. Accordingly, the change of importance may not be inevitably related to the shift of the amount and proportion of specific source of income.

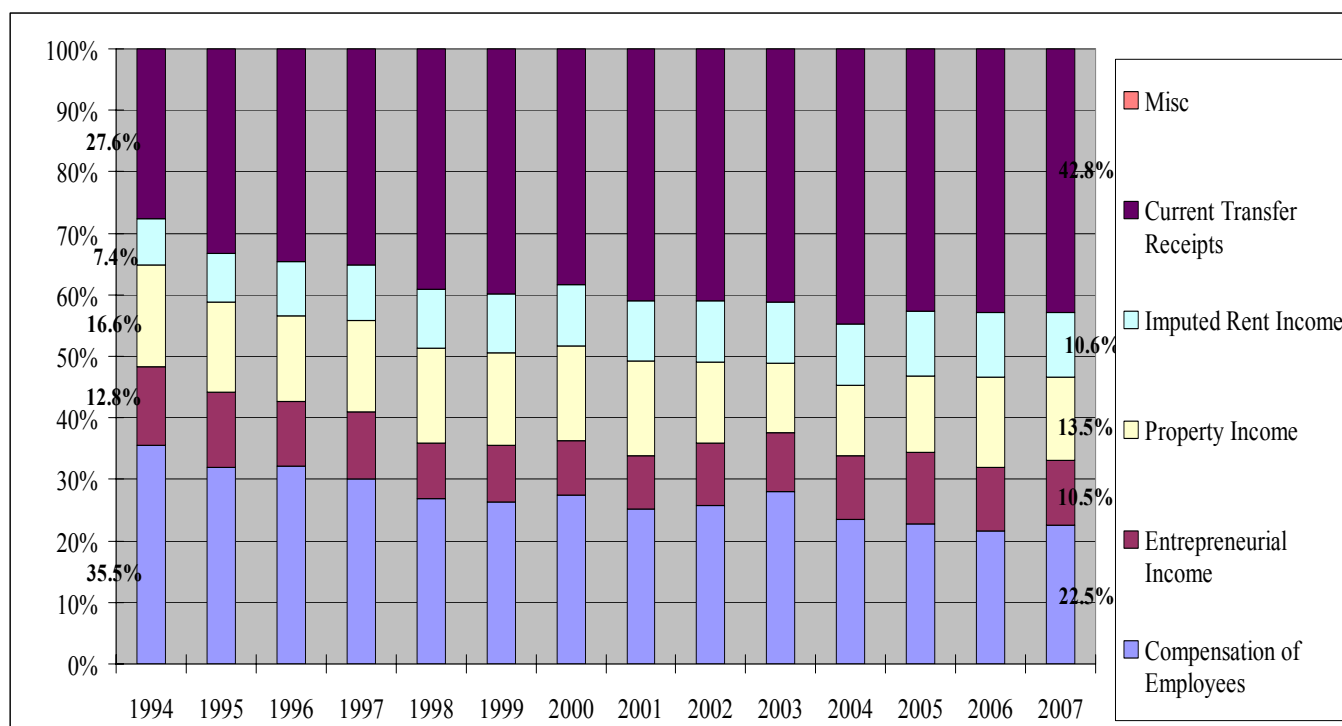
Among these income sources, obviously, the support from children was the most important source for people aged sixty-five and over though its importance decreased by about 20% between 1986 and 2005. In the meantime, the aggregate importance of "Saving and Investment", "Retirement Payments", "Earnings" and "Spouse's Earning & Retirement Payments" grew by about 6%. Among these four elements, the income from "Saving and Investment" became less important and diminished from 15.3% in 1989 to 9.2% in 2005 whereas the other three gained more importance. Among them, "Retirement Payments" played the most important role, growing from 11.9% to 13.0%, while income from spouses was the least important. Moreover, this series of surveys showed that social assistance and allowance programmes became more important from 1986 to 2005, increasing from 1.2% to 16.0%. That is, Living Allowance schemes (LA) have gained popularity and the number of recipients has doubled (Ministry of Interior 2006: Table 120 and 123). Evidently, when the peasants' allowance was inaugurated in 1995 the number went up from 1.6% to 6.4%. Its importance grew from 6.4% to 12.9% after the allowance for middle- and low-income earners was implemented in 1998. The senior citizens' allowance scheme in 2002 further boosted the popularity to 16.0% in 2005 (Table 3.3).

Year	Total	Children	Saving & Investment	Retirement Payments	Earnings	Spouse's Earnings & Retirement Payments	Social Assistance & Allowances from Government	Assistance from Benevolence & Relatives	Loan	Others
1986	100	65.81	29.77				1.24	-	-	3.18
1987	100	64.00	31.68				1.70	-	-	2.45
1988	100	61.82	34.88				1.07	-	-	2.25
1989	100	58.37	15.29	11.87	8.23	2.72	1.23	-	-	2.29
1991	100	52.37	15.87	16.07	8.10	2.68	1.57	-	-	3.33
1993	100	52.30	17.25	14.76	6.60	4.25	1.61	-	-	3.24
1996	100	48.28	13.15	17.55	7.30	4.34	6.37	-	-	3.00
2000	100	47.13	9.26	15.39	13.72	-	12.86	-	-	1.64
2002	100	45.72	11.73	16.65	12.11	2.83	8.98	0.45	0.10	0.43
2005	100	46.48	9.22	13.04	10.97	3.52	15.97	0.46	0.07	0.28

Notes: All the numbers are in percentages
Source: Fu (2003: 129); Ministry of Interior (2005: 60, 242-4).

Figure 3.1 illustrates the sources of elderly people's retirement income (sixty-five years old and over) between 1994 and 2007. It shows that transfer incomes (42.8%), compensation of employees (22.5%) and property income (13.5%) were the three main sources constituting nearly 80% of older people's income in 2007 and the imputed rent (10.6%) and entrepreneurial (10.5%) incomes were relatively small. Among these, transfer incomes grew markedly from 1994 (27.6%) to 42.8% in 2007 and employment compensation decreased by 13% from 1994 (35.5%), but the rest did not change much. Employees' compensation includes income from employment and retirement payments of Labour Standards (LS) scheme and other occupational pension plans, and entrepreneurial income represents income from self-employment. The property income is defined as benefits from private insurance policies as well as revenues from deposits and investment, but there are no further details about the composition of the revenues from investment and deposits and the receipts from private insurance schemes. The imputed rent income is excluded from the discussion in this thesis because it is irrelevant to public and private pension provisions.

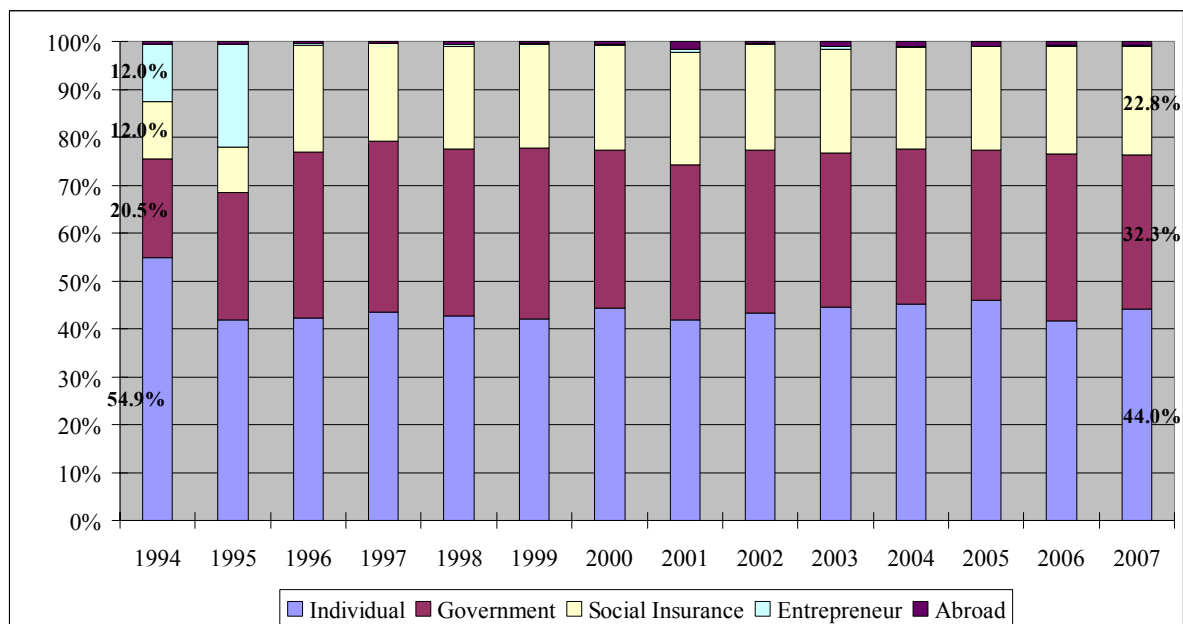
Figure 3.1 Income Components of Elderly in Taiwan (65+) (1994-2007)



Source: Data calculated from DGBAS surveys of various years (1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007).

Transfer income is the most important source of retirement income and includes the earnings acquired from individuals (children, relatives and other familial members), government (mostly are from Living Allowance (LA) schemes), social insurance (from Labour Insurance (LI) and other social insurance programmes for civil servants, school faculty and servicemen), enterprises, and abroad. Payments for occupational illnesses and workplace injuries were not categorised as social insurance benefits before 1996, thus the transfer from enterprises fluctuated greatly in 1994 and 1995. Income from adult children, relatives and other familial members (individuals) dropped from 54.9% in 1994 and has fluctuated between 40% and 50% since then. In 2007, the income from individuals composed 44.0% of older people's income. The benefits transferred from government grew from 20.5% to 32.3% between 1994 and 2007. Since LA schemes were introduced in 1995, the transfer from government has become an essential source of retirement income. Transfers from enterprises constituted an important part of income in 1994 and 1995, the reason being that the benefits of LI were defined as company's transfer payments. From 1996, LI payments were categorised as social insurance benefits and the system as a whole made up 22.3% of retirement income in 2007 (Figure 3.2).

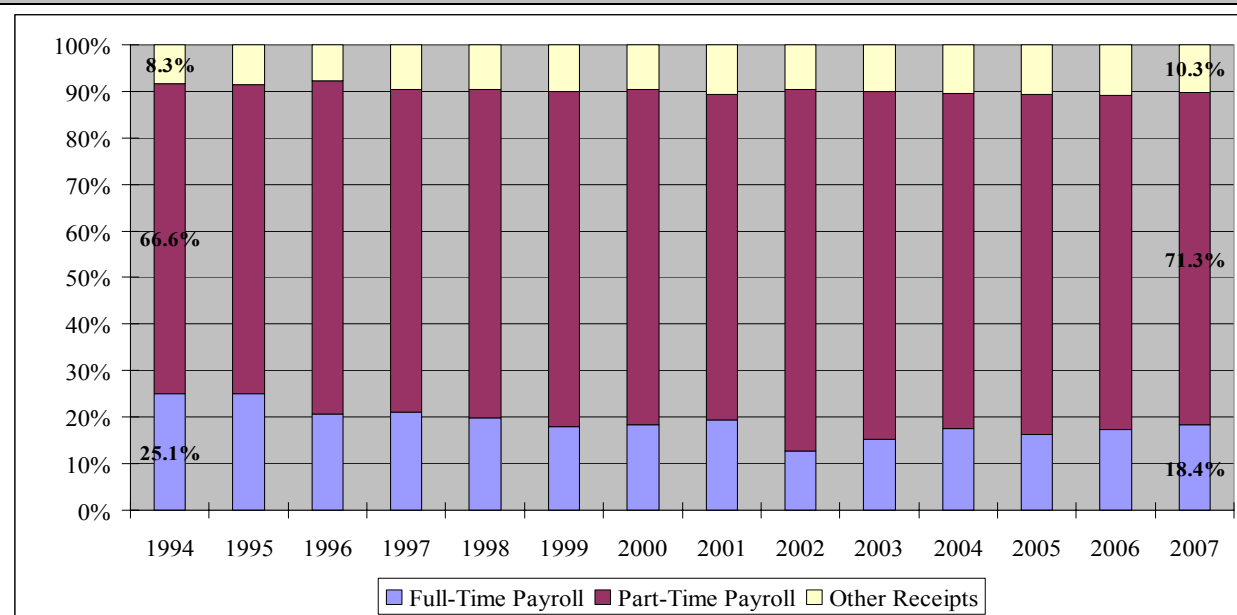
Figure 3.2 Composition of Transfer Income (1994-2007)



Source: Data calculated from DGBAS surveys of various years (1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007).

Compensation of employees was the second important element of older people's income in 2007, which was made up by full-time payroll (salary for employment), part-time payroll (chiefly composed by LS retirement payment) and other receipts and subsidies. According to Figure 3.3, part-time payroll constituted 71.3% of employees' compensation and full-time payroll made up less than 20% of this in 2007.

Figure 3.3 Components of Compensation of Employees (1994-2007)



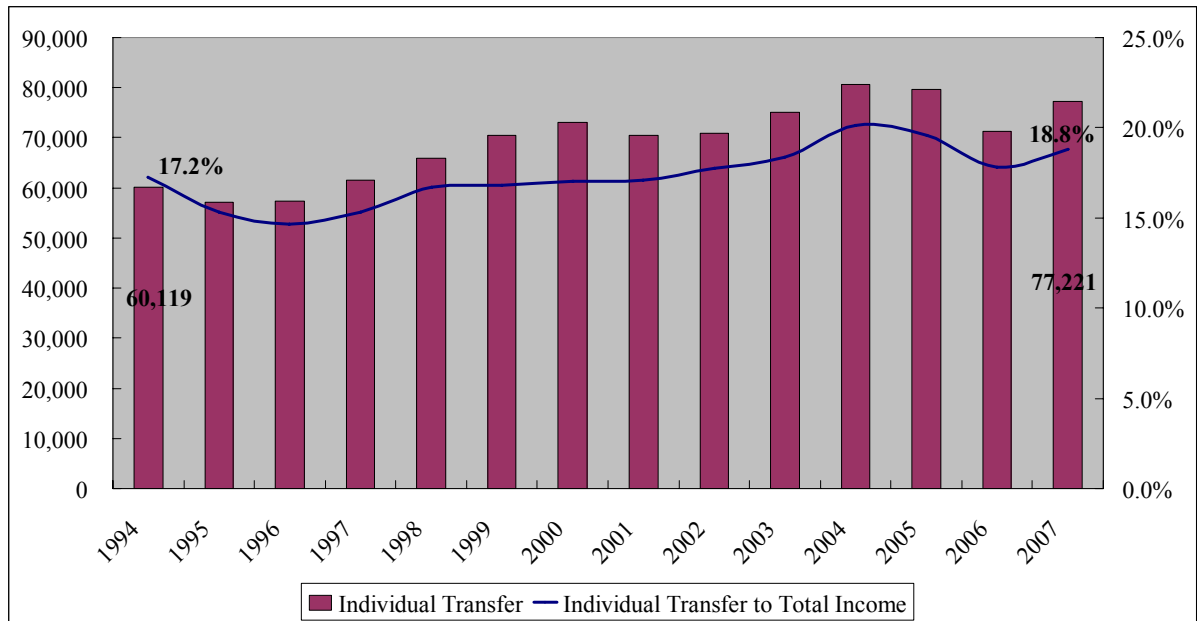
Source: Data calculated from DGBAS surveys of various years (1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007).

3.3.2 Familial Support

Although the importance of familial support dropped considerably between 1986 and 2005 by about 20%, the transfer income from adult children or other family members was still relatively more important than other elements (according to Table 3.3). Figure 3.4 further demonstrates that the amount of monetary transfer within family increased between 1994 and 2007 but as a percentage of entire income it remained stable at between 15% and 20%.

Some researchers (Finer 2000: 27 and 30; Lee, et al. 1994: 1036; Chou, 1997; cited in Wang and Sun 2003: 153) point out that the notion of familial support for elderly members is still dominant in Taiwanese society. Besides, they argue that the exchanges of resources between parents and adult children are based on the amount of conceptual loan which parents invested in their children's education and development of personality and career. Namely, the relationship was and is to some extent an insurance-like open-ended lifetime responsibility, but not simply an exchange of monetary gains. In this way, the resources obtained and risks incurred are distributed and pooled within the household and become a model of generational transfer. For this reason, however, the stability of the demographic profile of the society is the determinant of whether or not the model can be sustained, but the prospects are not good with regard to current official statistics and studies on demographic transformation.

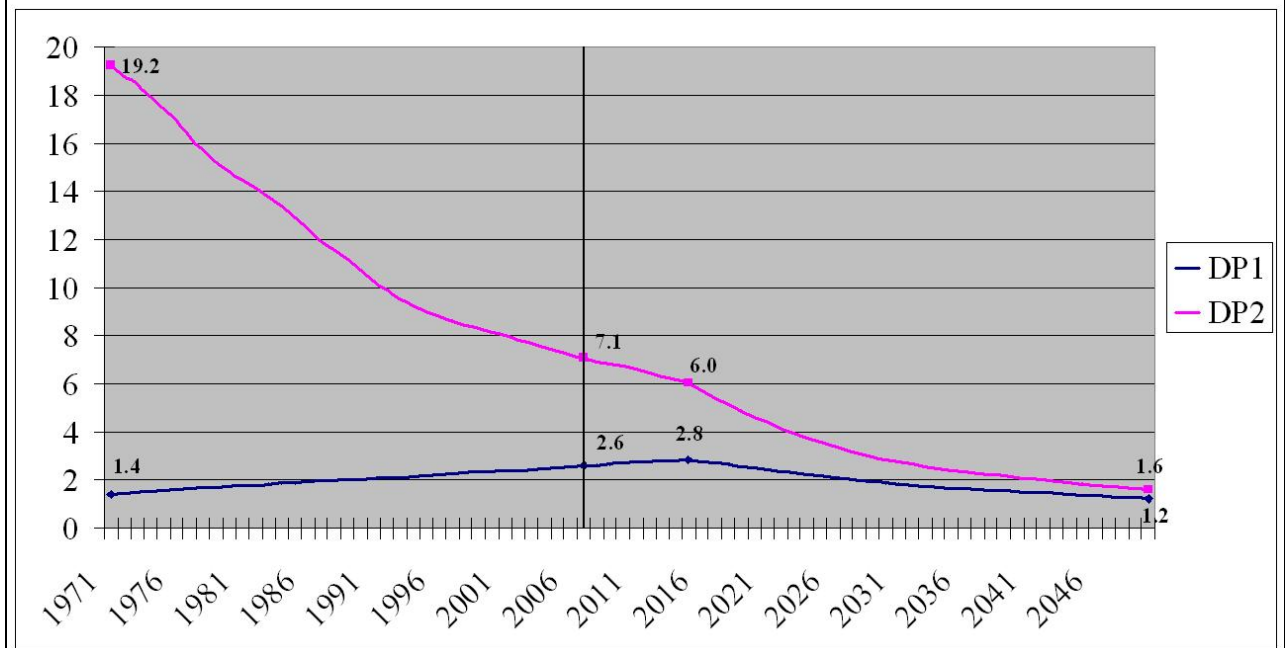
Figure 3.4 The Amount and Portion of Familial Transfer as Retirement Income (1994-2007)



Source: Data calculated from DGBAS surveys of various years (1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007).

Dependency ratio is defined as how many economically gainful people on average could take care of a dependent person. DP1 in Figure 3.5 presents the average number of working people to a non-working person (0-14 years old and 65 years old and over), while DP2 describes the average number of working population to one elderly person. The numbers after 2007 are projected. DP1 rose from 1.4 to 2.8 between 1971 and 2015 because workers who retired from the labour market are outnumbered by the younger generation who entered the market. The decrease of youngsters and prolongation of life expectancy overturned the trend in the past, thus DP1 was predicted to fall to 1.2 in 2050 meaning that every 1.2 working person would take care of one dependent person. DP2 showed that the ratio of working people to ageing population has greatly reduced since 1971 from 19.2 to 7.1 in 2007. From 2015, the ratio was predicted to drop further from 6.0 to 1.6 in 2050. Obviously, the inability to replace the labour force with a younger generation may consequently accelerate the ageing of the population.

Figure 3.5 Dependency Ratio of Taiwan (1971-2050)

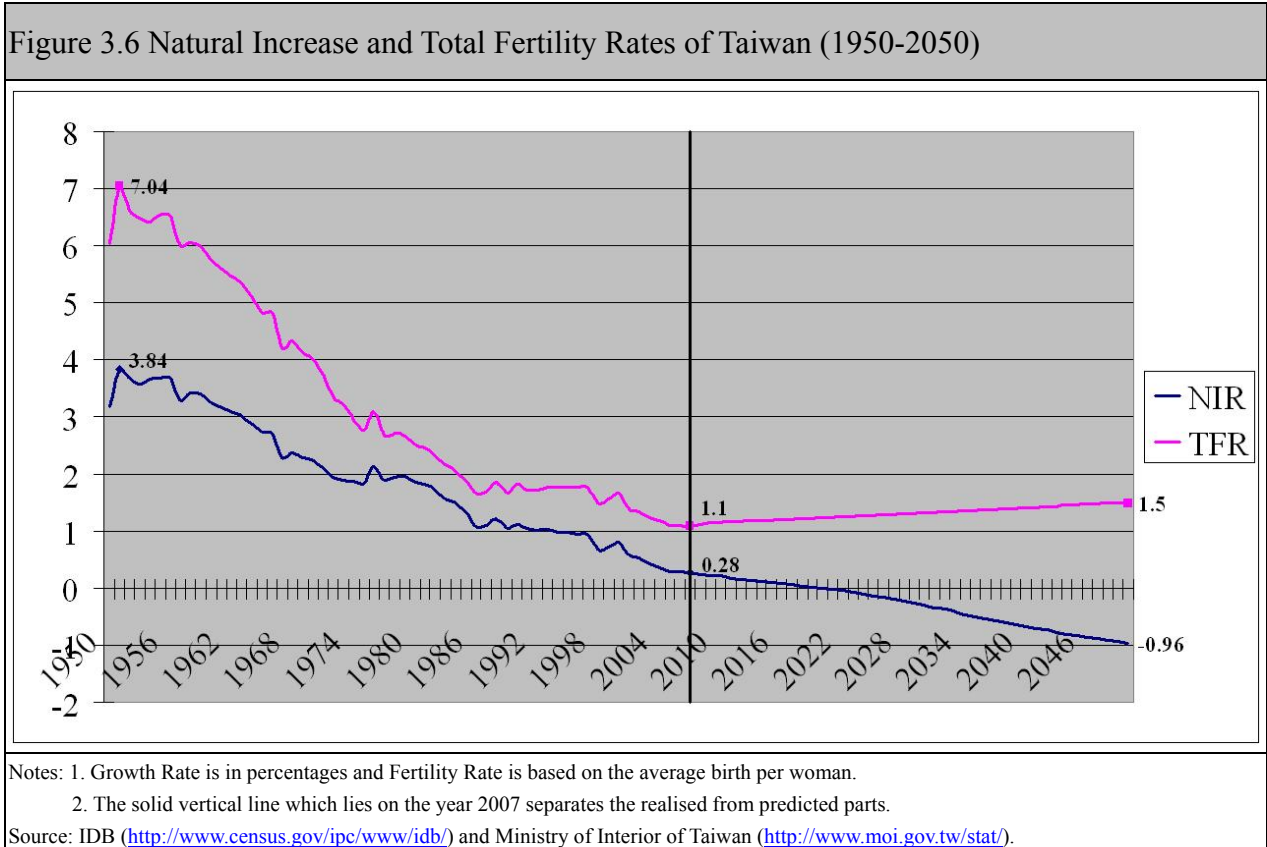


Note: 1. Dependency Ratio 1 (DR1; Lower line)= [Population Aged 15-64 / (Population Aged 0-14 + Population Aged 65)]
 2. Dependency Ratio 2 (DR2; Upper line)= (Population Aged 15-64 / Population Aged 65)
 3. The solid vertical line which lies on the year 2007 separates the realised from predicted parts.
 Source: Derived from Directorate-General of Budget, Accounting and Statistics (DGBAS; <http://www.dgbas.gov.tw/ct.asp?xItem=13213&CtNode=3504>), Taiwan, and IDB (<http://www.census.gov/ipc/www/idb/>).

As shown in Figure 3.6, the high total fertility rate (TFR) after 1950 helped boost the population, and the decrease of TFR decelerated the growth of population from the 1960s. The reduction of TFR was partly caused by the shift from agriculture to industry and the development of society and economy (Chang, et al. 1987: 324), and was partly due to the application of contraception advised by the US government (Tsai 2007: 82-90). Since then the TFR has continued to fall and reached a fairly low level, 1.11 per woman, at the end of 2007. However, as Kohler and his colleagues (2002: 642) have warned, if the TFR of a country stays at around 1.0 then the populace will be halved in twenty-nine years. Therefore, keeping the fertility rate at this level may not do anything to help smooth the demographic substitution and maintain the productivity and reproduction of this country.

Demographers have different views on the development of Taiwan's fertility rate, and whether it is going up or down. The arguments supporting the recovery of fertility rate in Taiwan, on the one hand, are mostly based on the postponement of birth. That is, TFR needs to be adjusted by the years of postponement caused by education, the tempo of births and the ideal number of births. As a result, the real TFR would stay at around 1.5, then gradually return to replacement level (2.1 for advanced countries as Taiwan) (Bongaarts and Feeney 1998: 285; Feeney 1991: 475-6; Wang and Liu 2008: 59). Chang's (2003: 617) findings further asserted that the TFR will gradually

increase to 1.6 by 2021 and increase slowly thereafter, while the latest official population projection indicated that the TFR may fall between 1.060 (if the conditions remain the same as now) and 1.397 (if demographic policy works appropriately) in 2050 (CEPD 2008: Appendix 5).



On the other hand, Castles’ (2003: 226) research found that the TFR may not necessarily return to the levels suggested by the other camp because the transition of demography is based on how a society adapts to social, economic and political changes, which is far more complicated than might be expected. Moreover, McDonald (2006: 487-8 and 498-500) contends that 1.5 of TFR is the level to examine whether one country could adapt to the transformation of society, particularly the relation between state and family, or not. It is argued that governments which take familial transition into consideration when policymaking could mostly avoid being caught in the low fertility trap, whereas states that cannot build a family-friendly environment may take longer to get out of it.

Accordingly, Lutz et al (2006: 173-7) hypothesise the low-fertility trap by applying 1.5 of TFR as the threshold and assume countries that fall below the level will be stuck in a state of low TFR for a long period of time. It is a dynamic model that explains how these three main components – number of births and age structure of the population, sociological reasoning, and economic rationale – interweave with each

other, and how the concept of having fewer children is gradually and eventually internalised and copied by the next generations. Firstly, the decreasing number of births which results from postponement of birth re-modifies the age structure and forms the perception of having fewer babies. The progress will not stop spontaneously but only when government corrects the situation; despite government action, the TFR will not be boosted immediately. Secondly, the number of children that a family raises will be repeated by the next generations. It is true that one may expect to have a number of offspring but not necessarily accomplish it, and that is why the bias is significant when measuring the number of births from one's expectation. Thirdly, it is hypothesised that, in a cohort, the gap between "personal aspirations for consumption and expected income" is enlarged and will thus reduce people's desire for children. This thesis is proposed by Becker (1965) who suggests that income is significantly and positively related with people's desire for children and develops the argument that children are luxury goods (Folbre 2004). If those societies that already have a low TRF level cannot solve these three problems appropriately, then they are likely to become further bogged down in this fertility trap. Among these societies, as McDonald (2008: 21) points out, in 2005, some East Asian countries such as China (Shanghai City: 0.60), Hong Kong (0.97), Japan (1.26), Korea (1.08), Singapore (1.24) and Taiwan (1.12) would be in a deep pitfall.

It is true that the reduction of the fertility rate in Taiwan, achieved through slogans and the application of contraception, helped improve women's participation rate and their social status, increased capital accumulation and formation, and contributed to the take-off of Taiwan's economy (Chang, et al. 1987: 336; Freedman, et al. 1994: 329). However, as Lee, Mason and Miller's (2003) research found, the reduction of TFR in Taiwan may have boosted the accumulation of capital but has not necessarily increased the income level. It is also true that, more importantly, in the light of the discussion above, the problem was not merely the postponement of birth, but how Taiwan reacted to the great transformation of the society. Some relevant studies (Freedman 1986; Frejka and Ross 2001: 246-7) have been calling for a review and amendment family policies in Taiwan since the mid 1980s, but Tsai (2007: 99-100) believes that the problem is not only about adjusting the policies. Rather, he asserts that this trend is nearly irreversible in Taiwan in the short run because there is a lack of theoretically supported arguments to encourage births. For example, the idea of "reducing the fertility rate", which has been the main theme of demographic reform since the 1960s, could still easily gain the younger generations' approval as "being advanced" (Coombs and Sun 1981: 1253).

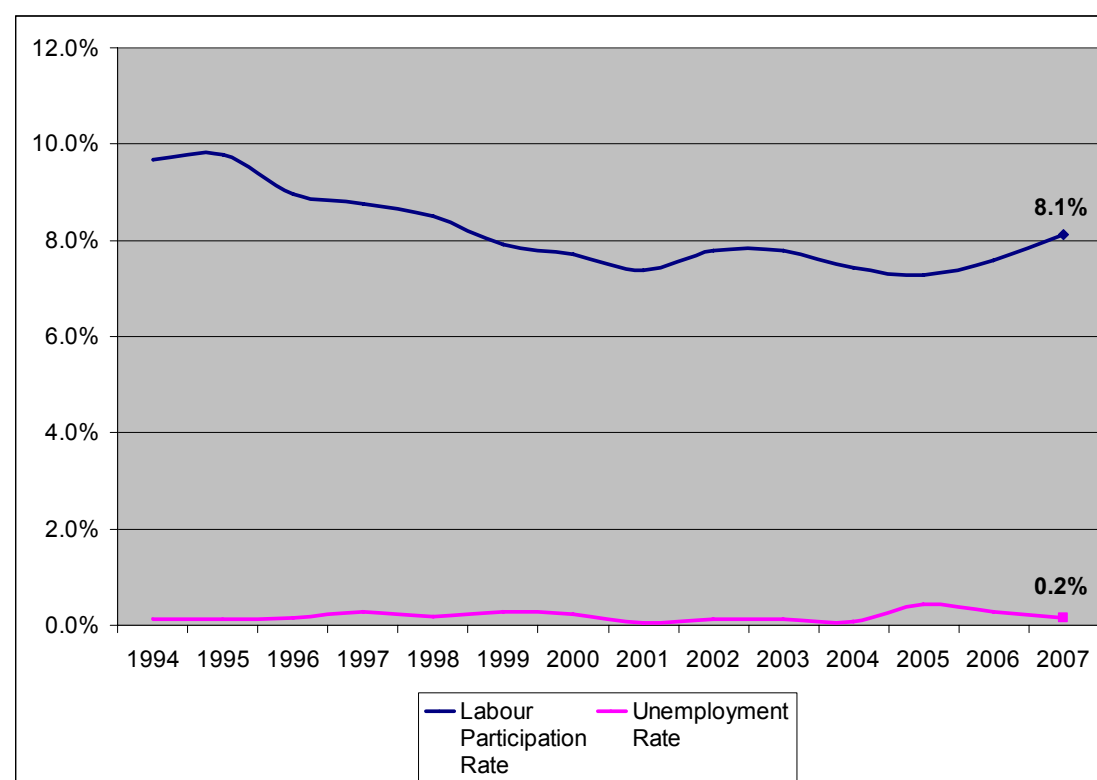
Some research (Attias-Donfut and Arber 2000; Attias-Donfut and Wolff 2000; Kohli

1999; Lee, et al. 2003) denotes that the level of public pension benefits and the strength of familial support are significantly and positively related. That is, a high level of public support could relieve family members from the obligation-driven transfers. However, government may need to take the responsibility of providing pension benefits when households fail to fulfil it. From the prospect of demographic transition discussed above, familial transfer may not be a sustainable model for supporting retired parents.

3.3.3 Earnings

As mentioned above, earnings from employment or self-employment were 10.97% of older people's income components in 2005 (Table 3.3). With reference to the level of importance in 1989 (8.23%), though it did not increase a lot within fourteen years, it still constituted more than one-tenth of old-age income. Figure 3.7 illustrates that the labour participation rate of the elderly population fluctuated between 7% and 10% from 1994 to 2007 and it was 8.1% in 2007; and the unemployment rate amongst this group was 0.2%. In other words, most of the elderly workers who remained in the labour market were either employed or self-employed, and many of those that quit their jobs may leave the labour market for good.

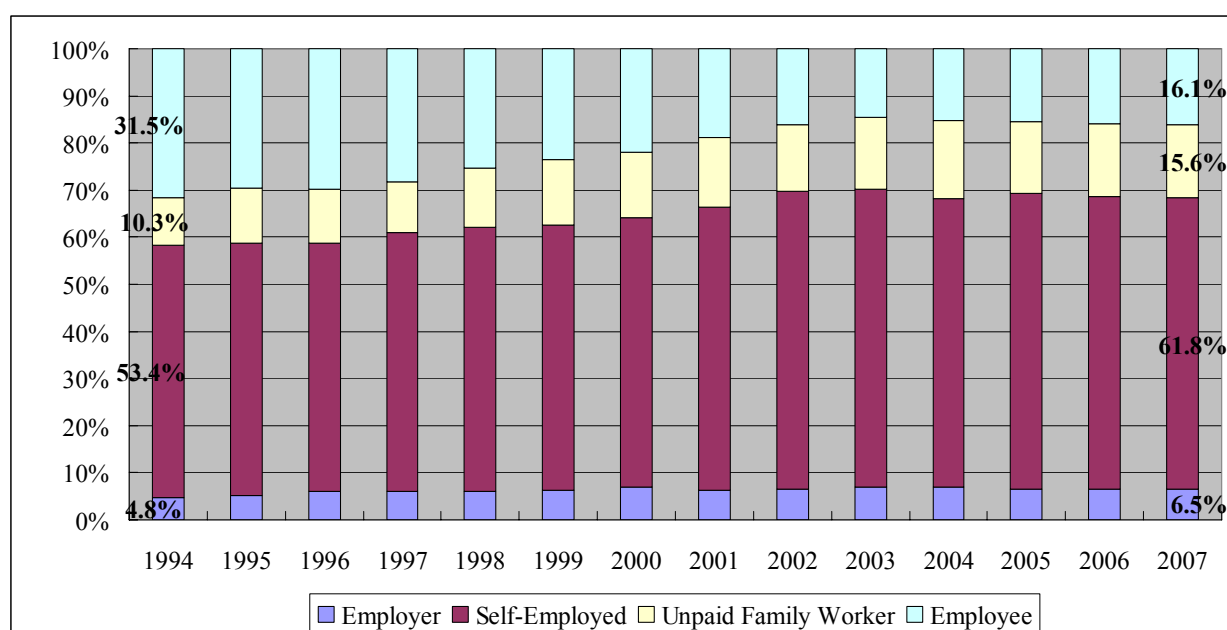
Figure 3.7 Elderly Labour Participation and Unemployment Rates (1994-2007)



Source: Council of Labour Affairs (2008: Table 2-4 & 2-6).

Figure 3.8 demonstrates that more than three-fifths of older workers were self-employed in 2007 and 6.5% were also employers. Those who were employed or worked as unpaid family workers occupied a similar portion of the economically gainful older population. There was a change in the distribution of employment status between 1994 and 2007 with the percentage of people working as employees halving, while the number of workers in other groups went up gradually. Therefore, self-employment and entrepreneurship rather than employment are the most common types of elderly participation in the labour market.

Figure 3.8 Labour Participation of the Older Population by Employment Status (1994-2007)



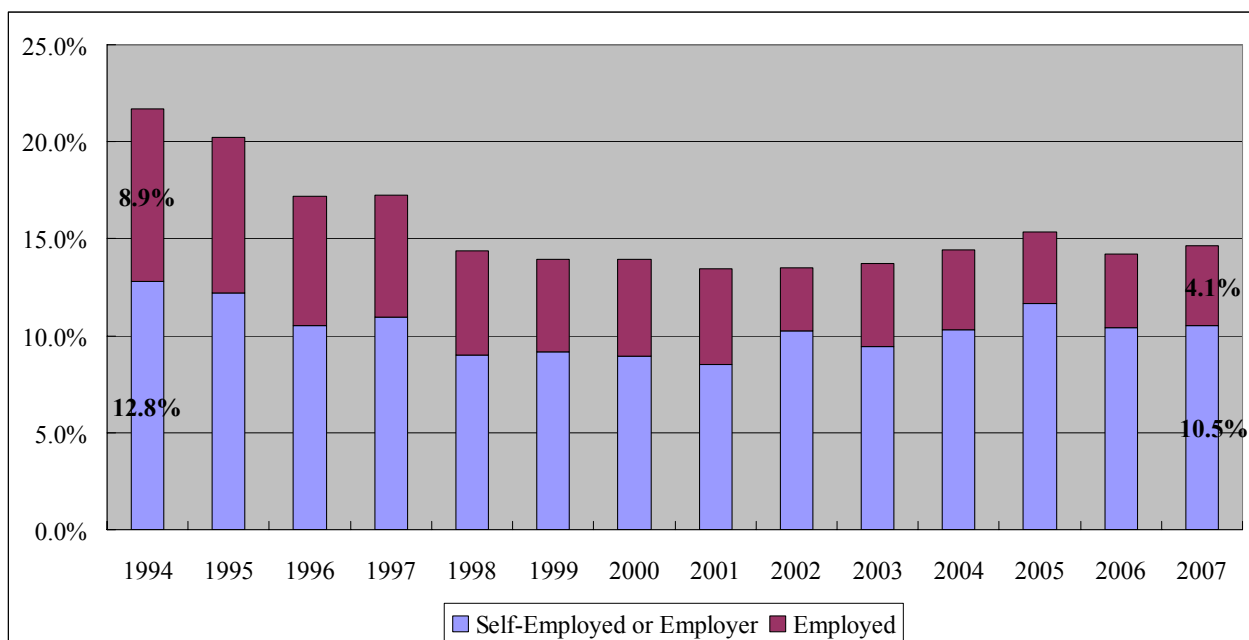
Source: Database of Manpower Survey Statistics, Directorate-General of Budget, Accounting and Statistics, Taiwan (<http://www.dgbas.gov.tw/ct.asp?xItem=18844&ctNode=4943>). [Accessed: 19 June 2009]

As Figure 3.9 shows, the income elderly people earned from employment or self-employment made up 14.6% of total income in 2007. Earnings from employment constituted 4.1% of older people's income while the share of self-employment or entrepreneurship was 10.5%. Income from the labour market was more important in 1994 than in 2007 comprising 21.7% of total income and employment income constituted 8.9% of all the components. The share of income earned through employment fell more sharply than that of self-employment or entrepreneurship between 1994 and 2007, which corresponds with the findings in Figure 3.8.

The figure indicates that earnings became a less important income component for older people between 1994 and 2007. As for the constitution of employment status, older self-employed and employers outnumbered older employees. Although it was unclear whether or not earnings from the labour market would become more

important to the elderly in future, less than 30% of the ageing labour force worked as employees.

Figure 3.9 Earnings as a Percentage of Total Income by Employment Status (1994-2007)



Source: Author's calculation based on DGBAS surveys of various year (1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007).

3.3.4 Public Retirement Payment Schemes

Labour Insurance (LI) is the largest social insurance programme in Taiwan. It covers around nine million workers and serves as the basic source of retirement income. The Labour Standards (LS) and Labour Pension (LP) schemes top up LI old-age benefits, which are now paid out from a pure earnings-related pension system according to the amendment of 2008, with periodical old-age benefits issued since 2009. Because the new LI, National Pension (NP) and LP have only recently been launched, the analysis of this thesis is chiefly based on the old LI and LS.

Table 3.4 demonstrates the coverage rate of insured to employed population. It shows that more than four-fifths of the economically gainful population were covered by LI between 1996 and 2008 (column (c)). In other words, between 80% and 86% of the employed working population are insured by the LI scheme and are eligible for old-age benefit when they fulfil the requirements.

Table 3.4 Coverage of Labour Insurance System (1996-2008)			
Year	(a)*	(b)	(c)**
	Employed*	LI Contributors	Ratio of Insured to Employed
1996	9,068,000	7,434,299	82.0%
1997	9,176,000	7,500,917	81.7%
1998	9,289,000	7,597,386	81.8%
1999	9,385,000	7,738,971	82.5%
2000	9,491,000	7,915,789	83.4%
2001	9,383,000	7,779,127	82.9%
2002	9,454,000	7,857,842	83.1%
2003	9,573,000	8,102,570	84.6%
2004	9,786,000	8,341,927	85.2%
2005	9,942,000	8,540,755	85.9%
2006	10,111,000	8,681,145	85.9%
2007	10,294,000	8,799,405	85.5%
2008	10,403,000	8,795,248	84.5%

Notes: The numbers are in thousand persons, persons and percentages.
* The numbers include employed and self-employed population. CLA provides the numbers in thousands only.
** (c) = (b) / (a)

Sources: Numbers are derived and calculated from Yearbook of Labour Statistics (Council of Labor Affairs 2009).

The coverage of the LS retirement payment is difficult to estimate because the records are held by employers instead of governmental organisations. Although the Bank of Taiwan is authorised to manage the fund, the information about coverage and the average level of benefit is not detailed. In order to assess the coverage rate of LS, therefore, it is assumed that the number of claims for LI old-age benefit is equal to the retirees from companies in the same year. The assumption is based on the old rules of LI that people who claim for LI old-age benefit cannot be re-insured by LI, thus the number of claimants for LI retirement payment may equal to the number of retirees from companies that year. Moreover, the number of recipients of LI and LS pension provisions fluctuated because both schemes provide lump-sum payments and not every retiree could be awarded the payment. As a result, Table 3.5 illustrated that the coverage rate of LS retirement benefit ranged between 13.2% and 22.8% from 1996 to 2006. In other words, only one in five to six retirees was entitled to this provision, which was the reason that the public asked for pension reform.

Year	(a)	(b)	(c)
	LI Recipients	LS Recipients	LS % of Recipient
1996	108,692	14,381	13.2%
1997	94,786	14,847	15.7%
1998	98,520	17,897	18.2%
1999	103,187	19,900	19.3%
2000	92,863	19,378	20.9%
2001	115,275	26,255	22.8%
2002	136,649	23,000	16.8%
2003	113,968	20,678	18.1%
2004	121,666	18,611	15.3%
2005	155,151	25,096	16.2%
2006	131,363	24,458	18.6%

Notes: All the numbers are in persons and percentages.
* (c) = (b) / (a)
Source: Calculated from data provided by BLA and CLA.

Table 3.6 illustrates the scale of LI, LS and LP funds as a percentage of GDP. Among these, the LP fund is the smallest because it was only launched in 2005. Both the LI and LS funds constituted less than 4% of GDP and the payment made up 1.2% and 0.3% of GDP at the end of 2007 and 2006 respectively. The LS fund grew from 1.5% to 3.6% of GDP between 1997 and 2007 but the percentage of the payment has stayed at around 0.3% since 2002, while the ratio of LI fund to the amount of GDP increased slightly from 3.3% (1997) to 3.4% (2007) and the benefit grew from 0.5% of GDP to 1.2% during this period. In addition, the LP fund rose swiftly from 0.3% of GDP to 1.9% between 2005 and 2007, but the amount of benefit was relatively small in 2007. Besides, the total amount of LI, LS and LP benefits constituted 1.5% of GDP in 2007.

Year	GDP	Labour Insurance		Labour Standards		Labour Pension		Total Benefit to GDP
		Fund to GDP	Benefit to GDP	Fund to GDP	Benefit to GDP	Fund to GDP	Benefit to GDP	
1997	8,610,139	3.3%	0.5%	1.5%	0.2%	-	-	0.7%
1998	9,238,472	3.8%	0.6%	1.7%	0.3%	-	-	0.8%
1999	9,640,893	4.2%	0.7%	2.0%	0.3%	-	-	0.9%
2000	10,032,004	4.5%	0.6%	2.1%	0.2%	-	-	0.9%
2001	9,862,183	4.9%	0.9%	2.5%	0.4%	-	-	1.2%
2002	10,194,278	4.5%	1.2%	2.7%	0.3%	-	-	1.5%
2003	10,318,610	4.3%	1.0%	3.1%	0.3%	-	-	1.3%
2004	10,770,434	4.2%	1.0%	3.3%	0.3%	-	-	1.3%
2005	11,146,783	3.8%	1.3%	3.4%	0.3%	0.3%	0.00001%	1.6%
2006	11,570,939	3.8%	1.2%	3.5%	0.3%	1.1%	0.00141%	1.5%
2007	12,698,501	3.4%	1.2%	3.6%	-	1.9%	0.00520%	1.5%

Note: GDP is in million New Taiwan Dollar (NTD) and the rests are in percentages. All the numbers are rounded up thus the total amount may not exactly be the sum of each programme.
Source: Calculated from DBGAS, CLA, and BLI.

Table 3.7 shows the number of claims and payment amounts of LI, LS and LP. The

claims for LI and LS retirement payments between 1997 and 2007 fluctuated and the total amount went up by three to four times. With regard to LI and LS benefits, firstly, the level of LI benefit was lower than that of the LS. It was caused partly by the fact that employers usually understated employees' salaries to the Bureau of Labour Insurance in order to pay fewer LI premiums, and partly by the nature of social insurance that sets the cap of the insured wage. Clearly, because the LS payment was based on the last drawn wage instead of the insured wage as in LI, the level of benefit may be higher. Secondly, the average amount of LS payment was quite stable between 1997 and 2007 even though both the number of claims and total amount of payment increased in the same period. This to some extent means that the LS retirement payment has failed to follow the increase of wages (18.5%)³ and consequently is unable to maintain living standards. Thirdly, Table 3.6 showed that the average level of LI benefit rose by about three times. Because the level of LI old-age benefit is based on the average of insured wage, the level of those who retire in 1997 is necessarily lower than those who retire in 2007. This could partly explain the inconsistency of benefit level between LI and LS payments discussed above.

Table 3.7 Claims and Average Amount of LI, LS and LP Retirement Payments (1997-2007)

Year	Labour Insurance			Labour Standards			Labour Pension		
	Claims	Amount	Average Amount	Claims	Amount	Average Amount	Claims	Amount	Average Amount
1997	94,786	43,804,614,281	462,142	14,847	127,226,897	1,316,035	-	-	-
1998	98,520	53,151,800,331	539,503	17,897	153,747,249	1,332,764	-	-	-
1999	103,187	62,340,482,813	604,151	19,900	189,288,792	1,334,020	-	-	-
2000	92,863	61,129,248,633	658,273	19,378	214,871,406	1,257,976	-	-	-
2001	115,275	84,137,765,711	729,887	26,255	244,971,266	1,407,673	-	-	-
2002	136,649	120,668,542,568	883,055	23,000	277,231,696	1,489,778	-	-	-
2003	113,968	103,200,784,549	905,524	20,678	314,375,763	1,311,301	-	-	-
2004	121,666	111,330,076,657	915,047	18,611	355,957,992	1,427,321	-	-	-
2005	155,151	149,647,800,000	964,530	25,096	381,889,972	1,418,307	139	1,003,000	7,216
2006	131,363	134,399,188,000	1,023,113	24,458	408,048,669	1,363,042	5,809	163,151,000	28,086
2007	142,053	152,534,198,000	1,073,784	-	-	-	19,648	660,692,000	33,626

Notes: All the amounts are in New Taiwan Dollars (NTD) and cases are in persons. The number for Labour Standards in 2007 is not available.

Source: CLA and BLA.

The percentage of administrative costs to pension fund is a way to evaluate the efficiency of the scheme. Table 3.8 denotes the cost of pension fund management and administration of the three main schemes respectively. The costs of these three schemes constituted less than 1% of the funds, except in 2007 when the numbers for LI and LP diverged. Also, the management costs of LI increased steadily, while the costs of LS and LP rocketed in 2007 along with the establishment of a supervisory

³ According to the CLA database and computed from the growth of average wage from NTD 36,699 to NTD 43,493 between 1996 and 2006.

board for the LP and LS, which had to transfer participants' records and necessary information to the newly founded organisation. The ratio of costs to benefits of LI reduced from 2.7 to 1.5, which was due to the increase of the amount of payment in 2008. Because LI old-age benefit was scheduled to be annuitised in 2009, many beneficiaries opting for lump-sum payments rushed to claim the benefit before the start of the new rule. Moreover, the figure for per capita administrative costs of LI, apart from the rocketing costs of LS and LP in 2007, was the highest among these three schemes. Although LP was the lowest among them, the history of the LP scheme was too short to accurately assess its performance.

Table 3.8 Administrative Costs of Pension Funds (2006-2008)

Year	LI			LS			LP		
	2006	2007	2008	2006	2007	2008	2006	2007	2008
Administrative Costs (NTD 1,000)	3,652,463	3,889,002	4,691,675	1,070,941	2,412,723	1,239,992	46,900	2,572,798	501,278
% of Fund	0.8	-	-	0.3	0.5	0.3	0.04	1.1	0.1
% of Benefit	2.7	2.5	1.5	3.2	-	-	28.7	389.4	40.8
Cost per Person	420.7	442.0	553.4	299.0	669.0	348.6	10.9	570.9	109.6

Note: The costs are New Taiwan Dollars and the numbers for 2008 are the budgets for the Fiscal Year 2008.
Source: Data are derived from Central Trust of China (2006), Labour Pension Fund Supervisory Committee (2006; 2007; 2008), Bank of Taiwan (2007; 2008) and Bureau of Labour Insurance (2007b; 2008).

Table 3.9 depicts the average payments, retirement age, life expectancy, average wage and replacement rate of LS retirement provision. It shows that the retirement payment from Labour Standards replaced 12.3% of previous earnings in 2006 and the replacement rate ranged between 11.5% and 15.7% from 1996 to 2006. In this sense, low retirement age and lump-sum payment increase the longevity risk and consequently may further reduce the degree of retirement income security.

Year	Avg. Payment	Retirement Age	Life Expectancy	Avg. Wage**	Replacement Rate
1996	1,225,906	56	23.37	28,426	15.4%
1997	1,316,035	56	23.87	29,585	15.5%
1998	1,332,764	57	23.20	30,517	15.7%
1999	1,334,020	55	24.98	31,570	14.1%
2000	1,257,976	55	25.34	32,505	12.7%
2001	1,407,673	51	28.91	32,990	12.3%
2002	1,489,778	51	29.23	33,225	12.8%
2003	1,311,301	52	28.47	33,443	11.5%
2004	1,427,321	51	29.53	33,892	11.9%
2005	1,418,307	55	26.11	34,319	13.2%
2006	1,363,042	55	26.61	34,819	12.3%

Notes: * The numbers are in New Taiwan Dollars and percentage.
** The average wage is based on current wages.
Source: Ministry of the Interior (<http://www.moi.gov.tw/stat/>) and Council of Labour Affairs (<http://statdb.cla.gov.tw/>).

The replacement rate of LI old-age benefit is illustrated in Table 3.10. Two replacement rates with two different definitions of insured wages are measured. The “Replacement Rate (1)” is calculated from the average insured salary which, in most cases, is underreported by employers to reduce labour costs. With this definition of wage, the replacement rate ranged from 10.7% to 13.0% between 2001 and 2006. On the other hand, the replacement rate was below 10% between 2001 and 2006 if computed with the current wage level applied in Table 3.9 (Replacement Rate (2)). It is worth pointing out that although the replacement rate went up between 2001 and 2006, the average retirement age decreased and life expectancy grew at the same time. Therefore, the replacement rate may stay at this level if the situation stays the same.

Year	Avg. Benefit	Avg. Insured Wage	Avg. Retirement Age	Life Expectancy	Replacement Rate (1)**	Replacement Rate (2)***
2001	729,887	25,448	59	22.25	10.7%	8.3%
2002	883,055	25,227	58	23.32	12.5%	9.5%
2003	905,524	25,448	58	23.42	12.7%	9.6%
2004	915,047	25,677	58	23.62	12.6%	9.5%
2005	964,530	26,145	58	23.61	13.0%	9.9%
2006	1,023,119	26,765	57	24.95	12.8%	9.8%

Notes: * All the numbers are New Taiwan Dollars and percentages.
** The rate is calculated from Avg. Insured Wage.
*** The rate is calculated from Avg. Wage applied in Table 3.9
Source: Ministry of the Interior (<http://www.moi.gov.tw/stat/>) and Council of Labour Affairs (2007: 200-1).

3.3.5 Living Allowance Schemes

Although the new social insurance system, the National Pension scheme (NP), was introduced in 2009 and replaced the Living Allowance scheme (LA), there was not enough information to evaluate the performance of NP so far. Therefore, the analysis in this section concentrates on LA.

Table 3.11 presents the statistics of LA in Taiwan between 1999 and 2008. As mentioned above, the programmes started with benefits for peasants and mid- or low-income senior citizens in the mid 1990s; then the provisions for senior citizens and aboriginals were introduced. Among these four schemes, with the exception of mid- or low-income senior citizens, the number of beneficiaries increased between 1999 and 2008, while the percentage of recipients of the peasants' allowance programme dropped markedly from 75.5% to 40.8% as the number of other beneficiaries grew. From the perspective of coverage, excluding peasants, the LA system covered more than 60% of the elderly population. In other words, around three-fifths of retired workers and the non-working population benefited from LA.

Year	Senior Peasants (% of total)	Senior Citizens (% of total)	Senior Aboriginals (% of total)	Middle- or Low-Income Senior Citizens (% of total)	65+ Population	Coverage of 65+**	Poverty Rate of 65+
1999	588,429 (75.5%)	-	-	190,583 (24.5%)	1,865,742	14.9%	10.2%
2000	635,838 (75.6%)	-	-	204,964 (24.4%)	1,921,308	15.9%	10.7%
2001	656,460 (78.4%)	-	-	181,211 (21.6%)	1,973,357	13.8%	9.2%
2002	669,779 (51.9%)	424,096 (32.8%)	15,171 (1.2%)	182,392 (14.1%)	2,031,300	45.7%	9.0%
2003	677,048 (45.0%)	639,427 (42.5%)	14,726 (1.0%)	173,951 (11.6%)	2,087,734	58.7%	8.3%
2004	688,840 (44.4%)	687,990 (44.3%)	18,340 (1.2%)	156,446 (10.1%)	2,150,475	59.0%	7.3%
2005	696,808 (43.3%)	746,410 (46.3%)	19,218 (1.2%)	148,118 (9.2%)	2,216,804	60.1%	6.7%
2006	730,238 (43.3%)	795,141 (47.1%)	20,548 (1.2%)	140,544 (8.3%)	2,287,029	61.4%	6.1%
2007	707,045 (41.4%)	842,335 (49.4%)	21,775 (1.3%)	134,644 (7.9%)	2,343,092	61.0%	5.7%
2008	710,031 (40.8%)	880,033 (50.6%)	23,255 (1.3%)	125,951 (7.2%)	2,402,220	60.8%	5.2%

Note: * The Living Allowance schemes for Senior Citizens and Senior Aboriginals were implemented between 2002 and Oct 2008. The statistics of Senior Citizens and Senior Aboriginals in 2008 end from the 1st of October 2008. The number of recipients is in persons and the coverage rate is in percentage.
** The coverage rate excludes the recipients of the senior farmer's living allowance scheme.
Source: Bureau of Labour Insurance (2007a: 422', 428 and 434) and Ministry of Interior (2009: 78-9).

It is worth noting that the number of elderly people who were deemed as living in mid- or low-income households has reduced steadily since 2000, and as a percentage of all LA recipients dropped further after the scheme for senior citizens was introduced in 2002 (from 21.6% in 2001 to 7.2% in 2008). This was directly related to the extension of the allowance programmes, because the introduction of allowance schemes for general senior citizens would necessarily cover more of the population. Besides, the definitions of deserving and undeserving people need to be noted since the criteria for mid- and low-income living allowances are closely related to the definition of old age poverty in Taiwan. The conditions for the senior citizen's allowance scheme, on the one hand, are that the applicant is not receiving pensions from governmental employees' social insurance programmes; and is not receiving benefits from other allowance schemes; and is earning less than NTD 500,000 in the last year; and the total value of owned properties is less than NTD 5,000,000; and is

not serving a sentence. On the other hand, because no poverty line has been established in Taiwan, the requirements for the mid- and low-income allowance scheme are partly based on the Social Assistance Act. According to related rules, if the average income per person of the applicant's household is less than 2.5 times of "subsistence level" and is less than 1.5 times of the per capita non-productive expenditure; and the total amount of savings, investment, securities, and bonds is less than NTD 2,500,000 and additional amount of NTD 250,000 is for each additional household member; and the land or houses owned by resident family members do not exceed a reasonable level of living (NTD 6,500,000); and the applicant is not serving a sentence, then they qualify for this benefit. The "subsistence level" mentioned above is borrowed from the Social Assistance Act for defining deserving people, which is termed as 60% of the per capita non-productive expenditure according to the latest released statistics by the relevant authorities and is reviewed every three years. The level of subsistence is different from area to area. Therefore, the mid- and low-income household allowance programme is to some extent a measurement of old age poverty in Taiwan.

As Table 3.11 shows, the number of the recipients of mid- and low-income living allowance and the poverty rate of 65 years old and over have reduced since 2000 (from 204,964 to 125,951 in 2008) and the poverty rate has dropped from 10.7% to 5.2%. The Directorate-General of Budget, Accounting and Statistics (DGBAS) stated that this was due to the criteria for the amount of savings, investments, securities and bonds and the total value of lands and houses being raised and a broader definition of kinship being applied since 2000.⁴ Hence, some applicants for mid- and low-income living allowance were rejected and have received senior citizens' living allowance instead since then.

Because farmers do not belong to the category of labour, Table 3.12 excludes the recipients of peasant's allowance benefit. The amount of spending on senior citizens, senior aboriginals and mid- or low-income senior citizens constituted 0.3% of GDP in 2006, which was about one-fifth the amount (1.5%) of the three main labour pension schemes, LI, LS and LP. The aggregate replacement rate of these three allowance provisions was 11.2% in 2008. With regard to the replacement rates of LI and LS, the findings show that, in 2006, the rate of LA (9.1%) was lower than that of LI (9.8%) and LS (12.3%).

⁴ Please refer to the DGBAS article (<http://www.dgbas.gov.tw/ct.asp?xItem=11370&ctNode=3482>) in Traditional Chinese characters.

Table 3.12 The Scale of Expenditure and Replacement Rate of Living Allowance Scheme (1999-2008)*

Year	Total LA Expenditure**	% of LA Expenditure to GDP**	% of LI, LS & LP to GDP	LA Replacement Rate	LI Replacement Rate	LS Replacement Rate
1999	9,994,304,668	0.1%	0.9%	13.2%	-	14.1%
2000	10,425,760,879	0.1%	0.9%	12.5%	-	12.7%
2001	9,823,860,567	0.1%	1.2%	13.1%	8.3%	12.3%
2002	24,256,575,349	0.2%	1.5%	9.4%	9.5%	12.8%
2003	28,883,644,809	0.3%	1.3%	8.4%	9.6%	11.5%
2004	33,717,553,345	0.3%	1.3%	9.3%	9.5%	11.9%
2005	35,590,577,449	0.3%	1.7%	9.2%	9.9%	13.2%
2006	37,308,905,499	0.3%	1.5%	9.1%	9.8%	12.3%
2007	38,848,722,969	0.3%	-	8.9%	-	-
2008	34,498,453,047	0.3%	-	9.2%	-	-

Note: *The numbers are in New Taiwanese Dollars and percentages. The percentage of spending on LI, LS and LP to GDP is derived from Table 3.5. The replacement rates of LI and LS are acquired from Table 3.8 and 3.9 of the thesis.
** The amount and percentages exclude the expenditure on senior peasants.
Source: Bureau of Labour Insurance (2007a: 422', 428 and 434), Database of Labour Statistics (<http://statdb.cla.gov.tw/statis/>), and Ministry of Interior (2009: 78-9).

As discussed above, because LA was a means-tested programme, its aim was different from that of LI and LS which intended to provide retirement payments to all retired workers. As a result, beneficiaries of LI and LS may not be qualified for LA in the early stage of retirement since the lump-sum payments from LI and LS would boost their savings significantly. Therefore, the replacement rate of pension provisions was not simply to add up the rate of these three programmes, whereas the beneficiaries of LI and LS are qualified for LA when the savings left are proved insufficient for sustaining their retirement life. With regard to the coverage rate of LA schemes (72.4% in 2008) in Table 3.11, recipients of other social insurance programmes seemed to consume the savings quickly, then claimed living allowances after they were sixty-five years old or over. Clearly this resulted partly from the low retirement age, partly from the low benefit level, and partly from the recipient's poor management of the money.

Lai and Orsuwan (2009) examine the efficiency of LA benefits for both worse-off and better-off households. They found that allowance schemes helped most households replace 30% to 50% of familial transfers, and some better-off households could even consume luxury goods after receiving the benefits. However, this oversimplified research does not go on to evaluate the adequacy of pension provision. For instance, it is true that the better-off group's consumption of recreation goods does not indicate that worse-off households' needs are exactly met. It is also true that the benefit level for the worse-off group may be less than adequate for relieving the burden placed on adult children. Therefore, to examine the poverty gap would provide another point of view on the efficiency of LA .

In Taiwan, the definition of poverty is currently based on the minimum level of subsistence which is normally 60% of annual consumption per person and is reviewed every three years. Central and local governments apply different levels of subsistence nevertheless the payment level is the same. The threshold of the wealthiest area is about twice that of the poorest. With regard to about 80% of older people living in Taiwan and Fukien provincial areas this level is applied in the thesis. Besides, because availability of social provisions is taken into account in this computation, the level of benefit is adjusted according to the rate of beneficiary of each programme. The results show that the aggregate benefit level of retirement payment in Taiwan was below the poverty threshold by more than NTD 3,000 between 2001 and 2005 (Table 3.13). Before the implementation of LA, the gap was as large as around NTD 5,000 (column (e)). In addition, it should be mentioned that the number shown in the column (f) will be achieved when one becomes sixty-five years old or over because the allowance benefit is issued after this. Thus, the waiting period for LA benefits after retirement was about eight to ten years in 2006 (Table 3.9 and 3.10), but there was no social provision to fill this gap.

Table 3.13 Poverty Reduction of Retirement Payment Schemes*

Year	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Minimum Subsistence**	Avg. Payment of LI, monthly	Avg. Payment of LS, monthly	Avg. Payment of LA, monthly	Poverty Gap (1)***	Poverty Gap (2)****	Poverty Gap (3)*****	Poverty Gap (4)*****
2001	8,276	2,733	4,058	4,518	-5,141	-4,519	-4,178	-
2002	8,433	3,156	4,247	3,252	-4,901	-3,416	-3,066	348
2003	8,426	3,222	3,838	2,907	-4,920	-3,214	-2,850	-
2004	8,529	3,228	4,028	3,257	-4,980	-3,058	-2,701	-
2005	8,770	3,404	4,527	3,246	-4,971	-3,020	-2,642	1,360

Note: *All the numbers are in New Taiwan Dollars (NTD).

** Minimum Subsistence based on provincial level.

*** (e) = [(b) * 0.85 + (c) * 0.2] - (a)

**** (f) = (d) * (coverage rate shown in Table 3.11) + (e)

***** (g) = (f) + (average earnings) * (participation rate)

***** (h) = (g) + (average familial transfers) * (% of children providing monetary income)

Source: Minimum Subsistence and the surveys on elderly retirement income are derived from the statistics of MOI (2005) and DGBAS (2001; 2002; 2003; 2004; 2005) individually in various years, and the average payments of LI, LS and LA are calculated by this thesis.

Furthermore, the columns (g) and (h) of Table 3.13 present the levels of the poverty gap after considering other income components between 2001 and 2005. Because there was no further information to compute the replacement rate of the retirement benefits from private insurance policies, the calculations of the poverty gap (3) and (4) were based on personal earnings and familial transfers respectively. The numbers illustrated when taking familial transfers into consideration that the poverty gap greatly increased from NTD -2,642 to NTD 1,360. Therefore, the results help explain 86% of the main components of retirement income in Table 3.3, and show that

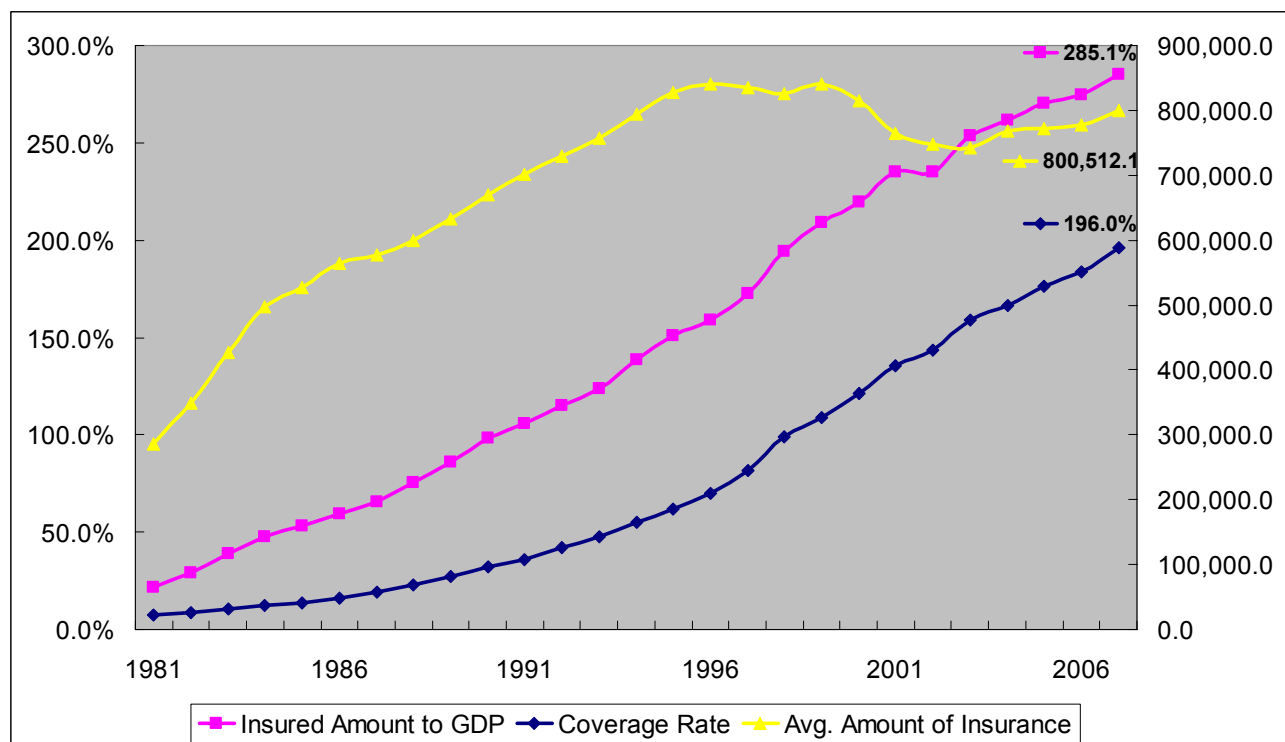
familial support was still the chief source of income ameliorating poverty among the elderly.

3.3.6 Private Insurance Benefits

Although the LI and LS or LP schemes provide retirement payments and LA covers the deserving old-age population, the replacement rate as a whole is lower than the International Labour Organisation's (ILO) suggestion in Convention No.128 (45%). In addition, as discussed above, the sustainability of familial support was diminishing. Subsequently, in order to acquire additional retirement income, private life insurance became an important instrument in Taiwan. Figure 3.10 demonstrates the coverage rate of life insurance⁵, scale of insured amount as a percentage of GDP, and the average insured amount per case. It should be noted that life insurance is divided into pure endowment, endowment and insurance against death in Taiwan. The figures show that the average insured amount at the end of 2007 was NTD 800,512 and the rates of coverage and scale of insured amount as a percentage of GDP rose gradually to 196.0% and 285.1% respectively between 1981 and 2007. In other words, on average, every person kept about two life insurance policies in force at the end of 2007 and the total amount insured was around three times of GDP at the time.

⁵ Since the available statistics do not separate pure endowment, endowment and insurance against death from each other, it is called life insurance as a whole in the following sections.

Figure 3.10 Ratio of Insured Amount to GDP, Coverage Rate and Average Insured Amount of Life Insurance (1981-2007)



Source: Insurance Statistics, Taiwan Insurance Institute (www.tii.org.tw).

Table 3.14 details the benefits paid by life insurance and annuity insurance policies to retired policyholders. As the numbers show, the amount of benefits paid by annuity insurance policies in 2007 constituted 1.149% of GDP, which was close to the aggregate level of Labour Insurance and Labour Standard (1.5% according to Table 3.6). The average benefit of annuity per claim was NTD 529,503 in 2006, which made up around one-fourth to one-fifth of the aggregate payment of Labour Insurance and Labour Standard schemes (Table 3.7). The total amount of payment from both life and annuity insurances constituted 6.3% of GDP in 2007, which was around four times higher than that of the aggregate payments of LI, LS and LA schemes.

Table 3.14 Annual Benefits Paid by Annuity and Life Insurance Policies (2000-2007)

Year	Annuity Insurance		Life Insurance		Annuity + Life to GDP	Annuity to GDP	Avg. Benefit of Annuity	Avg. Benefit of Annuity + Life
	Cases Paid	Total Amount Paid (NTD 1,000)	Cases Paid	Total Amount Paid (NTD 1,000)				
2000	702	117,068	2,752,465	180,285,685	1.8%	0.001%	166,763.5	232,263.3
2001	2,872	343,427	2,921,359	208,333,158	2.1%	0.003%	119,577.6	190,891.4
2002	6,569	1,759,116	3,226,982	232,111,626	2.3%	0.017%	267,790.5	339,718.9
2003	15,965	5,792,781	3,725,741	330,235,260	3.2%	0.055%	362,842.5	451,478.7
2004	28,386	13,191,923	3,816,346	406,333,358	3.8%	0.119%	464,733.4	571,205.3
2005	45,592	25,687,821	3,938,485	409,618,147	3.8%	0.224%	563,428.3	667,432.2
2006	130,651	69,180,126	4,878,570	511,128,901	4.9%	0.580%	529,503.2	634,273.5
2007	196,023	145,230,167	5,726,513	646,168,488	6.3%	1.149%	740,883.3	853,721.3

Note: The numbers are in cases, New Taiwan Dollars (NTD) and percentages.

Source: The numbers are calculated from the data provided by the Taiwan Insurance Institute (www.tii.org.tw) and Directorate-General of Budget, Accounting and Statistics of Taiwan (www.dgbas.gov.tw).

Table 3.15 illustrates the average insured amount and coverage rate by age groups. The selected groups start from 55 years old because the average retirement age falls in the group “55-59”. The statistics should be read with caution because the coverage rate is an average, thus it may not actually show how many insurance policies a person held. It must also be mentioned that the insurance policies mature as people grow older, therefore the average insured amount would decrease. The figures show that about four-fifths of people who were 55 years old and over were covered by life and annuity insurance policies in 2006, while the ratio dropped by half for the people who were 65 years old or more. In addition, the average insured amount of 55+ and 65+ groups was NTD 667,945.0 and NTD 556,331 in 2006 which replaces 6% and 7.2% of previous earnings respectively.⁶ This indicates that around 80% of people who were 55 years old or over received benefits from private insurance policies as a part of retirement income that replaced 6% of the average wage, while 40.5% of the elderly manage their retirement income from this source which substituted 7.2% of average salary.

⁶ For the 55+ group, life expectancy in 2006 was 26.61 years and the average wage was NTD34,819 therefore the replacement rate was 6.0%; while life expectancy for the 65+ group was 18.61 years in 2006 thus the replacement rate was 7.2%.

Year	Age Group	Insurance Policies in Force	Population	Coverage Rate	Amount Insured (million)	Avg. Amount Insured	55+		65+	
							Avg. Amount Insured	Coverage Rate	Avg. Amount Insured	Coverage Rate
2005	55-59	1,321,469	1,062,981	124.3%	951,432.99	719,981.3	693,780.1	71.3%	531,613.8	35.2%
	60-64	793,382	780,316	101.7%	486,022.80	612,596.2				
	65-69	449,619	715,262	62.9%	247,768.84	551,064.0				
	70-74	226,302	586,360	38.6%	117,154.89	517,692.7				
	75+	104,510	915,182	11.4%	49,964.18	478,080.4				
2006	55-59	1,635,090	1,216,871	134.4%	1,219,063.08	745,563.3	667,945.0	79.9%	556,331.1	40.5%
	60-64	851,766	766,255	111.2%	545,493.37	640,426.3				
	65-69	527,826	737,193	71.6%	302,373.14	572,865.2				
	70-74	263,712	586,672	45.0%	143,747.23	545,091.7				
	75+	135,529	963,164	14.1%	69,635.84	513,807.7				

Note: The numbers are in cases, persons and percentages.
Source: Insurance Statistics, Taiwan Insurance Institute (www.tii.org.tw).

Some researchers argue that life insurance develops due to the lack of social provisions to cover some uninsured or underinsured risks. In this sense, the extension of social security schemes may offset the growth of life insurance (Auerbach and Kotlikoff 1989; Fitzgerald 1987; Hammond, et al. 1967; Kotlikoff, et al. 1986; Ward and Zurbruegg 2002; Zhang and Zhu 2005). Fitzgerald (1987: 96), however, mentions that this effect may be trivial, therefore the association may not be significant. He further points out that wage earners tend to rely on survivor benefits provided by the social security system but increase the demand for life insurance when considering retirement because additional expenditures may be incurred, such as the demand for medical services and nursing care, which is uncertain. Hammond et al (1967: 406) and Auerbach and Kotlikoff (1989: 28-9) found that the development of social security offsets people's, particularly low income earners, need for life insurance. This finding to some extent corresponds with the Taiwanese case because, for one thing, the redistributive nature of LI and the benefit levels of LI, LS or LP and LA were limited. For another thing, the lack of universal provision may have triggered demand for private sources of retirement income.

Ward and Zurbruegg (2002: 408) found a marked and negative association between the public welfare provisions and the purchase of private life insurance policies in East Asian Tiger Economies, although this was not the case in other Asian countries. In Taiwan welfare provision for labourers is less generous than that for civil servants, so it could be argued that workers in the private sector will be more likely to purchase private insurance policies. Li et al (1996: 309) further point out that the development of life insurance in Taiwan does not mean the weakening of familial transfers. Rather, public and private provisions are seen as complementing familial support. Hence, transfers from family members still constitute the larger part of retiree income. In

addition, some researchers who found no association between public and private programmes have debated whether this was due to the insignificance of the coverage, payment level and insured risks of the schemes (Beck and Webb 2003: Table 4; Hwang and Greenford 2005: 122).

3.4 Conclusion

The historical review of the Taiwanese pension provisions implies that the implementation of social insurance and social assistance old age benefits are mainly based on political purposes instead of responding to people's welfare needs. That is, to solidify the legitimacy of the Nationalist government after its retreat from the mainland was the immediate necessity. The Labour Insurance (LI) system as well as some social insurance programmes for governmental employees was therefore introduced. Besides, the review also shows that economic reasons, rather than people's needs, were the second consideration. This is proved by the establishment of the Labour Standards (LS) scheme which ordered employers to be fully responsible for employees' retirement payments albeit the conditions for entitlement were difficult to meet. Although the Living Allowance (LA) provisions were implemented from the mid-1990s and became the most important source of retirement income, they were, virtually, the means to acquire political power rather than proof of the government's universalist intention. Evidently, the introduction of the contributory National Pension (NP) scheme, which replaced the tax-financed LA provisions, indicated the government's resistance to tax-funded welfare provisions. Even if the benefits of the LI scheme were annuitised in late 2000s to improve policyholders' retirement income security, the government announced its limited financial responsibility for the system.

Some advantages and disadvantages of Taiwan's pension system are concluded as follows. The advantages of the Taiwanese pension provisions are: for one thing, they effectively reduced family members' social security responsibility particularly after the implementation of LA schemes. This may partly result from the increasing coverage of the LI scheme and the LA provisions complete the safety net. For another thing, the annuitisation of LI's benefits will enhance the pension rights and income security of the insured. However, because this amendment was made in late 2000s, there was not sufficient information to evaluate its effect in this thesis. Yet another thing is that the Labour Pension (LP) system introduced in 2004, although it still emphasises the retirement payment responsibility of employers and the public might not be satisfied with this provident-fund-like pension programme, it enabled beneficiaries to accumulate pension rights in the form of deposits in personal accounts.

The disadvantages of the Taiwanese pension provisions are: firstly, the low level of replacement rate, which resulted from the lump-sum payments of the LI and LS schemes, may hinder the system from reducing old-age poverty. This rate may increase as the annuitisation of the LI old-age benefit gradually phases in as well as the increasing number of recipients choosing to adapt to pension payments. In addition, the increase of private insurance payouts to some extent denotes the inadequacy of retirement payment from public pension provisions. As a result, the aggregate income from the available sources indicates that the average retirement income was lower than the poverty level. Secondly, although the LA schemes, as noted above, helped relieve the social security burden of the shambolic family support system, the establishment of NP system may aggravate the situation with the informal support system in Taiwan. The main reason is that the contributory NP scheme focuses on the non-working and unemployed population who are the most incapable of paying the premiums. Thirdly, while the LP system may improve employees' pension rights the benefit level is still a problem. That is, because the level is determined by the return of investment, the uncertainty of this social security system is still great.

The data and findings presented in this chapter will be the basis of further comparison and assessment of the Chinese Community pensions in Chapter Eight and Nine, which will be undertaken in order to answer one of the main questions of this thesis: how do the pension provisions in the Chinese Community states compare to each other?

Chapter Four Hong Kong

Hong Kong is made up of three main territories (Hong Kong Island, Kowloon and New Territories) and 262 small islands that are located sporadically in the South China Sea. Hong Kong Island was ceded to the United Kingdom in 1842, and Kowloon and the New Territories became a part of the Crown Colony in 1860 and 1898 respectively. Exportation, importation, re-exportation, manufacturing industries and financial services were, and still are the businesses that Hong Kong relies on and have helped this Crown Colony become one of the East Asian Tiger Economies along with Singapore, South Korea and Taiwan. Hong Kong was returned to the People's Republic of China (PRC) in 1997 and its full name is now the "Hong Kong Special Administrative Region (SAR) of the People's Republic of China (PRC)".

As mentioned in Chapter One, the case study chapters of this thesis attempt to answer two of the questions that this thesis is concerned with: firstly, to what extent does the government's ideology or the core values of the society affect the development of pension system in the context of political, social and economic situations at different time points? Secondly, how, and to what extent, do these pension provisions reduce the risk of ageing poverty? This chapter is constituted by two main parts: a review of the development of social security provisions and evaluation of pension provisions in Hong Kong.

The historical review of the development of the social security system in Hong Kong highlights the influence of political, economic and social factors on the policy process. In order to investigate the changes of welfare ideology in different political, economic and social contexts, this thesis divides the development of social policies from the beginning of the Crown Colony to the present into three periods of time. The time points that this chapter finds important are the influx of refugees and international non-governmental organisations after the end of the Second World War in 1945 and the onset of the social assistance provisions in 1971. The differences in the development of social policy during these three time periods will be discussed to extrapolate government thinking on welfare and how it has changed over the decades. The introduction to Hong Kong's current social assistance and pension programmes comes after the historical review, which helps comprehend the social security system as a whole and facilitate the evaluation of Hong Kong's pension provisions.

The assessment of Hong Kong's pension provisions starts by reviewing the studies of elderly people's income components in order to find out, and do further research on,

the most important sources of income for retirees. The examinations of the family support system, ageing people's employment status, social assistance provisions, retirement payment schemes and private sources of retirement income will be done in the following sections. It needs to be pointed out that the assessment of Hong Kong's demographic profile comes along with the review of the familial transfer system because it is closely related to whether or not, and how long, this system may sustain. Besides, the section about private sources of income only contains the benefits from private insurance policies for availability reasons. The estimation of the elderly poverty gap will be illustrated by comparing the poverty line defined by scholarly research and 50% of mean and median income in old age acquired from census data in order to show the proportion of the ageing population living in poverty. The findings on Hong Kong's pension provisions will be concluded in the last part.

4.1 The Development of Social Provisions in Hong Kong

4.1.1 The Era of Communal Charitable Associations (1839-1945)

From the perspective of international history, Hong Kong has been a trading port since Portuguese settled there in 1513 during Ming Dynasty (Barber 2004; Endacott 1964; 1973; Porter 1996). In Hong Kong, the trading of salt in 16th century and of tea in 17th and 18th centuries between China and foreign countries dominated the economy. The business of opium was monopolised by the British East India Company after Britain took over Bengal in India in 1757 and quickly became the product traded for Chinese tea. Disputes over opium trading caused two Opium Wars in the mid 19th Century. The First Opium War was ended by the Treaty of Nanking in which China agreed to cede Hong Kong Island to the British government, and the Second Opium War left the Kowloon Peninsula under the control of the Crown Colony. The New Territories were, as it was put, borrowed by the British Government in 1898 for ninety-nine years, due to be returned on 30th June 1997 (Sterling, et al. 2001; Wakeman 1966: 98-101; Wiltshire 2003). And indeed it was on this date that the British government handed over the whole of the Hong Kong area to China.

The development of Hong Kong was fuelled by deep seated problems such as the Taiping riots in 1850s, population overload in southern China, the exploitation of the peasants and the continuous drought and starvation, all of which had the combined effect of pushing people out to look for chances to make a living elsewhere (Chan 1975; Ho 1959: 183-9; Jones 1974: 74; Mei 1979: 473-4; Tsai 1993: 19; Wakeman

1966: 179-80 & 187). Because Hong Kong was under British rule and the society was relatively stable, it was attractive to immigrants from the mainland. Moreover, because Hong Kong is adjacent to the mainland, it was an ideal place for middleman businesses (Hui 1999) and this consequently led to a sojourner mentality amongst Chinese residents' in Hong Kong (Chan 1986a). Because their sense of identification with Hong Kong was not developed at the beginning of their stay, the establishment of *kaifong* associations, the traditional Chinese communal and welfare service providers in pre-Communist China, was not initiated until the late 1850s (Lethbridge 1971: 117-8). *Kaifong* means neighbourhood, which is normally organised by kin or clan in China and functions as a mutual aid or charitable society to render monetary and/or in-kind assistance and welfare services, as a burial society and as a watchman system. In Hong Kong, because the residents were from different parts of China, *kaifong* associations went beyond kinship and clanship and aimed at consolidating Chinese residents and maximising mutual benefits. After *kaifong* organisations were set up in Hong Kong in late 1850s, they took on the role of providers of charity and relief, medical services and free education. With regard to the social security provisions for the elderly, *kaifong* delivered funeral services for ageing members and death gratuity for their families. But the services varied from *kaifong* to *kaifong* depending on their financial state and the resources available for maintaining services (Hamilton 1998: 228; Lethbridge 1971).

Some important local philanthropic associations that were managed and mainly funded by Chinese business gentry, such as Tung Wah Hospital (1872) and Po Leung Kuk (1878), were established to provide medical care and welfare services and played a similar role to *kaifong*. Tung Wah Hospital not only provided cheap or free medical services for needy people, but also served as the centre for preserving and conveying Confucian decrees and for settling disputes in the Chinese community. Po Leung Kuk, also known as the "junior association", was established by the Board of Tung Wah Hospital to shelter homeless, needy, and disabled people, orphans, elders, coolies and women that were captured and sold to prostitution (Lethbridge 1972: 41). Because the Colonial Government recognised that Tung Wah Hospital and Po Leung Kuk could help control the Chinese community and prevent grassroots uprisings, it attempted to exercise social control through these two associations from the 1880s. It eventually gained control of charity funds and this enhanced the legitimacy of the Colonial Government's rule in Hong Kong (Thompson 1978: 150; Tsai 1993: 81-94). Although charitable activities and *kaifong* ceased during the years of the Japanese occupation (1941-1945) they were resumed right after the War. Charities still served as the main source of shelter for people who had suffered from the War and provided them in-kind assistance, whereas the government's role remained minimal and passive rather than

acting as a welfare provider (Chow 1986: 406).

Like most colonies, the main aim of the Crown Colony as far as the British saw it was to improve business, in this case with or within China. The British were not interested in ruling Hong Kong as a home territory, let alone introducing social security programmes (Norton-Kyshe 1971: 4-6). To maintain itself in old age, the general population had to rely chiefly on the resources obtained by family members and *kaifong* associations. In addition, Po Leung Kuk took care of those ageing people who were homeless and helpless. The first cash-based social assistance programme for the general elderly population was not introduced until 1973. Meanwhile, the retirement income protection of civil servants in Hong Kong was significantly better. According to the Pensions Ordinance in 1862 (No. 10 of 1862), the Colonial Government provided pension benefits for all governmental employees who reached the age of retirement in Hong Kong, which was, and still is, financed by tax revenues (Sayer 1975: 10 and 99).

4.1.2 More a “Place” and Less a “Society”? (1945-1971)

The establishment of the Social Welfare Office (SWO) in 1947 was a milestone in the development of Hong Kong’s social provisions. The SWO was subordinate to the Secretariat for Chinese Affairs which was reorganised from the Registrar General established in 1913 and aimed at understanding people’s needs and managing and allocating welfare resources from Chinese charities and international non-governmental organisations. Because of the massive influx of refugees from mainland, the Colonial Government realised that a governmental department might be necessary for handling these regular tasks if social security schemes were established and consequently upgraded the SWO as Social Welfare Department (SWD) in 1958. However, the Colonial Government’s short-termism on social policy impeded the introduction of long-lasting welfare and social provisions such as social insurance and/or social assistance schemes (Kwan 1986: 157; Lau 1982: 118; Scott and Cheek-Milby 1986: 168). Therefore, the Government still served as an organisation liaising international and national charitable associations and the needy population (Jones 1990: 164-6 & 169) but most of these were in-kind benefits to maintain a substance level of living standards. After Hong Kong was removed from the list of international rescue in the mid-1960s, some of the philanthropic associations left Hong Kong whilst others stayed and worked together with newly-established local non-governmental organisations. Nevertheless, not all of these groups were approved by the Colonial Government or funded to deliver social services, therefore some of these non-publicly-financed organisations turned into so-called “pressure groups” activating social movements and promoting social legislation (Aspalter 2001b: 168; Chow 1995:

397-8 & 401; Kuan 1979: 165).

Because the welfare provisions that were delivered by international and national philanthropic organisations were often less than sufficient, the Colonial Government urged communal societies to be responsible for rescue. For this reason, the modern form of *kaifong*, widely known as the Kaifong Welfare Advancement Association, was voluntarily organised to manage local *kaifong* associations in 1949. *Kaifong* associations after that time became membership-fee-based clubs, which provided charity and relief, medical services and free education as before. The services provided were different from *kaifong* to *kaifong* and people could join the one they preferred, which was not necessarily the one in their own community. The social security provisions for the ageing population were funeral services for the member her/himself and death benefits for the member's dependents. Among services rendered, the death gratuity became a popular scheme and, as mentioned before, different *kaifong* provided different levels of payment depending on the size of membership and, most importantly, finances. The Kaifong Welfare Advancement Association had a close relationship with the SWO (and the SWD later on) for delivering grassroots opinions on specific issues informing the Government of people's needs. But the ageing of their memberships resulted in the *kaifongs* facing financial and leadership problems, fewer and fewer of the younger generation being willing to take part in the associations and responsibility for providing support for their elders (Boldrick 1972; Hu and Wong 1968; Vasoo 1988).

To some extent, the collapse of *kaifong* associations was closely related to the flood of refugees after the War which in turn caused a change in the perception of family and communal organisations. Firstly, newcomers did not feel it necessary to join the *kaifongs* because they had never belonged to any sort of kinship or clanship associations in Hong Kong (Jones 1990: 167-8; Lau 1982: 15-6, 133; Leung 1986: 357). Secondly, the younger generations were fascinated with Western life instead of Confucian decrees, consequently traditional values declined (Chiu and Hung 1999: 76-9). Thirdly, the refugees not only broke the long established model of cooperation between different kinships, but also made the resources and welfare provisions even scarser than before (Lau 1981: 990). That is, households and/or communities were unable to obtain enough resources for their members. This situation gradually undermined people's reliance on family and *kaifong*, but, due to the individualist viewpoint promoted by *laissez-faire* ideology, did not necessarily increase people's identification with welfare provisions (Chan 1986b: 39-40; Chow 1986: 407; Davis and Oever 1981; Salaff 1981: 32-3).

Hong Kong's economic ideologies to some extent correspond with and complement

people's views on self-reliance and family-reliance within core families, and subsequently nourish unfriendliness towards welfare provisions. The proposition of 'productive welfare activity' (Hong Kong Government, 1949; quoted from Jones 1990: 167), which aimed at providing social welfare under the presumption of economic prosperity instead of improving the economy with the support of social welfare, aggravated the under-development of social provisions in Hong Kong in the post-War period. This ideology helped develop "positive non-interventionism" or the idea that the Government should only interfere if social, economic and political events seriously jeopardise Hong Kong's prosperity (Ho 1986: 59-60; Rabushka 1979; Schiffer 1991: 194). The influence of these two ideologies led the Colonial Government to encourage economic growth rather than distribution - let alone redistribution - of resources, therefore a social security scheme was not an option (Hsueh 1979: 12). Huque et al's (1997: 4 and 8-9) and Ng and Wong's (1999) studies suggest that this strategy was widely accepted because it was believed that equal opportunities would lead to equal outcomes, that it was a "fair game". Furthermore, respondents in the two studies felt that although the free market sometimes failed, it accomplished more good than bad. Obviously, old values (self- and family-reliance) and new values (capitalist and free market) have created a public more interested in prosperity and success - namely individualism - and less in equality and redistribution. Hence, the receipt of welfare provisions equals indolence rather than haplessness in the eyes of the better-offs and to some extent inevitably hinders the development of social security programmes (Wong, et al. 2006). For this sake, it is anticipated that provisions in Hong Kong will emphasise family support system and charities rather than social security schemes.

Hong Kong's first attempt at introducing an insurance-based old age pension scheme was initiated in the mid-1960s when Professor Williams was invited to review the possibility of establishing a social insurance system in the Crown Colony. She claimed that (quoted from Jones 1990: 173):

"...the Hong Kong Government was far too cautious in its assumptions concerning the economic future, given that the Colony had by now proved its capitalist credentials. The Government was also too ready to assume that the Chinese family could and would continue to cope with all eventualities... [Hence], there was a powerful case for introducing social insurance, at least in respect of such short-term risks as illness and/or death of the breadwinner...[Though]...it might be difficult to interest young Hong Kong

workers in a compulsory provident fund¹ for their old age.”

However, the proposition was rejected by the Colonial Government. The reasons given were, firstly, that social insurance was generally unacceptable to the people of Hong Kong. Secondly, social insurance programmes would place a heavy financial burden on employers and subsequently reduce competitiveness. Thirdly, it would be unreasonable to erect a bigger administrative system to maintain such a programme (Kwan 1986: 184-5). In fact, the resistance was not from the public but chiefly from the business gentry because employers would certainly face higher labour costs than before (Ho 2001: 69-70). Moreover, Jones (1990: 162-3) argues that the Government's idea was that the “[s]tatutory cash relief as of right, for eligible categories of people in need, was soon to arrive, as a less compromising substitute for social insurance.” Most importantly, Jones (1990: 174) further points out that the British government to a certain extent treated Hong Kong as “more a mere place and less a society”, hence civil rights did not apply to Hong Kongers. Therefore, strictly speaking, the establishment of means-tested cash benefit provisions was accidental because the Government was reluctant to vest pension rights and other social insurance benefits to the population (Leung 1996: 122).

4.1.3 A New Era for Social Provisions? (1971-present)

The person who opened up the “golden age for social development” in Hong Kong was the Governor Sir Murray MacLehose. As soon as he came to power, he argued that the only way to achieve permanent social stability and economic prosperity was to build up the “four pillars” of social policy which included housing, education, medical and health care, and social services (Castells, et al. 1990: 149-51; McLaughlin 1993: 117). During the golden age, the first institutional means-tested cash benefit programme, Public Assistance Scheme (PAS), which was based on UK's National Assistance and some components of the Poor Law of 1834, was introduced in 1971 (Heppell 1973; Heppell 1974; Heppell and Webb 1973). Since then, those who were employed (instead of unemployed) and were proved to be financially vulnerable could receive PAS cash benefits. It is worth pointing out that the role of the PAS was to supplement to the recipient's salary and because, in theory, there were enough full-time jobs in Hong Kong at the time unemployed applicants were disqualified (Heppell 1973: 228). Special Needs Allowances (SNA), a claim-based non-means-tested scheme known as Disability and Infirmity Allowances in the first instance, was introduced in 1 April 1973 to offer disability and infirmity benefits.

¹ The “compulsory provident fund” here does not mean one like the Singaporean Central Provident Fund since Williams was considering devising a social insurance programme for old age security.

SNA defined infirmity as those who had reached seventy-five years old and over. Because it was argued that seventy-five years old was too high, the infirmity was then redefined and divided into “Normal Old Age (sixty-five to sixty-nine)” and “Higher Old Age (aged seventy and over)” in 1988 and different levels of benefit awarded to the two groups (Lee and Edwards 1998: 18-9). PAS and SNA schemes were renamed Comprehensive Social Security Assistance (CSSA) and Social Security Allowances (SSA) respectively in 1993 and the titles apply today. The spending on both cash benefit schemes has increased markedly since their onset. According to official statistics, expenditure on CSSA rose from HKD 12 million to HKD 18,045 million between 1971 and 2007 and the recipients of old age benefits constituted 53.3% of all beneficiaries in 2007; while spending on Normal and Higher Old Age SSA Benefits grew from HKD 178 million to HKD 4,102 million and the number of beneficiaries tripled between 1979 and 2007 (Census and Statistics Department 2008b: 77-9).

Eventually, these rises led the Colonial Government to argue that there was “no unqualified right to welfare provision...welfare has to be earned (McLaughlin 1993: 117)”. Expenditure on social provisions was thus limited to a specific portion of annual growth. It is true that to invite or elect the business gentry to be ministers and members of the Legislative Council (LegCo) in Hong Kong had been the norm since 1880s, thus economic development, rather than social policies, would inevitably be favoured. This conservative power had succeeded in opposing the introduction of a social insurance system since late 1960s and social allowance and assistance schemes were consequently passed as substitutes in the early 1970s. In order to, as it was claimed, survive the economic crises of the 1970s, employers’ representatives proposed two rules to limit the growth of social expenditure. The rule of 1976 stated that social expenditure should not exceed 20% of GDP in the calendar year, and the rule announced in 1987 specified that the increase in social expenditures should not surpass the growth of GDP in that year (Tang, 1995: 172-3; quoted from Huque, et al. 1997: 7). However, the increasing popularity of social assistance and allowance schemes and concern that a higher tax rate may reduce the competitiveness were the real reasons for imposing these restrictions. These rules, according to Article 107 of the Basic Law², are to be followed by the government of Hong Kong Special Administrative Region (SAR).

Democratisation was the key that propelled welfare reform forward, and the implementation of universal suffrage helped accelerate the procedure. Universal

² “The Hong Kong Special Administrative Region shall follow the principle of keeping expenditure within the limits of revenues in drawing up its budget, and strive to achieve a fiscal balance, avoid deficits and keep the budget commensurate with the growth rate of its gross domestic product.”

suffrage was not practiced in Hong Kong until 1982. In the past, only wealthy and reputable residents had the right to vote for or to be candidates of parliament members. The movement towards democratisation promoted by pressure groups and trade unions achieved universal suffrage and consequently changed the atmosphere of the LegCo. Grassroots representatives could now convey the opinions of the general public and this further influenced the social policy-making processes and balanced the views in parliament (Aspalter 2001a: 68-70). However, despite calls by grassroots representatives of the LegCo for the setting up of a public pension scheme, the Colonial Government remained the decision maker in reality and the scheme was blocked (Li 1989: 248-9).

In effect, the insurance-based pension scheme was not the only proposition being discussed in LegCo from the 1960s. A compulsory Central Provident Fund (CPF) scheme was proposed in 1975 and was resubmitted twice in 1985 and 1991, but it was turned down by conservative members because a compulsory system meant increasing employers' labour costs. Moreover, because the financing of a CPF would be centrally managed and administered by Government, the committee investigating CPF concluded in 1991 that the Government might not be competent to manage such a fund; also, that the potential impact on inflation and the investment of pension funds were too big a risk. The committee further pointed out that, and this was possibly the most important reason, the Colonial Government may need to provide some sort of financial guarantee to the CPF scheme if it were introduced (Hong Kong Legislative Council 1991). At the same time, the idea of a compulsory Retirement Protection Scheme (RPS) was proposed by the Government, similar to the Mandatory Provident Fund (MPF) scheme implemented in 2000. It was favoured by the Colonial Government at that time because, unlike the CPF, it would have been operated by private financial institutes and supervised by the authorities concerned, and the Government did not need to secure either the funds or the minimum benefit level. However, the Government's reluctance to guarantee pension provision collided with some LegCo members' opinions, Mr. Hui Yin-Fat, for instance, and led to the debate becoming more intense in 1993 (Hong Kong Legislative Council 1993b: 1714). Interestingly, in the meeting of 15th December 1993, the Government abruptly rejected both the CPF and RPS because neither was "capable of meeting the immediate, as well as the long-term needs of retired, the elderly and the low-income earners in our community" (Hong Kong Legislative Council 1993a: 1499) and the Old-Age Pension Scheme (OPS) was proposed instead. The OPS was based on a defined-benefit pay-as-you-go principle, with a low starting contribution rate (1.5%) for both employer and employee, and would provide moderate benefits (HKD 2,300 monthly in 1994 price level) for all citizens over sixty-five years old. According to the

OPS, those who have already retired would be entitled to the payment and minimum financial assistance. Benefit would be adjusted along with the price and/or wage index to offset inflation. As Miss Lau, the Secretary for Education and Manpower, pointed out the OPS was the grassroots consensus and would, as in many countries, render benefits to those who need it (Hong Kong Legislative Council 1993a: 1499).

The reasons for calling off the introduction of the CPF and RPS are unclear, however, it is believed that the last Governor of Hong Kong, Chris Patten, played the key role in promoting the OPS after his inauguration in 1992 (Ho 2001: 75-6). Although Patten's book, *East and West*, does not mention the development of pension reform at the time, he does talk about his concern for the pension rights of the people of Hong Kong and suggests that the establishment of an old age pension system on the basis of social insurance should be one of the goals for the near future (Patten 1998: 237). This to some extent implies Patten's preferred social insurance scheme and his position would have certainly made him influential in the proposition of the OPS.

The debates between democrats and conservatives in LegCo escalated because conservatives believed that the OPS might severely undermine prosperity and competitiveness in the foreseeable future. The final decision, in fact, was made in the Preliminary Working Committee (PWC) organised by the Beijing Government in August 1994. PWC was to prepare the administrative affairs of the Hong Kong SAR before 1997, and a few businessmen and limited numbers of labour representatives were invited. At this meeting, employers voiced their concerns about the rising labour costs if OPS were to be implemented, and some Chinese officials responded positively to their worries. After the PWC, the debate in LegCo on 9 November 1994 ended up with 26 votes for and 22 votes against, and OPS was put aside for further research and discussion (Hong Kong Legislative Council 1994: 866-71). Two months later, surprisingly, Patten abandoned the proposal of OPS in January 1995 because it was supposedly not supported by the majority despite a poll showing it had 70% support, and he declared that the newly proposed MPF, which was similar to the RPS mentioned above, was the only option. Ho (2001: 76-7) and Wilding (1997) argue that Patten was under the pressure from the Chinese government to abandon the OPS. Furthermore, Patten determinedly told LegCo members to either accept or decline the MPF, in other words to settle for something or nothing, because there could be no "spin from U-turn to U-turn" (Hong Kong Legislative Council 1995c: 2293-2301; 2298 particularly). After the investigations on 1st and 8th March 1995, the MPF won the vote (28 to 21) on the 8th March and was scheduled for launch in 2000 (Hong Kong Legislative Council 1995a: 2355; Hong Kong Legislative Council 1995b: 2571; Ramesh 2004: 40-1). Notwithstanding the democratisation that brought different

voices representing the public into the LegCo, it seemed that the structure of the polity was the key to dominating policymaking on social security. Therefore Tang (2000: 173) argues that the Government “is wholeheartedly against expanding social provisions, and is pursuing a Neo-liberal agenda in social programming” still.

It seems that Hong Kong is going to be a more politically open society because the Basic Law decrees all LegCo members must be elected by the public and have been no assigned members from business elites since 2004. However, the truth is, the Basic Law has restricted the issues that can be discussed in the LegCo (Aspalter 2001b: 160-1). For example, despite the Basic Law specifying that all social provisions should conform to the standards of ILO conventions, the emphasis on economic development and financial soundness overrides all other considerations (Chow 1995: 404-8). Hence, the development of social rights in Hong Kong has been constrained after 1997 because, as with the MPF for example, apparently, policymakers are more responsive to the interests of the business gentry than those of the general public.

4.2. Existing Retirement Payment Programmes

As discussed above, the retirement benefits for governmental employees and general population were different in colonial times. The civil servants’ pension scheme, which was funded by the Government to cover governmental employees and their dependents³, had been established in the early 1860s; while the provisions for the elderly poor and elderly in general were introduced in 1971. In order to provide retirement payments to employees, the Occupational Retirement Schemes Ordinance (Chapter 426) and Mandatory Provident Fund (Chapter 485) were established in 1992 and 1995 respectively.

4.2.1 Comprehensive Social Security Assistance (CSSA)

CSSA is a tax-financed programme run by the Social Welfare Department (SWD) that aims to provide “a safety net for those who cannot support themselves financially. It is designed to bring their income up to a prescribed level to meet their basic needs⁴.” That is, the benefit levels of CSSA recipients may vary according to the applicant’s

³ According to the legislation, these provisions cover customs officers (Chapter 35), the hospital authority (Chapter 80), general civil servants (Chapter 89, 99 and 305), Hong Kong Polytechnic (Chapter 90), widows and orphans (Chapter 94, 205 and 206), vocational training council (Chapter 387), judicial officers (Chapter 401), and the Hong Kong Institute of Education (Chapter 477). The provisions are adjusted to the price index and increases are financed by government tax revenues.

⁴ Please refer to http://www.swd.gov.hk/en/index/site_pubsvc/page_socsecu/sub_comprehens/. [accessed: 11.07.2009]

wage level and the number of household members. CSSA provides three kinds of benefits: Standard Rates, Supplements and Special Grants.

The entitlement and benefit levels of Standard Rates Benefit depend on the applicant's age group and physical status. Supplements have three subcategories: Long-term, Single Parent, and Community Living Supplements. Single Parent Supplement applies to lone parents only, and Community Living Supplements are chiefly offered to the severely disabled. Long-term Supplement provides cash benefit to any beneficiaries that receive assistance for longer than twelve months continuously. Special Grants cover persons or households that cannot afford special needs such as housing rent, tuition fees, transportation fees, diets that are recommended by physicians, and the expense of medicine and rehabilitation.

The citizenship test is the basic requirement for accessing CSSA, but excludes those who stay in Hong Kong for reasons other than residence (e.g. students). Income and assets tests are the second criteria by which applicants are assessed, depending on the type of assistance (namely, single person or household) and physical status. The asset limit for an able-bodied single adult is HKD 22,500 and 35,000HKD for a non-able-bodied adult since 2009. Table 4.1 shows the asset limits for household cases of able-bodied and non-able-bodied applicants. Benefits depend on the number of household members and ranged from HKD 15,000 to HKD 60,000 in 2009; while for households that have non-able-bodied members the limits range from HKD 35,000 to HKD 122,500.

Table 4.1 Asset Limits for Family Cases			
Able-Bodied Adult/Children		Elderly, disabled persons or persons medically certified to be in ill-health	
Number of Such Family Members	Asset Limit (HKD)	Number of Such Family Members	Asset Limit (HKD)
1	15,000	1	35,000
2	30,000	2	52,500
3	45,000	3	70,000
4 or above	60,000	4	87,500
		5	105,000
		6	122,500
Source: Social Welfare Department (http://www.swd.gov.hk/en/index/site_pubsvc/page_socsecu/sub_socialsecurity/#CSSAal). [accessed: 11.07.2009]			

The benefit level of the Standard Rates Scheme is determined by the applicant's age group (i.e. whether they are above 60 years old or not), level of disability (able-bodied, 50% disabled, 100% disabled or long-term care required) and the number of household members. Table 4.2 shows that the benefit level of elderly single persons aged 60 and over ranged from HKD 2,590 to HKD 4,420 in 2009, whereas older

people living with families were entitled to a lower level of benefit that varied from HKD 2,445 to HKD 4,050. The entitlement to assistance is based on income and assets instead of ability of work; obviously, the system assumes that household members may need to be responsible for taking care of the recipients, therefore awards a lower level of benefit than that given to single beneficiaries. In addition, recipients living in single-person households and entitled to CSSA benefits for longer than twelve months can be awarded HKD 1,625 of long-term supplement benefit annually for purchasing household and durable goods⁵.

Table 4.2 Monthly Benefit Level of Standard Rates for Elderly		
	Elderly Persons aged 60 or above	
	Single Person	Family Member
Able-bodied and/or 50% Disabled	2,590	2,445
100% Disabled	3,140	2,775
Requiring Long-term care	4,420	4,050
Note: All the numbers are in Hong Kong Dollars (HKD). Source: Social Welfare Department (www.swd.gov.hk). [accessed: 11.07.2009]		

It is worth noting that elderly people who are receiving Social Security Allowance benefits and live with other family members but want to apply for single person benefit qualify for CSSA only if their children sign the so-called “bad son statement” to declare their inability to support retired parents⁶. However, the case counts were trivial (19 cases were approved and 0 were rejected in the fiscal year 2008-09⁷) compared to the total recipients of Old Age Allowance (485,855 cases entitled in the fiscal year 2008-09⁸). Despite the SWD argument that the idea of signing the “bad son statement” is a long-established rule and is to make sure that ageing people are not receiving any support from other family members⁹, the truth is that signing the “bad son statement” clearly violates the tradition of familial support and is shameful for the applicants. Regarding this, the SWD claims that it is taken for granted that economically active family members should render support to retired members,

⁵ The payment level was HKD 3,255 for a household that had two to four ageing and/or disabled people and HKD 3,825 for a household that accommodated more than five ageing and/or disabled persons. (http://www.swd.gov.hk/en/index/site_pubsvc/page_socsecu/sub_socsecurity/#CSSAIts.) [accessed: 11.07.2009]

⁶ Please refer to the website (http://www.lwb.gov.hk/eng/legco/08072009_11.htm) for detail information about this issue. [accessed: 09.07.2009]

⁷ Please refer to the document (http://www.lwb.gov.hk/eng/legco/20090708_11_5.pdf) provided by the Labour and Welfare Bureau. [accessed: 09.07.2009]

⁸ Please refer to the document (http://www.lwb.gov.hk/eng/legco/20090708_11_4.pdf) provided by the Labour and Welfare Bureau. [accessed: 09.07.2009]

⁹ Please refer to the SWD’s reply (<http://www.lwb.gov.hk/eng/legco/29102008d.htm>) on this issue for more details. [accessed: 04.08.2009]

therefore the rule will not be removed¹⁰. However, the truth is the breakdown of familial harmony is the last resort for elderly applicants.

In addition, according to research initiated by the Subcommittee on Elderly Services of the Legislative Council (LegCo) points out that the level of benefit provided by CSSA, as well as the Social Security Allowance Schemes, are inadequate for elderly people's basic living requirements. For this sake, it suggests that LegCo should either establish a new system to meet long-term needs, partly or wholly remove the financial and income tests from these schemes, or augment the payment level of all provisions (Hong Kong Legislative Council 2008b: 2-3). In order not to vest rights to social provisions to the people, the SWD simply issued additional one-off benefits to CSSA recipients amounting to two months of payment in total, in June and September of 2008 respectively (Hong Kong Legislative Council 2008a: 12307).

4.2.2 Social Security Allowance Schemes (SSA)

The Social Security Allowance (SSA) Scheme, which is organised by the SWD and issues old-age or disabled benefits to qualified applicants, has been one of the main sources of retirement income since 1973. The Normal and Higher Old Age allowances provided by SSA are also called “fruit money” deemed as showing respect to elderly persons and aimed at enabling old age persons to purchase necessities (Yu 2007: 198). The main themes of Old Age provisions are to “provide financial assistance to families partly to relieve their burden of caring for their older members; to reduce the demand for institutional care by encouraging families to care for their older members; and to enable older persons to contribute to the family budget so that they would feel less of a financial burden to their families (Hong Kong Legislative Council 2001: 6).” The differences between CSSA and SSA are, firstly, the focus of CSSA is chiefly on the non-able-bodied population albeit more than half of the beneficiaries were elderly able-bodied persons; secondly, CSSA is administered to households rather than by conducting personal, income and asset tests. In other words, CSSA is given based on whether households are capable of rendering monetary and/or in-kind supports to family members instead of one's degree of inability to participate in economically gainful activities or surviving on one's own. Moreover, it should be noted that both Normal and Higher Old Age schemes do not disqualify economically active people, providing they meet the income criteria and have reached Normal or Higher Old Age.

A citizenship test is applied to SSA and those who are recipients of CSSA, or who are

¹⁰ Please refer to the SWD's reply to LegCo members on the enquiry of retirement income maintenance (http://www.fhb.gov.hk/cn/legco/replies/hw/1998_20020630/OTN/LQ95.HTM). [access: 09.08.2009] (in Traditional Chinese character)

prisoners, or who are younger than sixty-five years old are automatically excluded. In addition, with regard to the rules, the beneficiaries of SSA should reside in Hong Kong throughout the period of entitlement. For old people, the Normal Old Age Allowance scheme is a means-tested programme that issues benefits to people aged between sixty-five and sixty-nine, while the Higher Old Age scheme is an application-based demogrant that offers financial support to all people aged seventy or above. Table 4.3 illustrates the criteria of financial tests for the Normal Old Age Allowance marriage status.

Table 4.3 Means-tested Criterion for Normal Old Age Allowance		
	Asset Limit	Monthly Income Limit
For a Single Person	171,000	6,360
For a Married Couple	258,000	9,940
Notes: All the numbers are Hong Kong Dollars (HKD) and all numbers are rounded. Source: Social Welfare Department (www.swd.gov.hk). [accessed: 11.07.2009]		

The Normal and Higher Old Age Allowance programmes are flat-rate payment schemes. Since the late 1990s, the benefit levels of Normal and Higher Old Age Allowance have been HKD 625 and HKD 705 monthly but the level of both schemes was increased to HKD 1,000 in 2009 in order to keep pace with the price and wage indexes (Hong Kong Legislative Council 2008b). Additionally, in the same report, the SWD took the same route as it did with CSSA and provided three one-off payments to those receiving Higher Old Age Allowance in February, June and September of 2008, rather than devising a new pension provision system. The SWD arranged a HKD 3,000 payment to the needy recipients of Higher Old Age Allowance in February and two additional payments to all beneficiaries of Higher Old Age Allowance in June and September of 2008 respectively, which were equivalent to two months of Higher Old Age Allowance payment (Hong Kong Legislative Council 2008a: 12307).

4.2.3 Occupational Retirement Scheme Ordinance (ORSO)

Before the Mandatory Provident Fund (MPF) was established, voluntary occupational pension plans provided by employers played an important role in supporting retired workers through retirement and inevitably became an incentive for recruitment. The management of these plans was mostly entrusted to private financial institutes that were either based on Defined Contribution (DC) or Defined Benefits (DB) principles and the payment levels varied. In order to regulate and protect labour rights among these private pension plans, the Occupational Retirement Scheme Ordinance (ORSO; Chapter 426) was passed in 1992 during the intensive debates on pension reforms in LegCo. Since then, every occupational pension plan has to register to and be monitored by the Registrar. That is, the Ordinance did not attempt to standardise the

provisions of occupational pension plans, but simply supervised the plans to make sure that the accumulated funds were adequate to meet liabilities (Ramesh 2004: 50-1). The MPF Authority (MPFA) substituted the Registrar with the onset of the MPF scheme in 2000. ORSO allows participants to be elected as members of Consultative Committees and take part in the administration and investment of the funds. All the reports made by trustee (yearly) and actuary (once in three years) must be reviewed by this committee.

According to the Ordinance, some private pension plans can waive participation in the MPF scheme depending on their portfolio, monthly contributions, rate of return in specific periods, possible benefit levels and the explicit and implicit risks for participants. Among all the ORSO plans, 4,625 of them were exempted from MPF in 2008 and 2,597 were Non-MPF Exempted plans. Of all the plans, Defined Contribution Plans constituted more than four-fifths (Table 4.4).

Table 4.4 Types of Occupational Retirement Schemes, 2008			
	MPF Exempted	Non-MPF Exempted	Total
Defined Contribution Plan	4,230	1,701	5,931
Defined Benefit Plan	395	896	1,291
Total	4,625	2,597	7,222
Source: MPFA (2008).			

4.2.4 Mandatory Provident Fund (MPF)

The MPF covers most workers and some employers aged between eighteen and sixty-four in Hong Kong (including full-time employees, part-time employees, e.g. casual employees, employers and the self-employed). Besides this, it not only includes those who are working in domestic companies, but also those employed by local firms and working overseas. Of the 3.54 million workers in Hong Kong, 3.16 million were employed and 0.36 million were self-employed. Sixty-nine percent of the economically active joined the MPF and 4% of them opted out from this scheme, while 16% of the employed were covered by other pension plans such as the civil servants' pension scheme and MPF-exempted ORSO plans. Eleven per cent of the employed were not obligated to take a part in the MPF at the end of 2008, as they were employed by households or aged over sixty-five years old or younger than eighteen years old (Mandatory Provident Fund Authority 2008: 1).

Because the MPF is based on Defined Contribution principles, the level of contribution rate is a crucial issue. With regard to the standard in 2007, workers who earn below HKD 5,000 or above HKD 20,000 could opt out from the MPF. The upper and lower limits will be adjusted every four years in terms of household monthly

incomes (Section 10A). The contribution rate of the MPF is 10% and is equally afforded by employers and employees. The rate of contribution and earning scales also apply to self-employed workers but they can discontinue if their earnings decline. As for those who are working but aged below eighteen or above sixty-five years old or whose monthly income exceeds the ceiling or is less than the floor of the earning scale, they can contribute voluntarily (Section 11) and apply to the above stated rules.

Both the MPF and ORSO have been supervised by the MPFA since 2000, and are organised by the Authority Members. The members are selected from officials and both employer and worker's associations. According to the Ordinance (Section 6A), all the executive and non-executive directors are nominated by the Chief Executive and should make sure that non-executive members represent labour and employers precisely and constitute more than half of the seats. Moreover, the MPFA can set up one or more consultative committees to be organised by Authority Members or experts to deal with specific issues. An MPF Advisory Committee for scrutinising the MPFA's decisions on investment and finance is assembled from nine to eleven members from the investment or finance profession, pension profession, labour and employer's representatives. These members are nominated by the Chief Executive as well.

According to Chapter 485A, the conditions of being a trustee and its performance have to be prudentially scrutinised. Moreover, financial institutes that want to be approved should propose investment plans and be reviewed by MPFA. In order to avoid great losses to the fund, the entrusted institutes should maintain adequate levels of insurance to reimburse deficits and keep a specific portion of funds in capital reservation funds that emphasise bonds and deposits in banks to earn guaranteed interest revenues, also known as Prescribed Savings Rates (PSR). The PSR is periodically released to the mass media and is designed to maintain reasonable revenues on capital reservation funds in accordance with the average interest rate of the Hong Kong Dollar Savings Account and Authorised Financial Institution (Section 37(8)). The PSR fell from a peak of 4.75% in December 2000 to its lowest level 0.01% at the end of 2008 (Mandatory Provident Fund Authority 2008: 10). Therefore, the revenues of the funds were mostly from the market since the guaranteed interest rate was so low.

Participants in the MPF can only withdraw, as is the case with other Defined Contribution schemes, the deposits of her/his accounts after reaching the official age of retirement (sixty-five years old in Hong Kong). However, participants that decide to retire earlier, at sixty years old for instance, or are leaving Hong Kong for good, unable to work, deceased, or the level of their balance is less than HKD 5,000 are

excepted. The pattern of withdrawals, whether periodic or lump-sum, is not regulated.

Table 4. 5 Hong Kong's Retirement Payment Schemes for Labour and the Non-Working Population				
Programme	Comprehensive Social Security Assistance (CSSA)	Social Security Allowance (SSA)	Occupational Retirement Scheme Ordinance (ORSO)	Mandatory Provident Fund (MPF)
Coverage	General population.	People aged 65 years old and over.	People that are employed by private sector.	People who are employees, employers and self-employed in private sector and some part of governmental sector and aged between 18 and 65 years old.
Rate of Contribution	Tax-based.	Tax-based.	Depends on each occupational pension plan.	10%, employers and employees afford half of it individually.
Requirement for Entitlement	Citizenship, finance and income tests.	Citizenship tests for all applicants. Normal Old Age: 65-69 years old, and finance and income tests. Higher Old Age: 70 years old and over, no means tests.	Depends on each occupational pension plan.	Participant who reaches 65 years old; or Participant aged 60 years old and retires from a company; or Participant leaves Hong Kong for good; or Participant loses ability to work; or Participant is dead; or Participant's accrued benefit is less than HKD 5,000.
Payments	Depends on applicant's level of disability, inability to work and family status.	HKD 1,000 for every qualified applicant since 1 Feb 2009.	Depends on each occupational pension plan.	Depends on accrued benefit in one's account. The pattern of withdrawal is not regulated.
Organisation and Finance	Administrated by Social Welfare Department (SWD) and financed by general taxes.	Administrated by SWD and financed by general taxes.	Supervised by Mandatory Provident Fund Authority (MPFA). Finance and investment method depends on each pension plan.	Supervised by MPFA. Investment methods have to be approved and monitored by MPFA.

4.3. The Effects of Retirement Payment Programmes

The following sections will discuss and evaluate elderly people's income components, the efficiency of familial transfers, governmental transfers, private insurance, retirement payments and personal earnings. The "Pension" scheme, as shown in Table 4.6, is excluded because it is for civil servants only. The importance of the newly founded system – the Mandatory Provident Fund, which covers most of the economically gainful population - is not listed in Table 4.6.

4.3.1 Elderly People's Sources of Income

Elderly people's sources of income indicate the availability of income from familial transfers, governmental transfers, personal savings and investments, employment and retirement payments or pensions. However, Hong Kong's statistics do not illustrate the relative importance, namely the median or mean value of each source, but merely report the number of recipients of each source. According to the Hong Kong Council of Social Service (HKCSS) and Census and Statistics Department's studies on the sources of income of people aged sixty and over, it has been found that elderly people who received income from familial support declined from 74.6% to 61.2% between 1990 and 2005, while the availability of Comprehensive Social Security Allowance (CSSA) and Social Security Allowance (SSA) programmes grew from 45.2% to 52.5%. The surveys of 2001 and 2005 separated the income from CSSA and SSA and found that over half of the elderly received an SSA Old Age Allowance but only one in ten elderly people were entitled to CSSA. Moreover, ageing people responded that incomes from personal savings and investments and monthly wages were increasingly important between 1990 and 2005, and the proportion of people who were entitled to pensions slightly increased between 1990 and 2005 (Table 4.6).

It is worth noting that the number for personal savings in 2001 is an outlier because it was far higher than in other years, whereas the number of 2005 was too low and does not fit the trend between 1991 and 2000. Nevertheless, the surveys concentrated on the level of elderly people's incomes and show that 99.6% (2001) and 91.4% (2005) of the ageing population had personal income, and the median level of income was HKD 2,600 and HKD 3,000 respectively. The average level of personal income was HKD 4,053.8 in 2001 and HKD 4,285.5 in 2005 (Census and Statistics Department 2001b: Table 3.4i; 2005c: Table 4.13)¹¹. That is to say, both distributions of income

¹¹ The average level of personal income in 2001 and 2005 was computed from the data provided by Census and Statistics Department (2001b: Table 3.4i; 2005c: Table 4.13).

levels in 2001 and 2005 were skewed to the right and half of the respondents received less than HKD 2,600 and HKD 3,000 per month in 2001 and 2005 respectively. Among them, in 2001, respondents reported that personal savings (89.0%), family support (62.9%) and SSA benefit (51.6%) were the most important sources of income, while 61.2% and 54.3% of respondents replied in 2005 that they received family support and SSA benefit as a part of their retirement income. Because the Census and Statistics Department is not engaged in personal income components, there is no further information about how ageing people's income is composed¹².

Table 4.6 Elderly People's Source of Income (1990-2005)*						
Year	Family Support	CSSA	SSA	Personal Savings	Monthly Salary	Pension
1990-91	74.6	45.2		-	6.4	3.2
1991-92	74.6	47.4		3.1	6.0	3.1
1992-93	73.5	62.1		8.5	4.4	2.9
1993-94	76.1	61.5		12.1	4.6	2.8
1994-95	72.4	64.0		12.3	4.1	2.8
1995-96	73.4	61.3		12.7	4.2	3.0
1996-97	68.3	58.1		12.6	4.0	2.8
1997-98	71.1	59.3		12.3	3.8	3.1
1998-99	67.2	57.6		13.2	3.6	3.2
1999-00	64.7	54.6		12.9	3.6	3.2
2000-01	62.2	52.5		14.4	3.4	3.5
2001**	62.9	12.0	51.6	89.0	12.5	4.5
2005**	61.2	9.3	54.3	3.0	11.2	4.1

Notes: * All the numbers were in percentage and based on fiscal years, and old age is defined as sixty years old and over. Hong Kong's fiscal year runs from 1st April to 31st March the following year. The numbers between 1988 and 2001 were from the research of the Hong Kong Council of Social Service (HKCSS) in 2001. A dashed cell signifies that data is not available for that year.

** The numbers were from the surveys of the Census and Statistics Department in 2000 and 2005.

Sources: Calculated and derived from *Clientele Information System for Social Centre for the Elderly*, The Hong Kong Council of Social Service (2001) and Census and Statistics Department (2001b: Table 3.7; 2005c: Table 4.14).

4.3.2 Family Support

The living arrangements of people aged sixty or over in Hong Kong changed slightly between 1996 and 2006 as illustrated in Table 4.7. This shows that 11.6% were living alone in domestic households, 30.4% were living with a spouse and child/children and 21.2% with a spouse only in 2006. Also, 23.1% of ageing people were living with a child/children only and 10.0% were living in homes for aged persons, hospitals or penal institutions in 2006. As for the trend of family transition, the number of older

¹² According to the correspondence with the Census and Statistics Department, Billy Y. G. Li, the commissioner of the Department replied on 15th July stating that the personal income components of the elderly population were currently unavailable.

persons who were living with a spouse only (up from 16.2% to 21.2%) or in non-domestic households (up from 5.5% to 10.0%) increased between 1996 and 2006, while those who were living with a spouse and child/children (down from 32.1% to 30.4%) or with a child/children only (down from 28.2% to 23.1%) dropped during this period. That is, the census of 2006 showed that the number of older people living with a child or children declined from 60.3% (32.1% plus 28.2%) in 1996 to 53.5% (30.4% plus 23.1%) in 2006. The survey of 2003 corresponded to this trend and depicted that 57.8% of retired people were living with their children.

Table 4.7 Older Persons by Living Arrangement, 1996, 2001 and 2006*			
Living Arrangement	1996	2001	2006
Living in domestic household			
Living alone	11.5	11.3	11.6
Living with spouse**			
And with child(ren)	32.1	32.1	30.4
And not with child(ren)	16.2	18.4	21.2
Sub-total	48.3	50.5	51.6
Living with child(ren) only**	28.2	24.7	23.1
Others	6.5	4.4	3.7
Sub-total	94.5	90.9	90.0
Living in non-domestic household***	5.5	9.1	10.0
Total	100.0	100.0	100.0
Notes: * All the numbers are in percentage.			
** These numbers include older persons who are living with persons other than spouse and children.			
*** The numbers include those who are living in homes for aged persons, hospitals and penal institutions etc.			
Source: The numbers are derived from Census and Statistics Department (2008a: Table 7.3).			

Although Table 4.6 reports that 61.2% of respondents received monetary supports from family members in 2005, as Table 4.8 depicts, in fact, merely 30.1% of children provided help to their retired parents in the last twelve months. In other words, nearly 70% of children did not support, in cash or in kind, their retired family members, which does not fit with the data shown in Table 4.6. Moreover, the survey found that the median levels of annual cash support from children co-residing with retired parents and not co-residing with retired parents were HKD 25,000 and HKD 30,000 respectively (Census and Statistics Department 2003c: 18 & 20). With regard to household composition, the average amount of monthly family support modified by coverage rate (30.1%) and living arrangements (with/without children) was HKD 703.5 in 2003¹³.

¹³ This number was computed from the data provided by the Census and Statistics Department (2003c: 18 & 20) and was rounded up. The average amount of support provided by children living with and not living with parents was HKD 23,743.3 and HKD 34,280.7 respectively. Taking the numbers in Table 4.8 and the household composition in 2003 (57.8% of children co-resided with their parents, in other

Table 4.8 Whether Persons Had Supported Elderly Parents in Past Twelve Months		
Whether supported elderly parents' living or not in past 12 months	Number of Persons (in thousands)	Percentage (%)*
Yes	1,678.1	30.1
Living together with elderly parents	969.2	17.4 (57.8)
Living apart from elderly parents	669.5	12.0 (39.9)
Both	39.3	0.7 (2.3)
No	3,905.8	69.9
Total	5,583.9	100.0
Notes: * Figures in brackets represent the percentage in respect of all persons who had supported their elderly parents' living in past twelve months.		
Source: Census and Statistics Department (2003c: 12).		

The discrepancy between the numbers shown in Table 4.6 and Table 4.8 may result from, firstly, the inclusion of those who did not have old age persons to support. Because the survey of 2003 did not pick out those who have parents to support, the findings may be biased. Secondly, the definition of “support” may cause the bias. The survey defined a supporter as a person who co-resided with their parents and paid all or part of their parents’ living expenditures, or a person who did not live with their parents but had given them at least HKD 12,000 in the past twelve months. Because this survey excluded those who gave parents less than HKD 12,000, the accuracy of the study may have been affected. Secondly, the bias may be caused by parents’ idea of family harmony. As Becker (1974; 1993) points out, in East Asian countries in particular parents may worry about children’s inability to take care of their own life and that of their retired parents at the same time. For this reason, parents may answer “yes”, even if it is not true, when being asked about this and consequently cause bias. Hence, this implies that there may be fewer children assisting retired parents than the level illustrated in Table 4.6.

The income level of the households with co-resident older persons, particularly if there are fewer than four members, was less than the median household income in Hong Kong in 2006. The median household income of single-elder households, as shown in Table 4.9, was less than 40% of that of the national median level. Moreover, the median income of a two-person household with at least one elderly person was less than half of the national level according to the survey of 2001 and 2006.

words 42.2% of people did not co-reside with elderly parents) into account, the average amount of support in 2003 was equal to: $((34,280.7 * 12.0\%) + (23743.3 * 17.4\%) + ((34,280.7 * 42.2\% + 23743.3 * 57.8\%) * 0.7\%)) / 12$

Table 4.9 Median Monthly Household Income of Households with Older Persons by Household Size in 1996, 2001 and 2006

Household Size	1996		2001		2006	
	Domestic Households with Older Persons	All Domestic Households	Domestic Households with Older Persons	All Domestic Households	Domestic Households with Older Persons	All Domestic Households
1	2,560	9,000	3,125	8,600	3,113	8,047
2	8,000	16,000	7,000	15,300	6,606	14,000
3	14,200	17,250	15,425	18,750	14,425	17,500
4	20,000	18,600	21,205	21,225	20,530	21,500
5	22,095	22,500	24,425	26,300	23,925	26,705
6	24,500	25,500	28,500	29,130	28,625	29,500
7+	30,595	31,402	35,130	34,580	37,103	35,860
Overall	14,095	17,500	12,205	18,705	11,125	17,250

Note: The numbers are at market price. Older person here refers to people aged sixty-five and over.

Source: The numbers are derived from the Census and Statistics Department (2008a: Table 7.10).

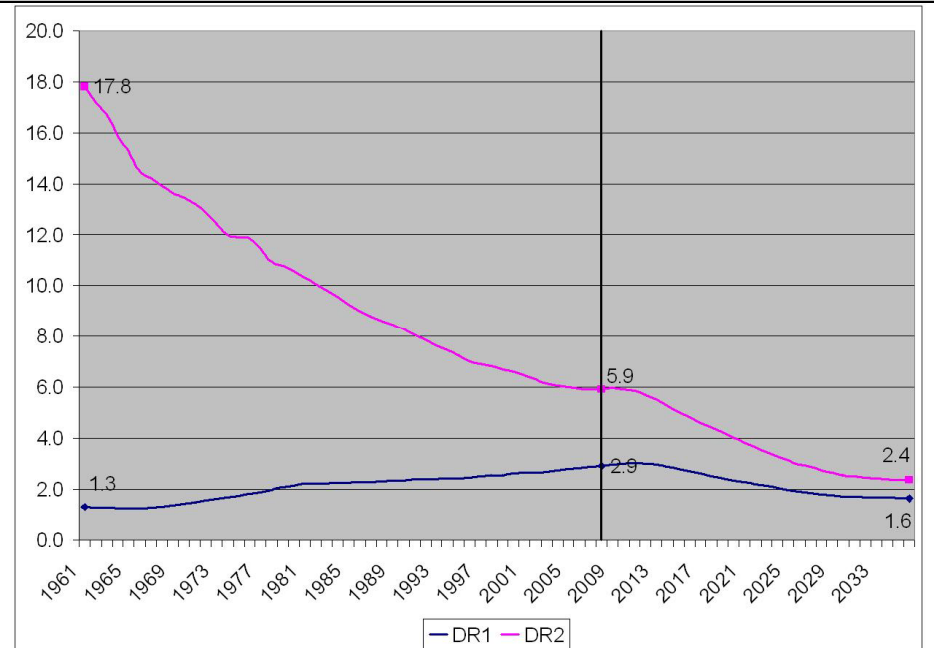
Table 4.10 further explains the reason for the low income level of those smaller sized households with elderly members. From the viewpoint of working members in a household, it was found that the median income level of single-elderly-person households was around one-third of that of single-person households overall, and the number of working members per household was 0.1 and 0.7 respectively according to the census of 2006. The median income of households is composed of two or more people of age of sixty-five or over was higher than single-elderly-person households, but the number of economically active household members was similar to that of single-elderly-person households. The figures also indicate that the resources available to households constituted by two or more ageing people were less than those of a single-elderly-person because the resources had to be shared by more people. In addition, households formed by two or more adults but where not all of them were ageing persons had 1.8 to 2.0 working members on average between 1996 and 2006 and the median income was around six to seven times of that of single-elderly-person households and about four to five times of that of households composed of two or more older persons. Therefore, for one thing, this implies that the number of working members is closely related to household income level. For another, the household income of those ageing persons who live alone or with other older persons was much lower than the national level, thus indicating that income from family support, social assistance and elsewhere may not be sufficient to maintain an adequate standard of living.

Table 4.10 Median Monthly Household Income and Household Working Members by Household Composition in 1996, 2001 and 2006						
Household Composition	1996		2001		2006	
	Median Monthly Household Income*	Avg. Number of Working Members	Median Monthly Household Income*	Avg. Number of Working Members	Median Monthly Household Income*	Avg. Number of Working Members
One adult only aged 65+	2,560	0.1	3,125	0.1	3,113	0.1
Two or more adults aged 65+	4,500	0.2	4,900	0.1	4,410	0.1
One adult only aged below 65	11,000	0.8	12,800	0.8	11,500	0.7
Two or more adults (not all aged 65+)	21,340	2.0	22,870	1.8	20,800	1.8
One adult and child/children**	8,500	0.6	9,000	0.5	8,000	0.6
Two or more adults and children**	18,000	1.8	20,000	1.8	20,000	1.8
Overall	17,500	1.6	18,705	1.5	17,250	1.5

Notes: * The numbers are in HKD and at market price.
** Children are defined as household members aged below 18.
Source: The numbers are derived from Census and Statistics Department (2006d: Table 7.14 & 7.15).

Aside from the status of family support, demographic population trends can be used to predict whether the families will be able to act as providers of retirement income in the future, hence the authorities concerned can draw up policies to abate the effects on society. DR1 in Figure 4.1 defines dependents as people aged less than fifteen or over sixty-five and found that the number grew from 1.3 working people to one dependent in 1961 to 2.9 economically active people to one dependent in 2008. After that, the number was forecasted to increase slightly then bend down to 1.6 at the end of 2036. As the total fertility rate in Figure 4.2 will illustrate later, the fertility rate dropped sharply in the post-War period and DR1 gradually went up due to the large numbers of younger people, but has driven population ageing swiftly since then because the decrease in the fertility rate made it more difficult to replace the working population. DP2 presents how many economically gainful people would support one old age person, and showed that the dependency ratio decreased markedly from 17.8 working people to one ageing person in 1961 to 5.9 economically gainful people to one elder in 2008. The number will fall further to 2.4 in 2036 according to the population projection.

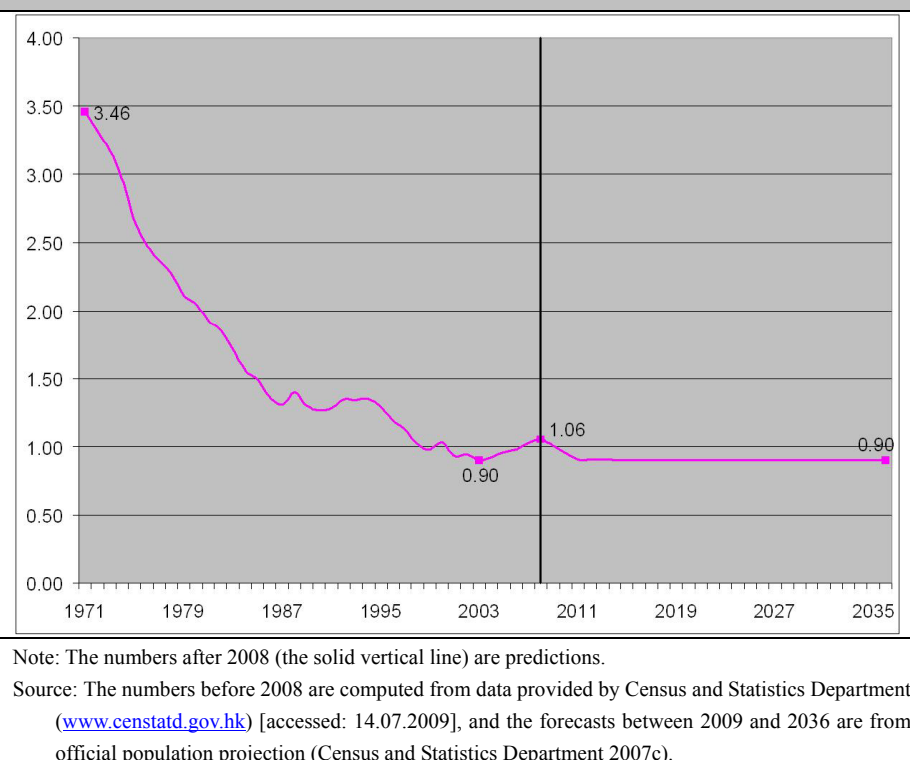
Figure 4.1 Dependency Ratio of Hong Kong Population (1961-2036)



Note: The numbers after 2008 (the solid vertical line) are predictions.
 DR1 = economically active population (15-64) / (younger population (0-14) + older population (65+))
 DR2 = economically active population (15-64) / older population (65+)
 Source: The numbers before 2008 are computed from data provided by Census and Statistics Department (www.censtatd.gov.hk) [accessed: 14.07.2009], and the forecasts between 2009 and 2036 are from official population projections (Census and Statistics Department 2007c).

Figure 4.2 illustrates the total fertility rate (TFR) in Hong Kong between 1971 and 2036, and the numbers after 2008 are forecasts based on observed birth rates, death rates and migration. The TFR decreased dramatically between 1971 and 2003, falling from 3.46 to 0.90 but went up slightly to 1.06 in 2008. However, the official forecast shows that the TFR may fall again and keep steady at 0.90 until 2036.

Figure 4.2 Total Fertility Rate of Hong Kong (1971-2036)



Because of the influx of refugees from China and Vietnam and the drop in the mortality rate, the Family Planning Association of Hong Kong, with financial and technical assistance from the International Planned Parenthood Federation (IPPF), has promoted a series of family policies since 1970s. The use of contraception was the main policy that aimed at reducing the number of births per family to two. The TFR soon fell to replacement level (2.1) in early 1980s¹⁴, however, as Frejka and Ross's (2001: 244) work observed, although the Colonial Government subsequently tried to dismantle the family policies it seemed that individuals chose to continue using birth control therefore the TFR declined further. Yip and his colleagues' (2001) research indicates that even though the TFR of local women was 0.98 in 1998, the virtual TFR was 1.57 if the Chinese who gave birth in Hong Kong are taken into account. Nevertheless, in this case, the number of working people will still decrease and the number of older people will have grown by 300% by the end of 2048. Therefore, the low fertility rate of local people is and will still be the key problem that government has to tackle. The truth is that the newborn population might not necessarily become part of the working population in Hong Kong and, even if they do, the family support system may still be unsustainable for Hong Kongers.

¹⁴ Please refer to the website of the Family Planning Association of Hong Kong (<http://www.famplan.org.hk/fpahk/en/template1.asp?style=template1.asp&content=about/history.asp>) and Hong Kong University (http://www.cmi.hku.hk/teaching/delta_culture/analy.htm#3). [accessed: 29.07.09]

Yip and Lee (2002) and Yip et al (2006) argue that the increase of spinsters, postponement of marriage and reduction in the childbearing of married women may greatly decrease the TFR. In addition, Lui's (2009) study found it significant that, firstly, married men and women tended to place more emphasis on career than childbearing, and believed that having children would increase one's opportunity costs. Secondly, respondents showed that they were not prepared to educate children therefore they determined not to have babies. Thirdly, the results illustrated that choices may be influenced by the choices of others. This corresponds with a study by Lutz et al (2006) which argues that childbearing behaviour may be inherited from previous generations and copied by future generations and consequently form the consensus of the society if this idea becomes pervasive. Nonetheless, Lui's (2009) findings also report that those who are strongly motivated by security in old-age would have more children. According to current public behaviour, Yip et al (2006) assert that the TFR will not return to one or above in the long-run because they are confident that all the conditions will remain the same. This implies that government may need to build up some social security schemes to replace family support now that it seemingly will not be sustainable. Although the savings-based Mandatory Provident Fund system was launched in 2000, it has not really changed things for retirees or those who are approaching retirement age. In addition, the passiveness of the increase of SSA benefit levels indicates that the government is concerned about the availability of retirement income but not the adequacy of it.

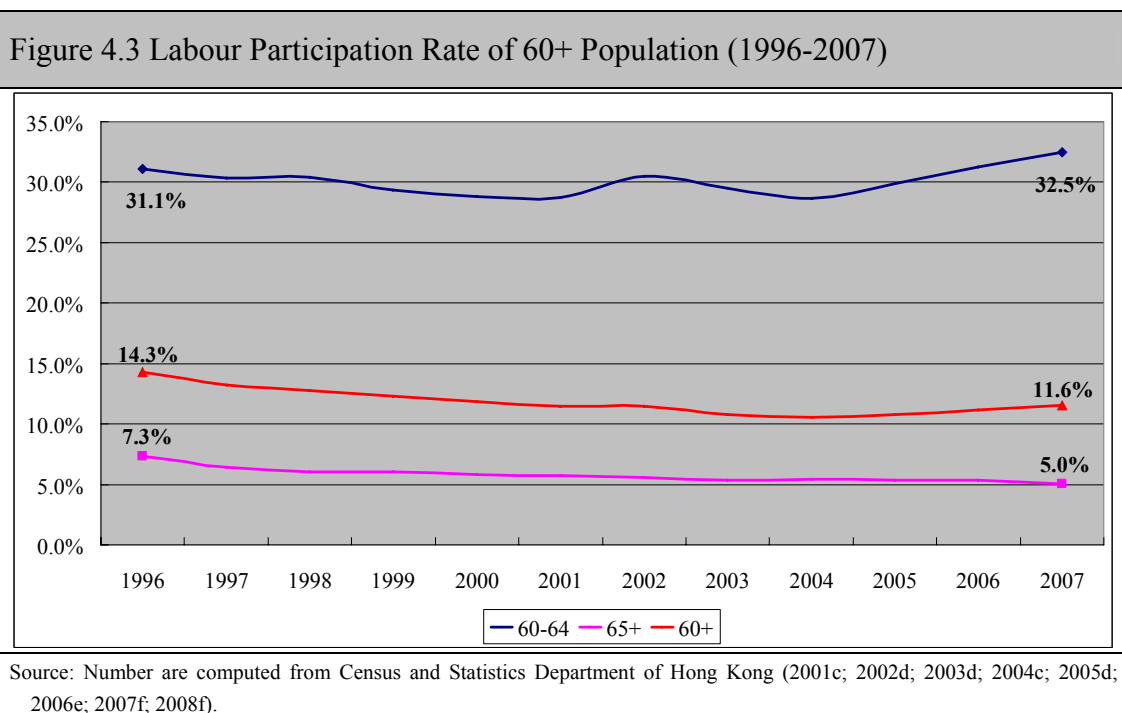
Yu's (2007: 201-3) idea is to protect traditional values, namely the family support system, and she claims that government ought to abolish Normal and Higher Old Age provisions because, with regard to Confucianism, family, instead of society, should take care of elderly members. In addition, she argues that means-tested social assistance, particularly CSSA, is better than universal ones because "it not only ensures a decent livelihood for the elderly, but it also ensures children are committed to fulfil their filial duties. In this way, the proper order of familial and societal obligations will not be upset." Yu comments that people see the elderly as burdens due to the implementation of the universal social provision, i.e. SSA, and this in turn will bring about more individualism. Strictly speaking, the decline of the family support system in Hong Kong was caused by demographic trends, unequal wealth distribution (Census and Statistics Department 2006d: 14)¹⁵ and insufficient social allowances. It is true that, *ceteris paribus*, low-income households in particular would gradually become unsustainable as time passes if the number of working members decreases

¹⁵ The pre-tax household income levels of Gini Index in 1996, 2001 and 2006 were 0.518, 0.525 and 0.533, while the levels of post-tax household income were 0.508, 0.515 and 0.521 individually. The post-tax post-transfers levels in 1996, 2001 and 2006 were 0.466, 0.470 and 0.475 respectively.

and income levels are reduced. Consequently, the elders in households would become more burdensome since they are unable to work and the resources of low-income households would be poorer than before. Therefore, the truth is that it is the government's inability to keep up with the changes taking place in society and reluctance to introduce long-term schemes to maintain retirement income, rather than universalism or individualism or social provision itself, which reinforce people's perception of "elders as burdens".

4.3.3 Employment Income

As Table 4.6 demonstrates, more than one-tenths of respondents who reached the age of sixty reported being economically active in 2001 and 2005, while the percentage decreased from 6.4% to 3.4 between 1990 and 2000. Figure 4.3 shows that labour participation rates of people aged sixty and older, and sixty-five and above, were 11.6% and 5.0% respectively in 2007, and both rates declined slightly between 1996 and 2007. It also illustrates that about one-third of people aged between sixty and sixty-four were still working. Hence, the labour participation rate corresponds to Table 4.6 (particularly the numbers in 2001 and 2005) in that slightly more than 10% of the ageing population are engaged in economically gainful activities.



However, the wage level for older workers may be less than other age groups. Table 4.11 depicts the median wage of employees aged sixty and over and that of the whole population engaged in economically gainful work between 2004 and 2007. The statistics show that elderly workers' median wage increased from HKD 6,567 to HKD 7,444 during this period and monthly income constituted about 70% of the total wages

earned. It should be noted that although the median wage level of employees aged sixty and over seems higher than that of single elderly persons (sixty-five years old and more) in Table 4.9 and 4.10, the truth is that only about one-tenth were engaged in gainful work.

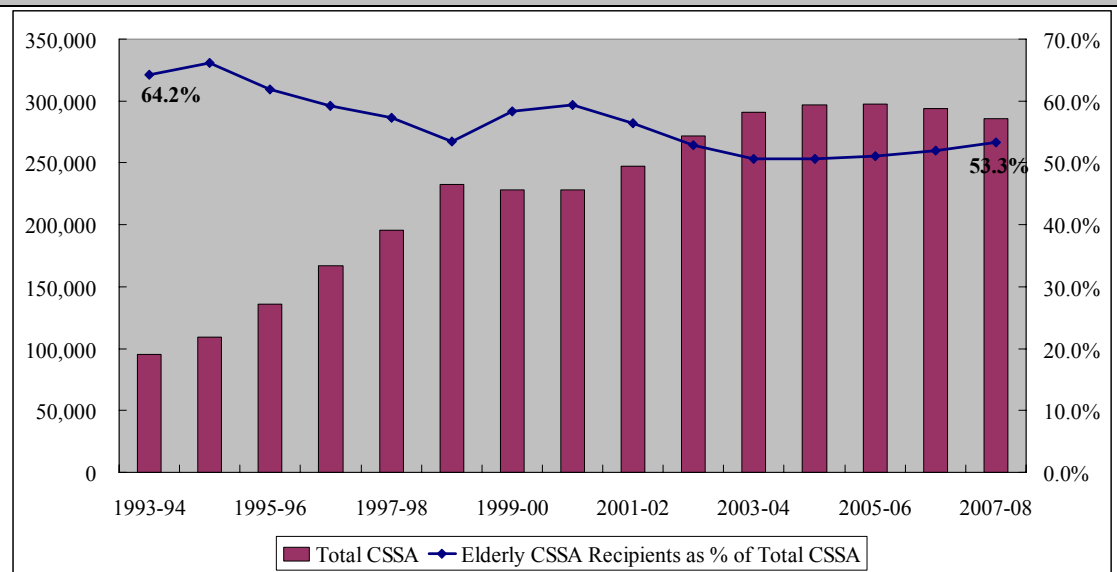
Table 4.11 Median Wage of Employees in Hong Kong (2004-2007)		
Year	Median Wage	
	60+	Total
2004	6,567	9,650
2005	6,953	9,639
2006	7,388	9,894
2007	7,444	10,146

Source: Calculated from data provided by the Census and Statistics Department of Hong Kong (2008f: Table 4.9 & 5.5).

4.3.4 Social Security Assistance Programmes

As shown in Table 4.6 the percentage of the ageing population who receive Comprehensive Social Security Assistance (CSSA) and Social Security Allowance (SSA) has increased markedly since 1992, and the aggregate percentage of social allowance recipients (63.6%) slightly outnumbered that of those in receipt of family transfers (61.2%) in 2005. This implies that both sources of income were similarly available but not of equal importance. In the light of CSSA regulations and level of payment, elderly recipients are entitled to a higher level of benefit than SSA recipients of Old Age Allowance if they pass a series of household income tests. Because the Old Age Allowance schemes of SSA were for people aged seventy-five or over, most households would apply for CSSA payments instead. After the thresholds of SSA were lowered to sixty-five and seventy years old, CSSA chiefly focused on the younger generations and handicapped persons thus the proportion of ageing beneficiaries steadily decreased between 1993 and 2008 (Figure 4.4).

Figure 4.4 Total CSSA Recipients and Elderly Recipients as % of CSSA (1993-2008)*

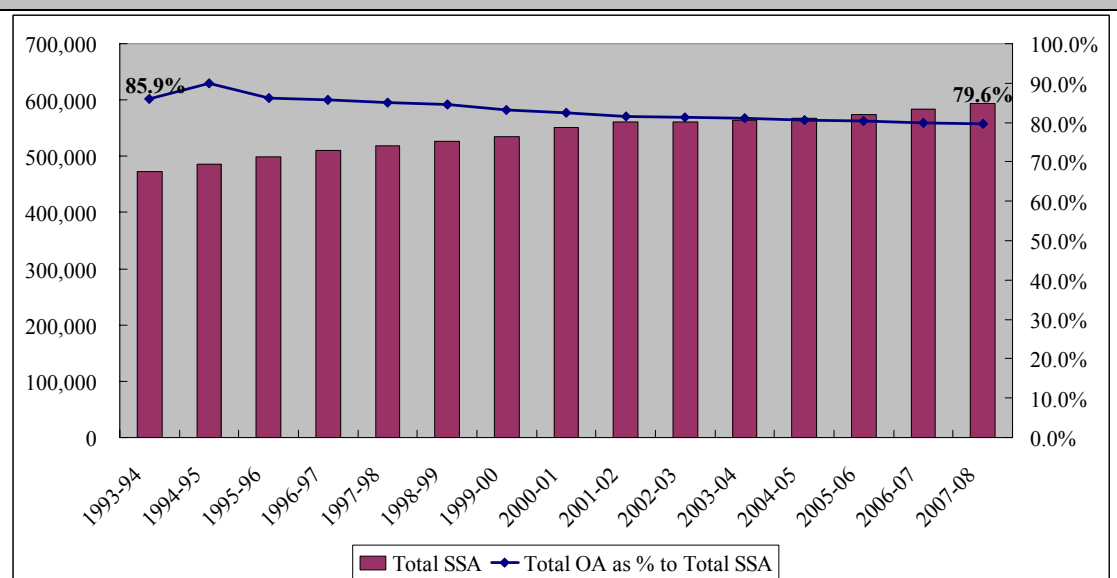


Notes: * All the numbers are in persons and percentages, and the statistics are based on the fiscal year which runs from April 1st to 31st March.

Source: Census and Statistics Department of Hong Kong (2001a; 2002a; 2003a; 2004a; 2005a; 2006a; 2007a; 2008c).

The beneficiaries of Normal and Higher Old Age Allowance of SSA constituted the main part (about four-fifths) of the SSA scheme between 1993 and 2008 (Figure 4.5), although the rate declined slightly from 85.9% to 79.6%.

Figure 4.5 Total SSA Recipients and OA Recipients as % of SSA (1993-2008)*



Notes: * All the numbers are in persons and percentages, and the statistics are based on the fiscal year which runs from 1st of April to 31st March

Source: Census and Statistics Department of Hong Kong (2001a; 2002a; 2003a; 2004a; 2005a; 2006a; 2007a; 2008c).

Because CSSA payments for the elderly are for persons aged sixty and over and the Normal and Higher Old Age Allowance schemes of SSA are for the over-sixty-fives, the coverage of CSSA and SSA is decided by simply dividing the recipients of these

two provisions by the ageing population. The line on the bottom, in Figure 4.6, shows CSSA payments for the elderly and that the coverage rate increased from 7.7% to 13.3% between 1993 and 2007, which fits with the number given in Table 4.6; while the middle line measures the benefits available to the over-sixty-fives, which range between 18% and 20% from 2001. The top line in Figure 4.6 depicts the coverage rate of Normal and Higher Old Age Allowance schemes and the reduction in coverage between 1993 and 2007 from 74.4% to 54.3%. Because the number of people who received both CSSA and SSA benefits was low according to the rules discussed above, CSSA and SSA by and large covered around 70% of people aged sixty-five and over in 2007.

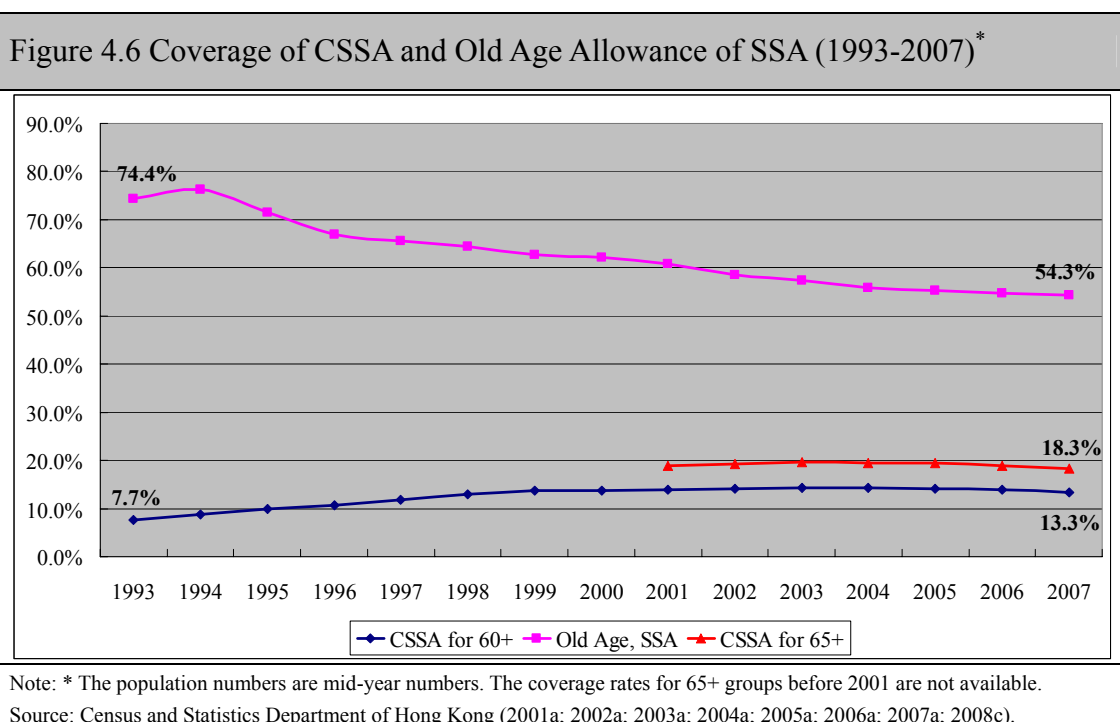
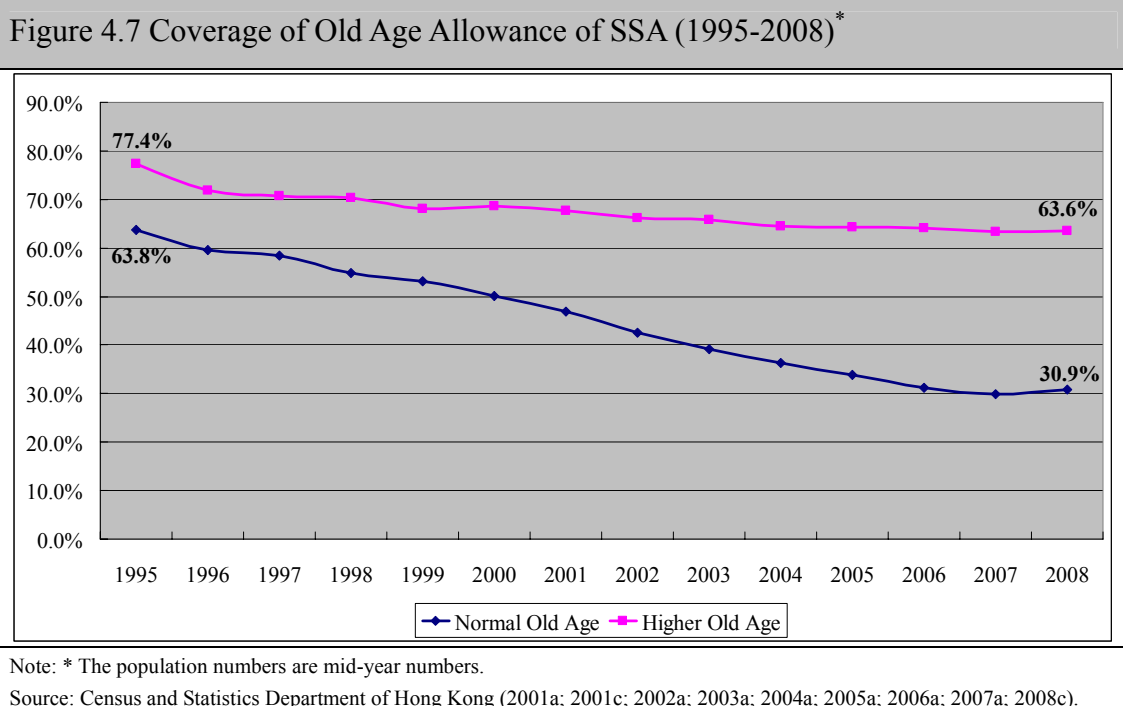


Figure 4.7 elaborates on the reasons for reduction in SSA coverage. As the graph shows, the coverage of the Higher Old Age Allowance scheme remained relatively stable between 1999 and 2008, whereas the coverage of the Normal Old Age Allowance scheme plunged by more than 20% due to the halving of SSA recipients between 1995 (141,470) and 2007 (70,054)¹⁶. Since the structure of the population was not abruptly changed as it was, for example, by immigration after the War, the labour participation rate of the ageing population remained low (less than 6% since 2001; Census and Statistics Department 2006a; 2007a; less than 6% since 2001; 2008c: Table 2.1) people's perceptions of social assistance stable, income and wealth thresholds approximately the same, and other eligibility criteria relatively unchanged,

¹⁶ Please refer to the document (http://www.lwb.gov.hk/eng/legco/20090708_11_4.pdf) for detail numbers of the recipients of Normal Old Age Assistance programme. [accessed: 11.07.2009]

the drop in SSA beneficiaries may have been caused by the development of occupational pension plans (i.e. ORSO plans) and the Mandatory Provident Fund (MPF) system. Because the incomes from both schemes have to be considered in means tests, this may affect entitlement to Normal Old Age Allowance benefit.



The expenditures on CSSA and SSA to some extent represent the resources that Hong Kong devotes to social provisions. As Table 4.12 demonstrates, the spending on CSSA and SSA composed 0.6% and 0.4% of GDP respectively in 2008. It also shows that social provisions as a percentage of GDP in Hong Kong remained constant at about 1% of which expenditure on CSSA constituted between 60% and 70%.

Table 4.12 Expenditures on CSSA and SSA as a Percentage of GDP (2001-2008)

Year	GDP (million HKD)	Expenditure on CSSA for elders as % of GDP	Expenditure on Old Age Allowance of SSA as % of GDP	Total Spending as % of GDP
2001	1,299,218	0.6%	0.3%	0.9%
2002	1,277,314	0.7%	0.3%	1.0%
2003	1,234,761	0.7%	0.3%	1.0%
2004	1,291,923	0.7%	0.3%	1.0%
2005	1,382,590	0.7%	0.3%	0.9%
2006	1,475,357	0.6%	0.3%	0.9%
2007	1,615,431	0.6%	0.3%	0.9%
2008	1,676,929	0.6%	0.4%	1.0%

Note: The GDP number is based on current market prices and the percentages are rounded up.
Source: Calculated from statistics provided by the Labour and Welfare Bureau and Census and Statistics Department of Hong Kong (www.censtatd.gov.hk) [Accessed: 09.07.2009].

Because CSSA is designed to maintain the living standards of households and not the

individual, it provides a higher level of benefits than SSA. Table 4.13 illustrates that the average benefit for people aged sixty-five and above was HKD 4,957 and replaced 27.5% of median household income in 2007. The one-off additional payment of CSSA arranged in mid-2008 markedly augmented the average amount of benefit (HKD 5,303) and the replacement rate (28.8%). CSSA replaced less than one-third of household income between 2001 and 2008 and, with regard to its low coverage rate, less than one-fifth of elderly people were entitled to it. Although the replacement rate may be higher for low-income households, the truth is that the level of benefit was generally lower than the poverty threshold. The findings will be shown in the following sections of this chapter.

Table 4.13 Replacement Rate of CSSA for 65+ (2001-2008)					
Year	Expenditure (million)	Recipients (person)	Avg. Monthly Benefit	Monthly Household Income	Replacement Rate
2001	7,218.8	126,530	4,754	17,000	28.0%
2002	7,645.8	133,847	4,760	16,000	29.8%
2003	7,909.1	138,734	4,751	15,000	31.7%
2004	7,903.1	142,014	4,638	15,500	29.9%
2005	7,982.2	143,922	4,622	16,000	28.9%
2006	8,062.3	143,294	4,689	16,900	27.7%
2007	8,410.5	141,403	4,957	18,000	27.5%
2008	8,919.3	140,168	5,303	18,400	28.8%

Note: The numbers are in Hong Kong Dollars, persons and percentages. Household incomes are median number.
Source: The numbers are computed from data provided by the Census and Statistics Department (2002b; 2003b; 2004b; 2005b; 2006b; 2007d; 2008d; 2009b).

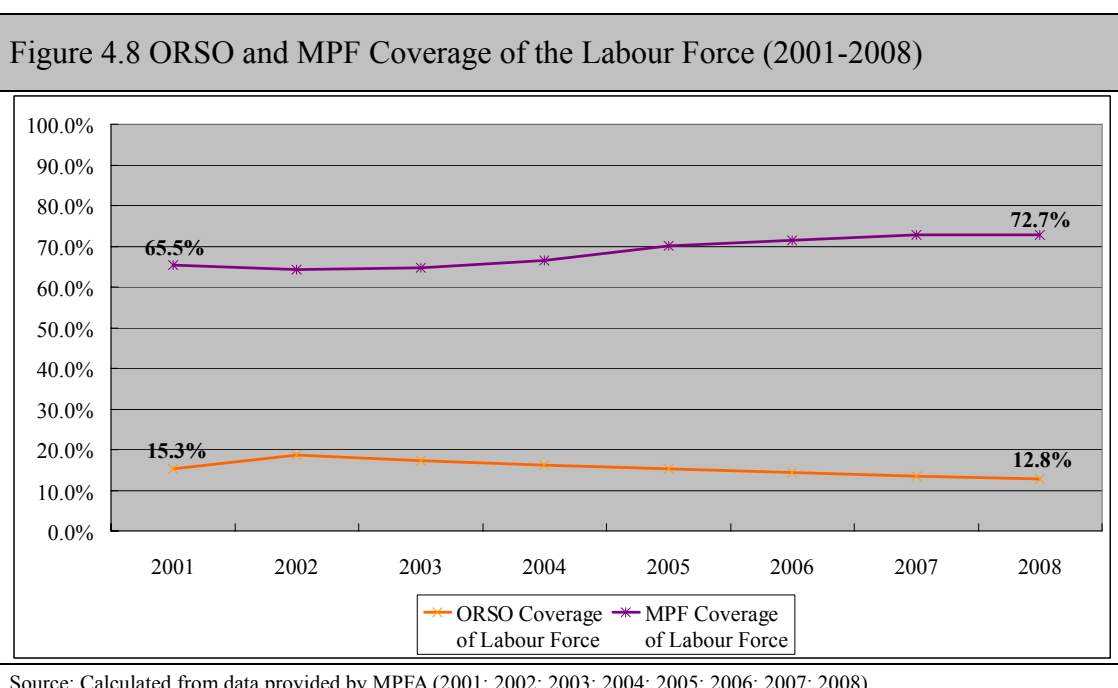
The replacement rate of SSA was not as high as that of CSSA (Table 4.13). As illustrated in Table 4.14, SSA replaced up to 7.2% of median monthly income between 2001 and 2007. The additional payments of Higher Old Age Allowance boosted the average amount of benefit in 2008, and the aggregate replacement rate increased to 10.5% accordingly. The level of both Normal and Higher Old Age Allowance benefit was raised to HKD 1,000 on the 1st of February 2009, thus the replacement rate may go up to around 10% if the monthly income of the general population does not rise dramatically.

Table 4.14 Replacement Rate of SSA (2001-2008)					
Year	Expenditure (million)	Recipients	Avg. Monthly Benefit	Monthly Income	Replacement Rate
2001	3,581.2	458,041	651.5	10,000	6.5%
2002	3,574.0	454,933	654.7	10,000	6.5%
2003	3,636.3	456,798	663.4	9,500	7.0%
2004	3,658.8	457,900	665.9	9,500	7.0%
2005	3,706.2	461,024	669.9	9,800	6.8%
2006	3,798.7	466,272	678.9	10,000	6.8%
2007	4,102.3	473,159	722.5	10,100	7.2%
2008	6,414.9	485,855	1,100.3	10,500	10.5%

Note: The numbers are in Hong Kong Dollars, persons and percentages, and the monthly incomes are medians.
Source: The numbers are computed from data provided by the Census and Statistics Department (2002b; 2003b; 2004b; 2005b; 2006b; 2007d; 2008d; 2009b).

4.3.5 Retirement Payment Schemes

The Mandatory Provident Fund (MPF) is a newly established system in existence since 2000 and which aims to provide retirement benefits to employees in the private sector. The Occupational Retirement Scheme Ordinance (ORSO) was implemented before the MPF for the same purpose, but strictly speaking it was an occupational pension plan on the basis of agreements between employers and employees. In other words, the ORSO is a voluntary scheme, and the decisions about whether or not to establish a company-based occupational pension plan, the type of pension plan (i.e. Defined Contribution or Defined Benefit), and contribution rate are made collectively. ORSO and MPF covered 12.8% and 72.7% of labour force respectively in 2008 (Figure 4.8).



The statistics about the coverage of each category of participant in Table 4.15 illustrate that the MPF covered most target employers and employees and around three-fourths of the self-employed at the end of 2008. The coverage of people targeted as a whole was 95.0% and the population amounted to 2.68 million. In other words, the rate of evasion of MPF was a mere 5.0% in 2008. Moreover, it should be noted that people aged between fifteen and fifty-nine not covered by any sort of occupational pension plan amounted to more than two million at the end of 2007 (Census and Statistics Department 2008c: 5; Census and Statistics Department 2009a: 18)¹⁷.

Year	Employers		Employees		Self-Employed		Coverage within MPF (%)
	Participants ('000)	Enrolment Rate (%)	Participants ('000)	Enrolment Rate (%)	Participants ('000)	Enrolment Rate (%)	
2001	209	88.0	1,747	94.6	301	91.0	93.5
2002	217	93.6	1,725	95.6	302	81.0	93.2
2003	218	95.4	1,733	96.3	299	81.5	94.0
2004	223	97.9	1,837	96.2	294	79.6	93.9
2005	227	98.2	1,974	97.4	288	77.6	94.7
2006	232	98.5	2,071	97.7	285	74.5	94.6
2007	239	99.5	2,130	97.6	271	75.1	94.9
2008	238	99.8	2,175	98.0	267	73.7	95.0

Source: Computed from data provided by MPFA (2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008).

Table 4.16 describes the scale of ORSO and MPF funds in various years. The MPF numbers, on the one hand, show that the fund grew rapidly and increased from 2.6% to 12.5% of GDP. It is worth pointing out that the drop in the MPF fund was due to a loss in investment of -23.4% in 2008 (Mandatory Provident Fund Authority 2008). On the other hand, the growth of the ORSO fund was comparatively stable. As the data stated, the percentage of GDP slightly dipped to 10.7% in 2003 and increased to 15.5% at the end of 2008 when the MPF fund fell. In addition, because the MPF scheme was relatively new, the amount of payment was small in GDP terms (0.4%) in 2008.

¹⁷ The number of the population not covered by the MPF, ORSO or civil servants' pension plan was 2,067,201. (Computed from data provided by the Census and Statistics Department and Mandatory Provident Fund Authority)

Table 4.16 The MPF and ORSO Fund as a Ratio of GDP (2001-2008)						
Year	MPF				ORSO	
	Fund		Payment		Fund	
	Amount	%	Amount	%	Amount	%
2001	33,498	2.6	-	-	152,547	11.7
2002	55,063	4.3	-	-	157,094	12.3
2003	89,409	7.2	-	-	131,548	10.7
2004	120,183	9.3	-	-	177,714	13.8
2005	151,360	10.9	3,603	0.3	194,708	14.1
2006	202,407	13.7	5,211	0.4	210,620	14.3
2007	264,786	16.4	6,584	0.4	238,937	14.8
2008	209,484	12.5	6,014	0.4	259,664	15.5

Note: The amounts are in millions HKD and GDP is based on current market values.
Source: Computed from the statistics provided by MPFA (2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008) and the Census and Statistics Department of Hong Kong (www.censtatd.gov.hk) [Accessed: 09.07.2009].

Although the ORSO was and is still an important pension plan scheme for workers in Hong Kong, there was no further information about the level of benefit and replacement rate provided. For this reason, the analysis of the public retirement payment system is based solely on the MPF. Table 4.17 presents an ideal simulation of the MPF to show the amount that an average person could accumulate for retirement under the assumption that the retiree does not purchase annuity with the payment. The “year” in Table 4.17 is ideally defined as the year that people are obliged to retire i.e. at sixty-five years old. For instance, people who were listed as retirees in 2007 means those retired after the first day of 2007, therefore the numbers listed in the 2007 row for calculating levels of benefit and replacement rates are based on the data between 2000 and 2006. A person retiring in 2007, for example, who started contributing to the MPF at the age of fifty-nine in 2000 would have spent one year as part of the fifty-five to fifty-nine age group and five years as part of the sixty and over age group. The accumulated rate of return computed until the end of 2006 was 24.5% and the life expectancy at sixty-five years old at 2007 was 20.57 years. Therefore, the average retiree in 2007 would receive HKD 336.1 monthly until she/he passed away and the replacement rate of her/his last drawn salary would be 4.5%. Inevitably the rate of substitution is comparatively low for retirees and retirees-to-be in the first few decades because of the shorter history of contribution.

Table 4.17 Replacement Rate of MPF (2002-2009)						
Year	Median Income*	Accum. Balance**	Avg. Benefit***	Accum. RoR****	Life Exp. at 65 Yrs	Repla. Rate*****
2002	7,160.7	16,318.6	68.4	-4.9%	19.87	1.0%
2003	6,790.9	22,069.4	92.5	-12.8%	19.89	1.4%
2004	6,496.8	35,838.5	148.4	8.3%	19.89	2.3%
2005	6,575.1	45,309.3	191.0	10.5%	20.13	2.9%
2006	6,960.5	62,194.7	251.9	18.2%	19.77	3.6%
2007	7,399.5	80,554.4	336.1	24.5%	20.57	4.5%
2008	7,450.1	96,024.8	398.6	25.0%	19.97	5.4%
2009	-	-	-	0.4%	20.07	-

Notes: * The median number of retirees' last drawn wage.
** Accumulated Account Balance = various years of median income * contribution rate * months of contribution * accumulated rate of return
*** Average Benefit = accumulated account balance / (life expectancy at 65 years old * 12)
**** Accumulated Rate of Return is computed from the accumulated gain/loss of MPF funds from the beginning of MPF system.
***** Replacement Rate = average benefit / median income

Source: The numbers are calculated from statistics provided by the Census and Statistics Department of Hong Kong (2001c; 2002d; 2003d; 2004c; 2005d; 2006e; 2007b; 2007f; 2008f) and MPFA (2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008).

It should be mentioned that, notwithstanding the fact that the information for evaluating the replacement rate of 2009 was incomplete, it was expected to be lower than the level of 2008 for the reason that the MPF fund suffered bitter losses that year. This is a widely-debated weakness of fully-funded pension plans, which in fact results in inequality of retirement payment for people who have identical work profiles but eventually receive different levels of benefit due to improper investments (particularly Orszag and Stiglitz 2001).

4.3.6 Private Insurance

Castles (1994) suggests that some countries with smaller scale social expenditures may need to take private spending on welfare (e.g. private insurance) into account. Table 4.18 demonstrates that benefits paid by private annuity insurance policies constituted 0.05% of GDP in 2008 and the level remained stable between 2001 and 2008. The total insured amount (including. annuity insurance policies and collective pension plans) made up around 30% of GDP in 2008. Moreover, the total amount of assured benefits in 2008 had increased by more than two-fifths from 2001. Accordingly, Hong Kong seems to be in the initial stage of annuity insurance because the amount of issued benefit was far less than the assured insurance benefit between 2001 and 2008.

Year	Amount of Sums Assured or Annuities per Annum (HKD millions)		Claims and Benefits Paid (HKD millions)		Total Sums of Assured Pension Benefits to GDP	Total Payment to GDP
	Individual Annuity Insurance (Class A (II))	Group Retirement Scheme Management (Class I (III))	Individual Annuity Insurance (Class A (II))	Group Retirement Scheme Management (Class I (III))		
2001	28.1	340,579.3	6.7	628.4	26.2%	0.05%
2002	26.6	352,344.3	5.4	476.7	27.6%	0.04%
2003	25.3	352,098.3	5.0	479.6	28.5%	0.04%
2004	24.9	369,730.8	6.1	566.2	28.6%	0.04%
2005	17.4	388,178.7	15.4	620.3	28.1%	0.05%
2006	30.0	372,165.3	28.1	699.0	25.2%	0.05%
2007	48.8	397,828.2	38.6	633.5	24.6%	0.04%
2008	60.0	493,219.5	70.5	693.0	29.4%	0.05%

Source: Calculated from various volumes of the quarterly report of OCI (2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008).

Table 4.19 further shows that Hong Kong's personal and collective annuity insurance market is developing. The number of insurance policyholders fluctuated between 2001 and 2008, especially in retirement schemes, while the persons awarded annuity benefits grew by more than ten times during this period. However, compared to the population aged sixty-five (45,348), the annuity insurance and private pension plans (2,939) covered around 6.5% of ageing persons. As for the average benefits of both categories, the level of individual annuity varied because it depended on the amount of money paid to purchase annuity, while the level of collective pension plans markedly increased between 2001 and 2007 and reduced sharply in 2008.

Year	Individual Annuity Insurance (Class A (II))		Group Retirement Scheme Management (Class I (III))	
	Cases Paid	Avg. Payment	Cases Paid	Avg. Payment
2001	37	180,054.1	4,041	155,516.5
2002	37	145,405.4	3,693	129,081.2
2003	20	248,350.0	2,974	161,262.3
2004	45	135,955.6	3,005	188,428.3
2005	269	57,249.1	2,503	247,832.6
2006	422	66,587.7	2,517	277,711.6
2007	440	87,727.3	2,330	271,888.4
2008	430	163,953.5	3,234	214,285.7

Source: Calculated from various volumes of the quarterly report of OCI (2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008).

Research into "Insurance Needs and Opinions on Insurance Services" in 2002 reveals similar low levels of private insurance coverage in Hong Kong to those shown in the table above (Census and Statistics Department 2002c: 63-83). It was found that, firstly, 51.8% of respondents had bought insurance policies and 37.7% held life insurance

policies. Secondly, among those who had purchased life insurance policies, 86.4% of respondents range between twenty-five and fifty-four years old. Thirdly, the study pointed out that, significantly, higher income households may have a higher tendency to buy insurance policies. Fourthly, 52.0% of life insurance policyholders took out their policy as “a protection for household income”; other reasons for purchasing were “savings (42.4%)”, “as funds in adversity” (27.0%), “retirement funds (7.5%)” and “as children’s education funds” (2.4%). In other words, less than one-fifth (19.5%)¹⁸ of the respondents were covered by life insurance policies and a mere 1.5% of all respondents were covered by annuity insurance and insurance policies intended for retirement income. Nearly half (48.2%) of respondents were not covered by any sort of private insurance policy due to either insufficient income or because they felt that they had no need for such a policy.

4.3.7 Estimating the Poverty Gap in Old Age

Because there is no official poverty line in Hong Kong, most evaluations of absolute and relative poverty are done by researchers and pressure groups. Some studies point out that the problem lies with the stigma attached to public assistance programmes (i.e. CSSA and SSA) and the inertia of benefit levels, which can hardly catch up with increases to the price index (Mok 1994 and Oxfam 1996; cited from Tang 1998: 76-7). Consequently, on the one hand, people who are reluctant of being labelled as deserving poor may refuse to claim social allowances and remain in poverty; on the other hand, because the payments cannot maintain recipients’ living standards above a certain level, they may be further trapped in poverty. Among the types of household, old age households have one of the highest probabilities of falling into destitution in Hong Kong, a fact which is closely related to the reduction of working members and the increase of ageing persons in the household (Lau 2005a: 106-8; 2005b: 4-5).

Some scholars are engaged in the examination of poverty among the ageing population in order to locate the needy, detect their demands and measure reasonable standards of living. Nelson Chow (1982; cited from La Grange and Yung Lock 2002: 238) is one of the forerunners of poverty research in Hong Kong. He argues that investigation of absolute poverty is not suitable for Hong Kong because it would not actually reflect the lifestyle and living conditions of Hong Kongers. Since then, some lines have been drawn for detecting relative poverty in Hong Kong, established and frequently applied, such as the median income of 20% of households with the lowest income (Lui and Wong, 2005; quoted from La Grange and Yung Lock 2002: 238) and 50% of median household income (HKCSS 2008; Tsoi 2002: 113-4). MacPherson in

¹⁸ The number is derived from 51.8% times 37.7%.

1994 proposed examining of minimum acceptable standards of living (MASoL) by considering people's requirements in terms of diet, clothing, social life, possessions and dignity, and a report *A Measure of Poverty* was produced using this method by MacPherson and Lo in 1997 (La Grange and Yung Lock 2002: 238). MacPherson and Lo's findings suggested that the MASoL of single elderly person in Hong Kong in 1995 was HKD 2,640 and HKD 3,918 for those who were living in public and private housing respectively, and the level of median income for all was HKD 3,279 (La Grange and Yung 2001: 263).

La Grange and Yung (2001; 2002) adopted a similar approach to MacPherson and Lo in 1997 in order to investigate the levels of poverty amongst the Hong Kong elderly but placed more emphasis on the strategies used to cope with the shortage of resources. Their research focused on the things the elderly would forego when they faced hardships and the degree of reduction. La Grange and Yung (2002) reported that ageing people who received less than HKD 7,000 per month would start applying strategies to cope with a reduction in income, instead of cutting down expenditures drastically on specific items as the income decreased. They also pointed out that expenditure on necessities which maintained a subsistence level of living, such as food, durable goods, fuel and water, was the last thing to be affected, and the critical point of income that one would begin reducing expenditure on these necessities was HKD 4,000. Wong and Lee examined poverty in Hong Kong again between 1999 and 2001, this time concentrating on the turning point at which people attempt to improve their quality of life. Wong and Lee's argument was that people would tend to reduce their relative expenditure on food and increase spending non-necessities only when a subsistence level of living was achieved. For this study the Engle curve was applied to detect the inflection point and it was found that people would spend more on non-essential items when they received more than HKD 3,750 per month, the "Basic Living Protection Line" (referred to as the "Line" hereafter) (Wong 2005: 435-7). These studies are essentially similar, La Grange and Yung proposing strategies to describe how single elders were able to improve their quality of life, and Wong and Lee using the Line to examine the level of income above which respondents were capable of pursuing quality of life.

The numbers depicted in Table 4.20 are the total average income of the elderly population after considering the average level of benefit and coverage of family financial support, CSSA, SSA and MPF. The average income level was compared with the Line proposed by Wong and Lee discussed above, and the difference between these two sets of number denotes the poverty gap. Because the income level drawn by La Grange and Yung (2001; 2002) was an approximate figure close to Wong and

Lee's findings (Wong 2005) and their ideas of estimation were similar, the simulation below solely took the Line as the poverty threshold. Besides, because MacPherson and Lo's (La Grange and Yung 2001: 263) poverty line was based on the median income level, it is not suitable for comparison with the average level of retirement income in Table 4.20, but will be applied in Table 4.21, together with 50% of the median household income level, to compare with the elderly median income level. The Line was adjusted to the Consumer Price Index (CPI) and the level ranged from HKD 3,507 to HKD 3,806 between the years 2005 and 2008. The findings illustrate that the total average income from family support, social assistance schemes and the MPF is below the threshold and 40% below the Line. In 2008, even though additional one-off payments were made to CSSA and SSA benefits, ageing people's average incomes were still 30% below the Line. Moreover, among these four sources of income, CSSA and family support provided more protection to elders while the MPF contributed the least. Although the contribution of the MPF to retirement income security may be fruitful in the future, the instability of the rate of return and lack of a minimum guarantee means the benefit level is uncertain. In addition, with regard to the low labour participation rate and the low percentage of private insurance policyholders amongst the ageing population, both methods do little to narrow the gap. Therefore, the government may need to either launch a new scheme integrating CSSA and SSA or increase the level of benefit of existing assistance programmes to bridge the gap.

Table 4.20 Estimating the Poverty Gap by Poverty Threshold and Elderly People's Average Retirement Income (2005-2008)

Year	Basic Living Protection Line*	Family**	CSSA***		SSA****		MPF*****		Total Avg. Income*****
		Avg. Benefit	Avg. Benefit	Cover. Rate	Avg. Benefit	Cover. Rate	Avg. Benefit	Cover. Rate	
2005	3,507	708	4,622	19.4%	670	55.2%	191	70.1%	2,108
2006	3,577	722	4,689	18.9%	679	54.7%	252	71.6%	2,160
2007	3,649	736	4,957	18.3%	723	54.3%	336	72.7%	2,280
2008	3,806	768	5,303	18.1%	1,100	55.2%	399	72.7%	2,625

Notes: * The poverty threshold is defined by Wong and Lee's "Basic Living Protection Line" and adjusted by CPI. The numbers are rounded up.

** The average benefit of family financial support of 2003 was derived from footnote 12 on page 22, and the numbers between 2005 and 2008 were adjusted from the number of 2003 by CPI.

*** The numbers are derived from Table 4.13.

**** The numbers are derived from Table 4.14.

***** The numbers are derived from Table 4.17.

***** Poverty Gap = (avg. benefit of family support + avg. benefit of CSSA * coverage rate + avg. benefit of SSA * coverage rate + avg. benefit of MPF * coverage rate) – poverty threshold

Source: Computed from the Census and Statistics Department, Hong Kong (2006c: Table 10.4; 2007e: Table 10.4; 2008e: Table 10.4).

Table 4.21 uses the 50% median household income level adopted by HKCSS poverty researchers and MacPherson and Lo's MASoL poverty line as the threshold for examining elderly people's median personal income between 2005 and 2008 as well

as the poverty gap. The MASoL level was adjusted by CPI and ranged between HKD 2,911 (2005) and HKD 3,159 (2008); while the figures for median personal income illustrated in Table 4.21 were from the studies of Census and Statistics Department in 2001 and 2005 and modified by CPI. The table shows that the level of median personal income in 2001 was generally around HKD 600 lower than that of 2005, which may be due to the sampling of respondents. It also shows that the level of income under the 2005 scenario was slightly lower than the 50% median household income between 2005 and 2008 but reached the MASoL level; while the 2001 scenario covered around three-fourths of the 50% median income and about 85% of the MASoL level in 2008. In other words, less than half of the ageing population were likely to be able to maintain themselves at a reasonable standard of living in retirement.

Table 4.21 Estimating the Poverty Gap by Poverty Threshold and Over-60s Median Personal Income (2005-2008)				
Year	Poverty Thresholds*		Median Personal Income	
	(1)	(2)	2001 Research**	2005 Research***
2005	2,911	3,000	2,471	3,000
2006	2,970	3,250	2,520	3,060
2007	3,029	3,350	2,571	3,121
2008	3,159	3,500	2,681	3,255

Notes: * Poverty thresholds are as follows: (1) MacPherson and Lo's (1997) research; (2) 50% of single-person household income applied by HKCSS (2008) poverty research.
** The income level in 2001 was HKD 2,600 and the number listed was adjusted by CPI.
*** The income level in 2005 was HKD 3,000 and the number listed was adjusted by CPI.
Source: Census and Statistics Department (2001b: Table 3.4i; 2005c: Table 4.13).

The numbers of the following tables are the poverty rates of Hong Kong calculated from data derived from the Hong Kong's Population Census of 2006 managed by Census and Statistics Department. The figure for household income applied was not adjusted by equivalence value. The poverty thresholds applied in these tables are the 50% of average household income and 50% of median household income widely employed by HKCSS poverty researches. The findings in Table 4.22 illustrate that the more elderly persons there are in a domestic household the more likely it is that the household will fall below the poverty threshold. The table shows that 17.2% of households without old age persons fell below 50% of median income while more than one-third of households with ageing persons were below the threshold. Besides, in the average term of poverty threshold, more than half of the households that were living with elders fell below 50% of average household income in 2006.

Number of 60+ persons	Less than 50% of average household income		Less than 50% of median household income		Total
	Number of household	%	Number of household	%	
0	495,705	33.4%	254,379	17.2%	1,482,138
1	265,064	53.9%	184,996	37.6%	492,091
2+	139,831	55.4%	100,678	39.9%	252,317
Total	900,600	40.4%	540,053	24.3%	2,226,546

Source: Census and Statistics Department.

Table 4.23 depicts Hong Kong's poverty rate by household types and shows that 95.4% of single-elder household and 55.2% of single-person household (excluding single-elder households) incomes were less than 50% of average household income in 2006. In addition, 88.1% of single-ageing-person households fell below the 50% of median household income level, while 35.2% of single-person households received less than 50% of median household income in 2006. The number of working household members may be the main reason for this. As the number of two or more person households living with old age persons illustrates, a mere 29.3% fell below 50% of median household income but around half of them received less than 50% of average household income in 2006.

Household types	Less than 50% of average household income		Less than 50% of median household income		Total
	Number of household	%	Number of household	%	
1-person domestic households aged 60+	109,891	95.4%	101,469	88.1%	115,213
1-person domestic households aged below 60	138,860	55.2%	88,453	35.2%	251,373
2 or more persons domestic households living with person(s) aged 60+	295,004	46.9%	184,205	29.3%	629,195
Others	356,845	29.0%	165,926	13.5%	1,230,765
Total	900,600	40.4%	540,053	24.3%	2,226,546

Source: Census and Statistics Department.

Table 4.24 further indicates the poverty rate of single-elder households in terms of the number of working household members. The findings show that more than nine out of ten single-elder households were in poverty either with respect to the 50% of average or median level of household income in 2006, while the poverty rate of those households was still high by both thresholds.

Number of working members	Less than 50% of average household income		Less than 50% of median household income		Total
	Number of households	%	Number of households	%	
0	101,968	96.9%	95,316	90.5%	105,266
1	7,923	79.7%	6,153	61.9%	9,947
Total	109,891	95.4%	101,469	88.1%	115,213

Source: Census and Statistics Department.

Table 4.25 describes the poverty rate of non-single-person households with elderly persons by the number of working members in households. The data reports that the poverty rate of households with two or more economically gainful persons would decrease significantly. It also illustrated that 76.7% and around one-fourth of the households that did not have a working household member, or had just one, would fall below 50% of median household income in 2006, while the numbers for 50% average level of household income were 89.3% and around half of the households.

Number of working members	Less than 50% of average household income		Less than 50% of median household income		Total
	Number of household	%	Number of household	%	
0	142,077	89.3%	122,089	76.7%	159,087
1	125,949	54.9%	57,767	25.2%	229,486
2	25,431	15.4%	4,073	2.5%	164,728
3	1,436	2.6%	241	0.4%	55,890
4+	111	0.6%	35	0.2%	20,004
Total	295,004	46.9%	184,205	29.3%	629,195

Source: Census and Statistics Department.

Like the numbers reported in this section, the information derived from the population census of 2006 portrays a similar picture to the simulations in Table 4.20 and Table 4.21. That is, both results found that the total amount of income that elderly Hong Kongers received, either in terms of average or median income level, was insufficient to maintain a reasonable level of living.

4.4. Conclusion

The development of Hong Kong's pension system illustrates that the government concentrates on its political legitimacy and business gentry's benefits. Specifically, since community leaders and local business elites were arranged some positions in the Colonial Government, business interests rather than people's welfare needs gradually became the main consideration of social policy-making. This was proved firstly by the

promotion of the social insurance system to Hong Kong in the late 1960s. It was eventually turned down by business elites and a series of social assistance programmes were the result of compromise. Secondly, it was proved by Patten's promotion of a social-insurance-based pension system in early 1990s, but ended up with the opposition of the Peking government and Hong Kong's business gentry. The centrally-managed privately-run Mandatory Provident Fund (MPF) system that was promulgated in mid-1990s denoted the businessmen's victory in the pension policy processes. Beyond that, the community support system was gradually demolished due to the influx of refugees after the Second World War. The perception of self-responsibility was therefore rooted in people's mind nevertheless the government still emphasised the social security responsibilities of household members.

There are two advantages of Hong Kong's pension system concluded here. Firstly, the universal Social Security Allowance (SSA) programme for people aged over seventy improves ageing people's income security. Secondly, the MPF is the first contributory pensions programme to be introduced for the working population and requires employers to take a part of the social security responsibility, which has never happened before.

The disadvantages of Hong Kong's pension provisions are as follows. First of all, the application-based SSA provisions may not be helpful for the elderly people who really need the payments due to the perception of stigmatisation and self-responsibility. The "bad son statement" rule applied by the Comprehensive Social Security Assistance (CSSA) programme is the proof. Secondly, regardless of the fact that the MPF scheme maximises policyholders' freedom of choice of investment portfolio, the knowledge about how to choose the package of investment becomes the problem which directly influences the investment return and the level of retirement benefit. Thirdly, the replacement rate of old-age benefit is low. Because the government focuses the social security responsibility on household members and intends to passively discourage people from applying for CSSA and SSA benefits, the payment level is inadequate to cover poverty level as illustrated in the evaluation section of this chapter. As a result, the ageing people's retirement income security is in great peril. Fourthly, the decreasing of the fertility rate and dependency ratio indicates that the family support system may not be sustainable in the future, but the government has not proposed an effective system to respond to this demographic situation. Fifthly, the low coverage of private insurance policies suggests that Hong Kongers may mainly live on other family members' incomes in retirement. This further proves that the over-emphasis on the family's social security function may endanger the society's stability once the family support system breaks down.

The findings above will be carried forward to Chapter Eight and Nine for comparing the inputs and outputs of the pension system with the other three countries.

Chapter Five Singapore

Singapore is a tiny island where around 4.7 million people live, and the population is constituted by Chinese (75%), Malays (13%), Indians (9%), Euroasian and others (3%) (Singapore Department of Statistics 2007a: 4). Singapore is on the tip of the Malay Peninsula and is the pivot of West and East especially since the Suez Canal was opened in the mid 19th Century. In terms of politics, Singapore became a British settlement in 1819 and then a British Crown Colony in 1867. It gained autonomy gradually after the Second World War, and the ruling party, the People's Action Party (PAP), was formed in 1954 and has been in power from 1959 until the present day. The first Prime Minister, Lee Kuan Yew, reigned over the city state between 1959 and 1990 and raised Singapore's economy up as one of the East Asian Tiger Economies.

The case study of Singapore's pension system aims at investigating two main questions raised by this thesis: firstly, to what extent the Singaporean government's ideology or the core values of the society affect the development of pension system in the context of political, social and economic situations at different time points? Secondly, does the pension system effectively reduce the risk of old-age poverty in Singapore? In order to respond to these two questions, the historical review of the development of social security provisions and the evaluation of current pension provisions will be applied.

This chapter starts with the historical accounts of the development of this British settlement and Crown Colony and its social security provisions since 1819 from political, economic and social perspectives. The historical review section is divided by the year 1959 into two parts – the colonial and post-colonial periods. The reasons for selecting 1959 as the decisive time point are twofold: firstly, the Central Provident Fund (CPF) scheme was introduced in mid-1950s and it denoted the initiation of Singapore's pension provisions. Secondly, the assets accumulated under the CPF system were not simply to finance participants' retirement payments but also became the most important financial resources driving economic development and a political means of solidifying the legitimacy of the People's Action Party's (PAP) during the process of the development of the nation. It should be noted that, because the development of the CPF system to some extent denotes the economic and national development of Singapore, the introduction of the current pension scheme will be integrated with the historical review.

The evaluation of Singaporeans' retirement income security comes after the historical accounts. This section begins with the review of ageing people's income components to find out the most important sources of income for Singapore's retirees, and the detailed

evaluations will be performed to look into the following components: family support system, employment income, retirement payments from the CPF scheme and private insurance benefits. The review of dependency ratio and fertility rate will come along with the discussion of family income transfer system because they are closely related to the sustainability of this informal system. A comparison of retirees' income level and the official poverty level will be made in order to examine the poverty gap of an average retiree. At last, the findings of Singapore's pension provisions will be concluded.

5.1 Development of Social Provisions in Singapore

5.1.1 Prior to the Lee Kuan Yew Era (1819-1959)

Singapore is mentioned in historical records such as Ptolemy's Golden Chersonese, from the 2nd and 3rd centuries, as a sheltered place between China and India for escaping monsoons, storing goods, and an important entrepôt for managing middlemen businesses (Hsu 1973; Wheatley 1955: 74-5). Singapore was called Tamasek in Malay, while the modern name, Singapore, originates from Singapura, which means "Lion (Singa) City (pura)" (Turnbull 1996: 2-4). The settlement of Singapore was proposed by Stamford Raffles of the British East Indian Company, a Lieutenant Governor of Bencoolen in western Sumatra. He captured this tiny island and embarked on the establishment of the Crown Colony to-be from 1819 (Song 2007: 14). Because Raffles' actions threatened the Dutch government's income from this area, negotiations between Britain and the Netherlands began, culminating in the Anglo-Dutch Treaty in 1824, which stated that Britain would exchange Java and Sumatra for Singapore, Penang, Malacca and the whole of Malaya, as well as the islands around Singapore within ten miles of the Straits Settlements (Turnbull 1996: 28). The exchange of territories not only strengthened Britain's trade links with China, but also left her with a strategic site that was later used to support the Crown Colony of Hong Kong in the following decades (Turnbull 1996: 73; Wong 1991: 30-1).

As Turnbull (1996: 6) states, Raffles' "personal ambitions and concern to boost British trade were backed by a sense of messianic mission". Hence, aside from expanding British influence in Southeast Asia, he also attempted to build a settlement that would free the Asian people from battles, slavery, piracy, and suppression. Even though the island was dominated by mercantilism and a *laissez-faire* approach to social policy, Raffles insisted on reducing the use of forced labour (Webster 1998: 54). He tried to preserve the culture, society, politics and power structure of each community by arranging each ethnic group in its own section of the island along the Singapore River

(Turnbull 1996: 12). Opium, coolies, prostitution and gambling were not allowed in the port city (Dobbs 2003; Warren 1986; Warren 2003). However, Raffle's aims were forestalled because no financial support was provided by the British East Indian Company and no taxation was imposed on businessmen in Singapore, meaning the administrative system was impossible to maintain. It was also difficult to uproot "traditional" industries such as prostitution given the imbalance between the genders.

Among all the ethnic groups in Singapore, it was the Chinese population that grew the most after 1819. Although these successful Chinese businessmen had been working as middlemen for many years, the long distance between Southern China and Singapore as well as the unrests in China eventually forced them to settle in Singapore rather than travelling to and forth (Song 1923: 31-41). Hence, the Chinese community gradually settled and some kinship- or clanship-based mutual help organisations were founded. The patron-client reciprocal ties between employers and workers were characterised by paternalism in that employers paid meagre wages for the hard work of their employees but promised labourers that they would send remittance back home to China and meet their needs in times of hardship (Dobbs 2003: 64 & 70-3). The clanship ideology helped develop three types of Chinese mutual help associations: the dialect association; clan association; and secret society. The dialect and clan groups were for those who spoke the same dialect or who belonged to the same clan or kinship, and the secret societies were for those who had the same political tendencies. Most of the dialect and clan organisations acted as trade or guild associations, providing funeral support to members and their families (Lin 1999: 98). The secret societies were involved in terrorist movements from 1854 and became more extreme and intensive in 1920s especially during the civil war between the Kuomintang and Communist Party. Nevertheless, their most important role was helping "needy members in the event of sickness, unemployment, or death, and conducting ancestor-worship and other important festivals (Lee 1991: 247-8)". Therefore, before colonisation, welfare demands were met by clanship, kinship, dialect and secret associations as well as donations from the gentry.

The first public-funded social provision, the Silver Jubilee Fund, was established in 1935 in order to celebrate the Silver Jubilee of the sovereign King George V. The Ordinance of the Silver Jubilee Fund was promulgated in 1936 and repealed in March 2001 (Woon 2001: 244). Two million Straits Dollars was paid from the Government's budget on General Administration into the Silver Jubilee Fund to relieve poverty and render old age allowances, funeral grants, educational grants, meal subsidies, and special allowances to people who were in need (Mills 1942: 89-90; The Straits Times 2007). The money was later also used to help establish the Social Welfare Department

in Singapore in 1946 (Tan 1991: 352). The Fund was supported by public contributions (e.g. from non-governmental organisations and private donations) and grants from the Colonial Government and Municipal Commissioners of Singapore.

Japan occupied Singapore between 1942 and 1945. During these three and half years, as Harper (1999: 35) states, “Japanese rule...accelerated the communalization of politics and precipitated a massive social crisis: whole communities were uprooted; disease preyed upon the people; and the agrarian economy was in shambles.” With regard to Singapore’s strategic and economic importance, Japan “attempted to fashion a more direct relationship between the people and the state, and to cement it by creating a new role for political ideology.” Colonialism was to be eradicated and replaced with an “oriental racial consciousness” and the “great spirit of cosmocracy” (Harper 1999: 36). The result was that de-colonialism and nationalist ideologies took root and conflict between Singaporeans and the British elites escalated when Singapore was retaken after the War (Harper 1999: 223). The most important philanthropic association during Japanese occupation was the Blue Cross Charitable Institution, which was established in 1943 and supported by the Chinese community. It provided coffins to the poor for holding funeral ceremonies and distributed food and clothing.

Shortly before the end of the War, in April 1945, the British Colonial Office released a memorandum, *Social Welfare in Colonies*, which was influenced by the Beveridge report of 1942. The memorandum suggested introducing social security programmes to the Crown Colonies and contributed to the establishment of the Social Welfare Department in 1946 and Central Provident Fund scheme in 1953 (Lewis 2001; Wee 2002; cited in Mehta and Briscoe 2004: 93). The emergence of socialist organisations after the War was another factor prompting the colonial government to develop welfare provisions and set up the Social Welfare Department (Christie 2001). Therefore, strictly speaking, the colonial government’s concentration on social provisions was more to do with political issues than the proposals of the British Colonial Office. The Social Welfare Council, another important apparatus for organising and distributing resources, was created in 1947 by integrating governmental and municipal departments, religious bodies, and voluntary organisations. Together, the Department and Council were given the task of delivering resources during the post War years. Meanwhile, NGOs and charities continued to flourish. In 1958 the Singapore Council of Social Service was formed and took over the works of the Singapore Welfare Council (Tan 1991: 353-4); the Department of Social Welfare was upgraded to Ministry of Social Affairs in the same year (Quah`, 1984: 289`; cited from Aspalter 2001: 55). It is called the Ministry of Community

Development, Youth and Sports (MCYS) nowadays.

The Colonial Government's position on social welfare was made clear at the Social Welfare Conference held in August 1947. Here it was asserted that the delivery of welfare provisions "might undermine the foundations of society by destroying people's sense of personal responsibility." Government welfare provisions should therefore be strictly limited and focus solely on the distribution of resources raised from the public rather than introducing a statutory cash-benefit scheme. This tendency to rely on donations raised from the public and movements organised by charitable bodies is also found in Hong Kong. Accordingly, Low and Aw (1997: 6-8) argue that Singapore and Hong Kong welfare provision has traditionally been based on informal, rather than institutional, welfare arrangements.

The Conference also concluded that government may need to minimise its role in welfare provisions. The Malayan Union further stressed that "the orthodoxy of social welfare was to help local populations to help themselves" instead of allowing them to rely on financial assistance. For both economic and political reasons, the aim of welfare provisions was to "divert energies into socially desirable channels" then to "create a vehicle for legitimate national and social aspirations", thus Harper (1999: 61) concludes that "healthy political democracy was a corollary of welfare". Smyth (1985) further points out that, in terms of the welfare development of commonwealth states at the time, this "new welfare-state imperialism" rendered welfare provisions by restoring the role of local communities and with respect to the physical or ideological conditions in each state. In Singapore, as in other British colonies, colonial government focused on self-reliance and self-responsibility, therefore the provident fund system was a way to maintain economic control as well as avoid social responsibility. Nevertheless, the Conference also agreed to launch a five-year social welfare plan providing cash-benefits for the elderly, unfit, blind and crippled from 1949. In 1951 the Public Assistance Board was established for managing social benefits, the Department of Social Welfare stating that the goal of the Board would possibly be to transform the social assistance scheme into a social insurance system in the long-run, and that a "new Department will arise to replace the [Public Assistance] Section" (Chow 1981: 357-8).

In 1951 the McFadzean Commission was assigned to devise a retirement payment system. One of the Commission's members, Mr. H. K. Rogers, was strongly opposed to a social insurance scheme because there was no research to indicate people's preferences for pension provisions. Furthermore, he noted that resources would be unequally distributed because social insurance schemes allocate more money to the ageing population whilst leaving other problems unresolved (Singapore Retirement

Benefits Commission 1952: 16). Nonetheless, the Commission ultimately recommended a social insurance system, although Mr. Rogers's statement of opposition was included in its report. However, the McFadzean report was rejected, firstly, because social insurance could not be fully-funded by contributions alone. There was concern that the Colonial Government and the autonomous government taking over from it would need to cover the deficits of any social insurance scheme if benefits increased faster than expected and/or the system was short of contributions due to changes in the demographic structure. Secondly, the provident fund system established in Malaysia in 1951 inspired Singapore to adopt a similar strategy (Low and Aw 1997: 15). Thirdly, Regnier (1991; cited in Tang 2000: 86) reports that communist movements also urged the creation of the Singaporean provident fund system in order to ease unrest after the War. The end result was that the Central Provident Fund (CPF), a fully-funded centrally-managed scheme, was proposed by the Colonial Government in 1953. ILO (International Labour Organisation) consultants conditionally agreed with this proposal as the system would be transformed into a social insurance scheme when there was enough knowledge of actuary and public finance. The CPF was implemented in 1955 and the contribution rate was set at 10%, employers and employees paying equal amounts.

Around this time commissions were also assigned to investigate social security provisions in Singapore. After about two years of investigation, in 1957, the Caine Report suggested a social insurance system be introduced to pool risks instead of a minimum. It was pointed out that although the benefits might not cover all risks, they would cover more labourers and render a certain level of protection to the ageing population, widowers, and sick (Singapore 1957a). Another report was prepared by G. J. Brocklehurst, an ILO expert on social security, who concluded that a social insurance system would be more likely to reduce the rocketing expenditures on welfare services and social provisions. Now that the CPF had been put into practice, he proposed a gradual switch from the CPF to an insurance-based scheme because a social insurance system would provide more stable and secure support for retirees, the unemployed, disabled and survivors (ILO 1997: 93-101; Singapore 1957b). A report produced in 1959 by the Committee of Officials confirmed the government's obligation to implement a social insurance system and unemployment insurance and also drafted an insurance-based scheme before the British Colonial Government handed over power to the People's Action Party (PAP) (Singapore 1959). The PAP government decided that economic development was the priority at that time and thus declined the proposal (Aspalter 2002: 178). Under pressure from the ILO, International Social Security Association (ISSA) and Organisation for Economic Cooperation and Development (OECD) the PAP agreed to keep the CPF structure in

place for a later transfer (Sherraden 1997: 43). In the end though, there was no transfer because, as Parrott (1968: 544-8) and Ramesh (2000: 249) observe, the CPF scheme was too successful (in political and economic terms): self-reliance and family support ideology, as well as the drawbacks of social insurance schemes, were firmly rooted in the public consciousness by the time, therefore a transfer was not possible. Hence, the triumph of CPF scheme enhanced the state's reliance on it and encouraged family support systems, charities, communal associations and private insurance policies to cover the shortfall.

5. 1.2 The Lee Kuan Yew Era and Beyond (1959-present)

Some of the founders of the socialist People's Action Party (PAP) formed in 1954 such as Lee Kuan Yew and Dr. Goh Keng Swee (Lee's economic policy advisor) were educated in Britain and influenced by Fabian socialism during their stay. Lee was elected as a member of the Legislative Council in 1955, and then became the Prime Minister when the PAP took most of the seats in Legislative Council in 1959 and assigned Goh as the Minister of Finance. Between 1959 and 1963, Lee strived for the participation in the Federation of Malaya because at that time he believed Singapore could not be prosperous without a hinterland. Although Singapore eventually became a member of the Federation in 1963, the communist movements in Singapore greatly disturbed Malaysia. As a result, Tunku Abdul Rahman, the Prime Minister of Malaysia, decided to expel Singapore from the Federation on August 9, 1965 and this was also the day Lee announced the independence of Singapore (Lee 1998; LePoer 1989).

As stated above, the PAP government rejected the British Colonial Government's social insurance proposal of 1959 because the scheme's aims conflicted with PAP goals on economic development, voluntarism of social provisions and the ideology of family support. Lee (2000: 95) tried his best to build up "a fair, not welfare, society" and elaborates this idea as follows:

"We believed in socialism, in fair shares for all. Later we learned that personal motivation and personal rewards were essential for a productive economy...A competitive, winner-takes-all society, like colonial Hong Kong in the 1960s, would not be acceptable in Singapore...To even out the extreme results of free-market competition, we had to redistribute the national income through subsidies on things that improved earning power of citizens, such as education. Housing and public health were also obviously desirable...We decide each matter in a pragmatic way, always mindful of possible abuse and waste. If we over-re-distributed by higher taxation, the high performers would

cease to strive. Our difficulty was to strike the right balance¹.”

Social provisions that the government believed would improve prosperity and increase opportunity such as education, housing and medical services were subsidised by the government. To this end, from the early 1960s Lee introduced programmes to subsidise private expenditure on education, housing and medical services as well as charitable associations, in order to enhance the integration of different racial groups in Singapore and promote the ideologies of self-reliance and voluntarism (Castells, et al. 1990: 212).

Aspalter (2001: 59-60) and Gough (2004: 187-8) comment that the development of the CPF was important to the nation building of Singapore because the expansion of welfare provisions through the scheme was a means to settle this highly heterogeneous society. The development of the CPF can be divided into four stages, the first steps being taken between 1955 and 1964. The CPF was launched in 1955 to encourage workers to save for retirement and provide disability benefits. In 1964, public flats constructed by the Housing Development Board (HDB) were made available and CPF participants were allowed to purchase these flats with CPF deposits from 1968. In order to target part of contributions on retirement, in the second stage, Ordinary (for buying flats, purchasing medical and educational services and investment) and Special Accounts (for retirement payments) were introduced in 1977 to distinguish the purposes. The introduction of the Medisave Account (1984) commenced the third phase of the CPF and allowed participants to repay medical expenses and medical insurance premiums with her/his deposits, demonstrating the government’s concern about the ageing population and the demands made on medical services. The introduction of the Retirement Account and Minimum Sum Scheme in 1987 represented the last stage of the CPF’s evolution. Because premature withdrawals for purchasing flats or covering medical costs and tuition fees were depleting participants’ accounts, the Minimum Sum Scheme was introduced and it was made compulsorily to keep a certain amount deposited in the Retirement Account, the rest of the balance being allocated for investment or other usages (Aspalter 2001: 50-2). Although the Minimum Sum Scheme provides periodical payments according to the participant’s account balance and life expectancy on reaching retirement age, it lasts up to twenty years on average (CPF Board 2009a: 3). Therefore, the CPF has diverged from the main theme, retirement payment, when it was established. The state requires employees to save a specific proportion of earnings to pay for the social provisions they need. Throughout these four stages of development, each participant of the CPF has three basic accounts. Firstly, the Ordinary Account is used for retirements, tuition fees,

¹ Author’s bold italics.

mortgages for public flats, insurance premiums and investments; and secondly, the Medisave Account is for covering medical expenses. Thirdly, the Special Account is introduced for meeting old-age contingencies. Plus, the Retirement Account is for the Minimum Sum Scheme that is established when one reaches the age of fifty-five.

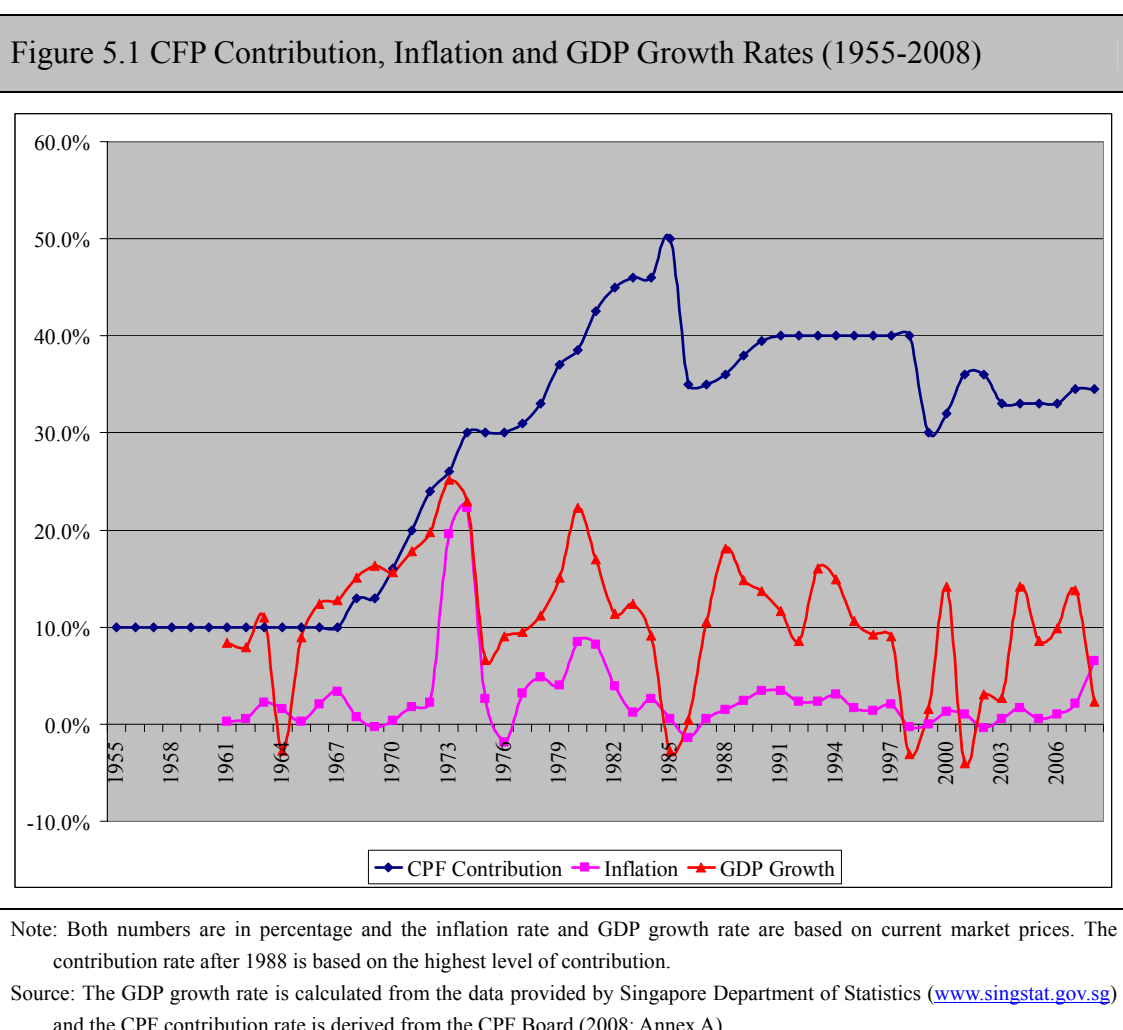
Public housing policy, executed by the HDB since 1960s, was the most important programme at the time. On the one hand, it actualised Lee's idea of providing ordinary people with their own flats and continued the family support system (Mehta and Briscoe 2004: 109). On the other, with the financial assistance of CPF and relevant regulations that empowered HDB to collect lands from the public and control property prices, housing policy helped boost prosperity in the fledgling state and stabilise price and inflation from 1964 (Aspalter 2002: 179-80; Trocki 2006: 174). In order to promote private homeownership, in May 1968 the government allowed and encouraged people to pay the mortgage of public housing by CPF deposits, which was the only way to make early withdrawals at that time. Lee and Vasoo (2008: 278-9) observe that the CPF financed HDB by repaying the loans made for constructing public flats on behalf of the CPF participants who joined the homeowner scheme. In this way, the PAP government successfully integrated the individual savings scheme with collective housing programmes and tackled the market's inability to provide low-income housing, a phenomenon encountered in many countries. However, this policy was the reason why government debt continued to grow even during a time of high economic growth (Asher and Newman 2001: 160)². Nevertheless, with this programme the rate of homeownership rocketed from 9% in 1960 to a peak of 87% in 1990 dropping slightly to 82% in 2007 (Housing and Development Board 2008: 78).

In order to develop the homeowner programme further, as well as add new elements to the CPF system and control prices and inflation, Lee decided to boost the contribution rate in 1968. To do this, he urged the public to understand that it was only by transforming the confrontation between employers and employees into cooperation that a productive economy and peaceful society could be achieved. From the state's viewpoint, the increase in contribution would not only enhance the government's ability to control collective consumption, but also reduce people's take-home pay. Therefore, the state could maximise the benefit to the society as a whole and, at the same time, minimise private consumption that may in turn cause inflation. From then on, as shown in Figure 5.1, the CPF contribution rate rose from 10% in 1955 to 50% in 1984 but reduced to 34.5% in 2007. According to the current Prime Minister Lee Hsien Loong, it was adjusted in accordance with economics in order to share the prosperity of

² According to Lee and Vasoo's computations, government debts grew from SG\$ 51.4 billion to SG\$ 200.0 billion between 1990 and 2005.

the society (CPF Board 2007b).

However, in actual fact, the adjustment of the CPF contribution rate was more like a government stabiliser of inflation rate manipulating disposable income to influence people's propensity to consume (Abeysinghe and Choy 2004: 576-7; Lam 2000: 404 & 418-9; Tu 1999: 104). As Figure 5.1 illustrates, although the contribution rate went up with the growth rate between 1965 and 1972, it did not decline when the economy went into recession after the 1973 oil crisis. At that time, the contribution rate remained at 30% even when the inflation dropped below zero in 1976. When the inflation rate went up in 1977, the contribution rate rose to a peak of 50% in 1985. More interestingly, the period between 1977 and 1984 was not only when the contribution rate was raised but also the years when the Special Account and Medisave Account were introduced. Figure 5.1 depicts how the government decreased the contribution rate to stimulate the economy at times when the inflation rate was about zero or negative. For instance, the government adjusted the contribution from 50% to 35% in 1986 and from 40% to 30% in 1999 to pull the economy from nadirs caused by the 1979 energy crisis and the Asian financial crisis (1997-1999).



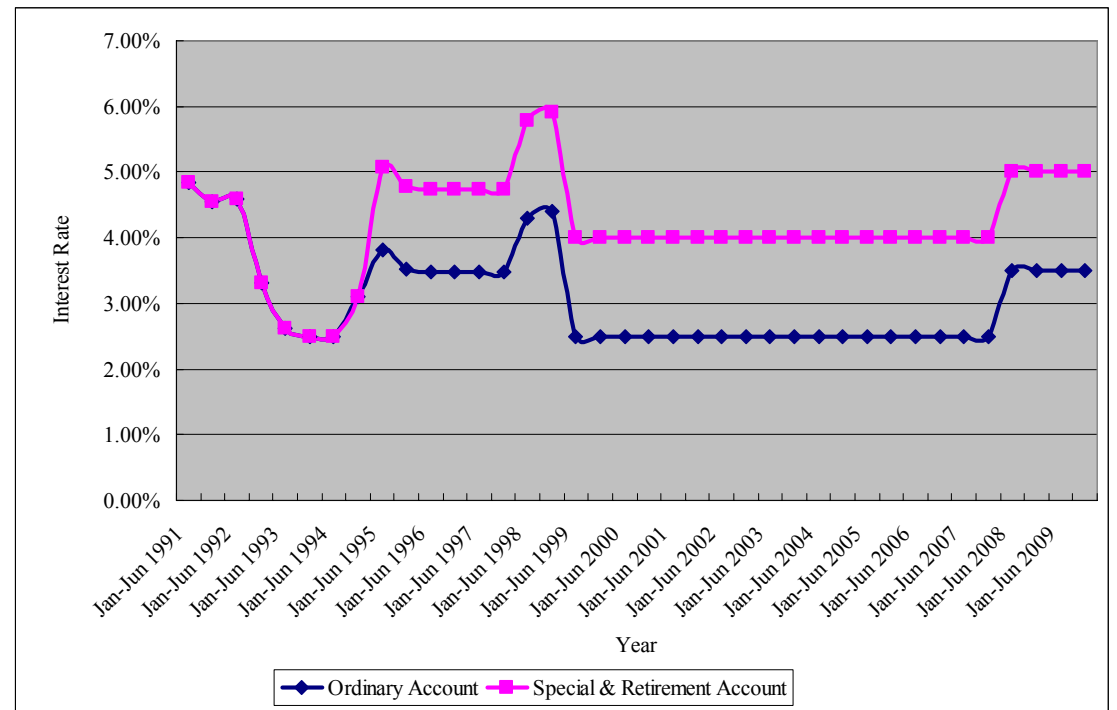
From 1972 the contribution rate was no longer split equally between employers and employees, the larger share being paid by employees to increase business competitiveness and individual responsibility. In addition, the level of contribution was specified by age groups from 1988 on the grounds that ageing workers may need more disposable income for household expenditures hence the contribution rate reduces as one grows older. Table 5.1 describes the contribution rate since July 2007: the rate decreases from 34.5% to 28.5% when participants attend the age of fifty then reduces to 10% for employees aged sixty-five and over. Moreover, the allocation of contributions shows how the emphasis on Medisave increases with age and stops distributing to the Special Account because of the establishment of the Retirement Account after the age of fifty-five. It is not compulsory for the self-employed population to contribute to the Ordinary Account, but contribution to the Medisave Account is mandatory. The contribution rate to the Medisave Account is 6% at present.

Age	Contribution Rate (%)			Credit Into (% of Contribution)		
	Employer	Employee	Total	Ordinary Account	Special Account	Medisave Account
<35	14.5	20	34.5	66.67	14.49	18.84
35-45	14.5	20	34.5	60.88	17.39	21.73
45-50	14.5	20	34.5	55.09	20.28	24.63
50-55	10.5	18	28.5	45.62	24.56	29.82
55-60	7.5	12.5	20	57.5	0	42.5
60-65	5	7.5	12.5	28	0	72
>65	5	5	10	10	0	90

Note: The contribution rate is for those who earn between SG\$ 1,500 and SG\$ 4,500 since July 2007.
Source: CPF Board (2008: Annex A).

Because the CPF is centrally managed by the CPF Board, a governmental department, and most of the savings are allocated to purchase governmental bonds, the return rate of account deposits depends on the average interest rate of four major local banks. The deposits in these accounts earned the same level of interest rate until the middle of 1995 when the Medisave, Special and Retirement Accounts began to earn a higher level of interest rate than the Ordinary Account. The CPF guaranteed a minimum annual return rate at 2.5% for the Ordinary Account and the level of additional interest rate earned by Medisave, Special and Retirement Accounts was revised from 1.25% in 1995 to 1.5% in 2001. Figure 5.2 showed that the return rate for the Ordinary Account remained at 2.5% between 1999 and 2007 and the Medisave, Special and Retirement Accounts earned a 4% interest rate. From 2008 on, all the accounts earned an additional 1% interest thus the return rate was at 3.5% (for Ordinary Accounts) and 5% (for Medisave, Special and Retirement Accounts).

Figure 5.2 Interest Rates for CPF Accounts (1991-2009)



Sources: CPF Board (2001; 2006).

Because the rate of return as well as the average account balance was low due to the multi-functions of the CPF, the government introduced some investment plans intended not only to strengthen the finances of some government-led companies (GLCs) but also to boost both the aggregate rate of return and account balance. The first and most famous case was Singapore Bus Services (SBS) in 1978. Because the government wanted to merge some private bus service companies, CPF participants, following the homeownership programme in 1968, were allowed to purchase stocks up to SG\$ 5,000 of CPF deposits. Lee believed that this would enable the state to “redistribute part of the surpluses the government had accumulated over the years of our steady growth (Lee 2000: 103).” Due to the success of the SBS programme, the Approved Investment Scheme (AIS) was introduced in May 1986. According to the rules, people could allocate up to 20% of CPF deposits to the stock market, and the rate was raised to 40% in November 1986. Low and Aw (1997: 72) report that the average withdrawal per person for this programme amounted to SG\$13,288 in 1986 rising to SG\$24,799 in 1992. The AIS was amended in 1992 and separated into the Basic Investment Scheme (BIS) and Enhanced Investment Scheme (EIS) to specify the types of securities allowed to be invested. Moreover, in order to further augment CPF joiners’ average account balance and encourage investments in GLC stocks, the government introduced a series of the Share-Ownership Top-Up Schemes (SOTUS) in 1993, 1995 and 1996 granting

qualified individual CPF participants³ with SG\$ 200, SG\$ 300 and SG\$300 in CPF deposits respectively (Tan 2001: 206). The AIS was replaced by the CPF Investment Scheme (CPFIS) in 1997 which allowed CPF participants to allocate up to 80% of their savings, including the parts that had been withdrawn for housing, education and other investment programmes or the amount after putting the Minimum Sum aside to invest in approved portfolios (Aspalter 2002: 176). In addition to the government’s top-up schemes, the government applied the Topping-up of Minimum Sum Scheme in 1987. For this, Lee claimed that old-age parents’ CPF accounts were their “nest-egg of last resort” and urged adult children to add funds to older family members’ Retirement Accounts (Turnbull 1996: 322).

Despite the state’s efforts to boost the average level of account balance by extending investment programmes, introducing a series of top-up schemes and calling on the family support system, as Asher and Newman (2001: 157) note, the average balance set aside for retirement was a mere SG\$ 31,000 in 2000. Because of this, the government steadily boosted the level of Minimum Sum from SG\$ 30,000 in 1995 to SG\$ 80,000 in 2003 and scheduled to raise the level between 2008 and 2013 from SG\$ 100,000 to SG\$ 120,000 (Table 5.2). Besides, in order to offset the influence of inflation, the amount of the Minimum Sum will be adjusted according to the level of inflation.

Table 5.2 Adjustments to the Minimum Sum Scheme		
Fifty-fifth Birthday On or after:	CPF Minimum Sum*	Minimum Sum** (adjusted for inflation)
1 Jul 2008	100,000	106,000
1 Jul 2009	104,000	117,000
1 Jul 2010	108,000	-
1 Jul 2011	112,000	-
1 Jul 2012	116,000	-
1 Jul 2013	120,000	-
Note: * All the numbers are in SG\$. The amount of Minimum Sum is based on the price index in 2003.		
** The amounts for 2010 and thereafter will be released then.		
Source: CPF Board (http://mycpf.cpf.gov.sg).		

Some rules were applied in order to ensure that the CPF retirement scheme is financially sustainable. Firstly, in 2007, the state declared the amount of Minimum Sum to allocate to the Retirement Account according to rules which will be entirely phased in by 2013. According to the rules, participants who have an account balance of less than SG\$ 5,000 do not have to set aside the Minimum Sum, while those who deposit between SG\$ 5,000 and SG\$ 12,500 can withdraw up to SG\$ 5,000 when attending the

³ According to the rules, CPF participants who deposited over SG\$ 500, SG\$ 750 and SG\$ 500 in their accounts during the specified period of time in 1993, 1995 and 1996 were qualified to receive the grant.

age of fifty-five and allocate the rest to the Retirement Account. Those who have saved between SG\$ 12,500 and SG\$ 195,000 can withdraw up to 40% of their savings in the Ordinary and Special Accounts and put the rest in the Retirement Account; while those who deposit more than SG\$ 195,000 can withdraw all the money after distributing the prescribed Minimum Sum (in Table 5.2). The amount of the Minimum Sum, after being allocated, can be used to invest in small businesses and/or to invest in capital, financial and stock markets, and/or to purchase life insurance policies (Aspalter 2002: 184). The part of Minimum Sum left with the CPF Board will earn 4% interest.

Secondly, along with the new rules of the Minimum Sum Scheme mentioned above, regulations specifying the proportion that participants can withdraw from their Ordinary and Special Accounts after reaching the age of fifty-five were introduced. The regulations state that people aged fifty-five in 2008 can withdraw up to 50% of the total amount of savings in the Ordinary and Special Accounts before depositing the Minimum Sum in the Retirement Account. The percentage is reduced by 10% every year until 2013. That is, participants who reach the age of fifty-five after 2013 should follow the first rule.

Thirdly, the government intends to increase the age that payouts from the Minimum Sum scheme are received from sixty-three to sixty-five years old, as shown in Table 5.3. From 2008, people who are aged less than fifty-three can only access the savings in the Retirement Account after attending the age of sixty-five, and the Draw-Down Age is to be raised to sixty-seven if the threat of longevity risks remains (The Straits Times 2007). The CPF Board believes that in this way the payouts from a Retirement Account could last until the participant is eighty-nine years old, however, some argue that the payment in fact lasts a mere ten to eleven years according to the size of the deposit and the level of benefit (The Void Deck 2007).

Table 5.3 The Minimum Sum Scheme Draw-Down Age	
One's age as at 31 Dec 2007	Applicable draw-down age
56 to 57	63
54 to 55	64
53 and below	65
Source: CPF Board (http://mycpf.cpf.gov.sg).	

Because the Minimum Sum Scheme was unable to solve the longevity problem as expected, in 2007, Prime Minister Lee Hsien Loong declared the CPF Lifelong Income Scheme for the Elderly (CPF LIFE), which will provide monthly payment during retirement (CPF Board 2009a: 3). CPF participants aged between fifty-five and eighty can opt to join CPF LIFE but the decision is irreversible. Those who have SG\$ 40,000 in the Retirement Account at the age of fifty-five will be automatically included in the

CPF LIFE scheme; while the inclusion is voluntary for those who deposit less than SG\$ 40,000 in the Retirement Account. The payouts of the CPF LIFE programme begin at the Draw-Down Age (Table 5.3) and the level of benefit depends on the balance in the Retirement Account and the retirement plan one chooses. Four retirement plans have been introduced since the onset of the CPF LIFE, each one of them with a different combination of payments (Table 5.4).

Table 5.4 CPF LIFE Plans		
CPF LIFE plans	Monthly Payout	Bequest*
LIFE Basic Plan	Low	High
LIFE Balanced Plan	Medium	Medium
LIFE Plus Plan	High	Low
LIFE Income Plan	Highest	No bequest
Note: * Bequest equal to survivor's benefit. Source: CPF Board (http://mycpf.cpf.gov.sg/CPF/my-cpf/reach-55/SubPage.htm).		

Basically, the payment of each plan is divided into the parts paid from participant's Retirement Account balance and annuity scheme. As shown in Table 5.5, for instance, the LIFE Plus and LIFE Income plans allocate less to bequest payments therefore participants can receive the highest level of annuity payments straight away (Table 5.6); while the LIFE Basic and LIFE Balanced plans focus more on the first stage of payment disbursed from the Retirement Account that starts from Draw-Down Age to ninety and eighty respectively, then continued by the annuity benefit scheme. Nevertheless, the CPF Board will smooth over the gap in the payments from these two sources.

Table 5.5 The Arrangement of CPF LIFE Plans				
The payouts of LIFE Plan start from	LIFE Basic	LIFE Balanced	LIFE Plus	LIFE Income
Retirement Account	From Draw-Down Age to 1 month before 90	From Draw-Down Age to 1 month before 80	Not applicable	Not applicable
Annuity	From 90 to the end	From 80 to the end	From Draw-Down Age	From Draw-Down Age
Source: CPF Board (2009b: 4).				

Table 5.6 demonstrates the estimated payment level of different LIFE plans according to the amount of savings. The level of payment depends not only on the amount of deposits paid into the CPF LIFE plans, but also the participant's gender, age upon joining the programme and the plan chosen. In addition, the benefit level will be adjusted to the CPF interest rate and mortality rate annually. The adjustments are usually small therefore, as the CPF Board states, the level of payment is stable (CPF Board 2009a: 11).

Table 5.6 Monthly Payment of CPF LIFE Plans

Account Balance	LIFE Basic	LIFE Balanced	LIFE Plus	LIFE Income
SG\$ 20,000	172-188	183-200	193-211	206-224
SG\$ 40,000	339-371	362-396	382-419	408-444
SG\$ 100,000	742-821	796-880	845-934	906-995

Note: All the numbers are in SG\$. The payment range is based on the CPF interest rate between 3.75% and 4.25% and does not represent the ceiling and floor of benefit levels.

Source: CPF Board (2009a: 6) and CPF Board (<http://mycpf.cpf.gov.sg/CPF/my-cpf/reach-55/SubPage.htm>).

Besides the CPF scheme, the Public Assistance (PA) scheme is the only government source that supports older persons living in single-person households and who have no family support or live with other family members but whose monthly household income is less than SG\$ 1,000. Since the PA scheme was introduced in 1946, it has been funded partly by the general public and partly by charitable associations and the government. Nowadays, this programme is organised by the Ministry of Community Development, Youth and Sports (MCYS) and administered by five Community Development Councils (CDCs). Government awards SG\$ 1 per person of Annual Resident Grant to each CDC and also encourages CDCs to seek public donations to CDC funds. Government gives an additional SG\$ 3 of Matching Grant for every dollar of donation and adds SG\$ 4 for every dollar of long-term donation. Josey (1979: 118; cited in Aspalter 2002: 186) points out that around 22,000 of the destitute population were entitled to PA benefit in 1966, but the recipients fell to about 7,300 around the end of 1970s as the total population of Singapore grew from 440,000 to 2.2 million during this period. According to MCYS statistics, the number of PA beneficiaries decreased slightly from 2,772 to 2,714 persons between 2005 and 2008 (Singapore Department of Statistics 2009) or less than 1% of the people aged above sixty-five in 2008.⁴ The level of benefit for a single-elderly household nowadays is SG\$ 330 per month, which is known as the minimum household expenditure (MHE) level and is also deemed as Singapore's poverty threshold (Ramesh 1992: 1097). It is worth noting that the benefit level of the CPF LIFE plans at SG\$ 40,000 of deposits range between SG\$ 339 and SG\$ 444, which is about the MHE level (Table 5.6).

The family support system is thought to be the main source rather than the CPF and PA. Because industrialisation accelerated the transformation of household type from stem family to core family and forced people to rely on salaries, the high level of CPF contributions further reduced the money that people took home. However, this progress

⁴ The number is computed from PA beneficiaries (2,714 persons) divided by the population aged above sixty-five (315,800) and is equal to 0.9%.

has in turn undermined the tradition of filial piety since 1970s (Benjamin 1976: 124). This was the reason why Lee Kuan Yew requested the public add funds to their parents' CPF accounts and topped up the accounts to reward those who saved more.

In order to enhance the ideologies of self-reliance and the family support system, in 1984, the Ministry of Health published a report about the ageing population and advocated promulgating the law on parents' maintenance. The report stated that the youth at the time had become more materialistic, self-oriented and individualistic and that it may be necessary to pass a law to grant older parents the right to accuse the children who abandon them (Ministry of Health 1984: paragraph 6.4). Another committee was assigned to investigate this issue in 1989 and rejected the proposal because, for one thing, there were few cases of abandoned ageing parents in Singapore and, for another, judgments about family support issues were not easy to make. The conclusion of the report further asserted that the tradition of filial piety was deep rooted, therefore the judicial system should not intrude on family disputes (Chan 2004: 550-1). Nevertheless, Professor Walter Woon proposed the Maintenance of Parents Act in 1993 because the government's welfare and retirement provisions were unable to secure retirees' income on the one hand, and there would inevitably be some financially able children that refused to support aged parents on the other. Woon further pointed out that the aim of this Act was not out to reject filial piety but to remind people about it and that legislation might also help sustain the CPF and Public Assistance schemes as the ageing population grew.⁵ The Maintenance of Parents Act (167B) was promulgated on 2nd November 1995 and emphasised the reciprocity of rendering supports to each other instead of the relation between applicants and respondents. That is, children and/or relatives are not obligated to maintain their retired parents and/or elder relatives if it is proved that the parents and/or older relatives did not fulfil their responsibility to raise them. However, Kline (1992: 198), Wise (2002: 590-1) and the BBC⁶ comment that Singapore is going against the global mainstream, which has been to gradually limit or remove filial responsibility laws since 1960s. After the Act was introduced in 1999, 328 out of 424 applicants won the mediations (Singapore Parliament Debates, 1999: 22; cited in Fu 2003: 231). The number remained then at around 300 but went up slightly to 347 in 2006. With regard to the low caseloads since the onset of the law, Chan (2004: 578) argues that people tend to conform to the moral obligation of supporting aged parents and relatives instead of taking legal measures.

⁵ Please refer to Sunday Times, 4 April 1999 (<http://www.singapore-window.org/sw99/90404st.htm>) and Leong Ching's "Filial Piety: The Forgotten Value?" on New Paper, 20 October 2007 (<http://newpaper.asia1.com.sg/printfriendly/0,4139,145333,00.html>) [accessed: 17.01.2009].

⁶ Please refer to http://news.bbc.co.uk/1/hi/programmes/crossing_continents/136691.stm [accessed: 17.01.2009].

As discussed above, Lee Kuan Yew's era started from the political chaos and the withdrawal of the Colonial Government at the end of 1950s. The establishment of the CPF scheme, the trickle-down economics and paternalistic ideologies complemented each other and swiftly extended this simple retirement payment programme into an omnibus system (Rodan 2004: 480-1; Standing 2002: 117; Trocki 2006: 174-5). In this way, the CPF helped accomplish prosperity from the late 1960s and therefore the government obtained the legitimacy to further enlarge the system on the grounds of the self-reliance ideology. Although the state found that the early withdrawal of CPF deposits was endangering people's retirement incomes, they simply called for a renaissance of the family support system and an emphasis on voluntarism in charitable activities, rather than enacting social provisions to fill the gap or extending the eligibility of the Public Assistance scheme. Hence, the self-reliance ideology is still the main theme in Singapore, but it has gradually come to refer to both family and the individual with the growth of the aged population since the 1980s (Mehta and Briscoe 2004: 109).

5.2 The Evaluation of Retirement Income Security

The income components of older persons will be reviewed in the first section, followed by the evaluation of the incomes from family members, employment, the CPF and private insurance policies. The level of poverty will be estimated last.

5.2.1 Income Components of Singapore's Older Persons

The surveys of Singaporean senior citizens of 1995 and 2005 show that the proportion of older persons aged fifty-five or above who had their own sources of income increased from 42.7% to 63.1% (MCYS 1995: 17; 2005: 25). This means that 42.7% and 63.1% of elderly population in 1995 and 2005 respectively had incomes from salaries, business revenues, dividend, investment, interest, rents and retirement plans to cover their daily expenditures in retirement. Table 5.7 demonstrates the importance of the income components of respondents aged fifty-five or more in 1995 and 2005. The difference between the 1995 and 2005 surveys was caused by the items included. Because the CPF scheme, pension plans and personal savings were not considered in the report of 1995, it seemed dubious to compare with the surveys each other. The main reason was that the importance of the income from adult children dropped by about 20% between 1995 and 2005 but the difference was made up by the elements unlisted in 1995. It is true that these components, especially personal savings, including savings/term deposits in banks, value of estate, life/endowment insurance policies and stocks, shares and bonds, were reviewed by the report of 1995 but were

excluded from the survey of importance. Therefore, the importance of income from children in 1995 may be biased and cannot be compared with the one in 2005.

Table 5.7 Most Important Financial Support of Senior Citizens				
	Total	Age Groups		
		55-64	65-74	75+
1995 Survey				
Total	100.0	100.0	100.0	100.0
Children	64.0	48.5	79.0	85.7
Salaries/Business Income	25.7	39.8	13.5	3.9
Spouse	3.7	5.8	1.8	0.9
Others	6.6	5.9	5.8	9.5
2005 Survey				
Total	100.0	100.0	100.0	100.0
Children	44.7	31.9	55.8	63.7
Salaries/Business Income	24.8	38.9	12.7	3.7
Spouse	6.3	9.1	4.1	1.6
Personal Savings	12.1	11.0	15.0	10.7
CPF	3.5	3.9	3.7	1.8
Pension	1.4	0.5	2.0	2.7
Others	8.6	4.7	6.7	15.8
Note: All the numbers are in percentages.				
Source: Ministry of Community Development, Youth and Sports (1995: 21; 2005: 28-9).				

Nevertheless, the findings in Table 5.7 depict the contribution of retirees' income security in 1995 and 2005 respectively. It shows that in 1995 children were the main sources of income (64.0%) in retirement, followed by employment salaries (25.7%) and supports from spouses (3.7%). Children's support of retirement income was still the most important source in 2005 (44.7%) and employment income was at a similar level (24.8%) to 1995, but the significance of support from spouses (6.3%) slightly increased. The elements newly brought into the 2005 survey illustrate that personal savings (12.1%) were more essential than help from spouses, the CPF scheme (3.5%) and pension plans (1.4%).

Three things should be noted here. Firstly, the family support system (51%, including children and spouse) was in fact the most important source of income, even as the CPF acquired huge amounts of monthly contributions and was thought to be dominant in the provision of social security. Secondly, the importance of children's support went up as the incomes from employment, spouse and the CPF payments waned. It is true that the payments from life and endowment insurance policies and deposits in banks, which constituted a significant part of personal savings, may pay respondents benefits periodically until death, therefore acquiring a constant level of importance

throughout the years of retirement. It is also true that CPF payments were based on the amount of deposits, thus the benefits may be exhausted or become trivial as members grow older. In addition, because the percentage of homeownership in Singapore was more than 80% as stated above and people were encouraged to move to smaller flats and get some money back or to let some rooms to others if applicable, this also may contribute to the stability of the importance of personal savings. Thirdly, the significance of income from other sources slightly increased from 6.6% to 8.6% between 1995 and 2005 and, more tellingly, for respondents aged seventy-five and above became the second most important component (15.8%) in 2005. Although the report of 2005 did not elaborate on other sources of maintenance, the respondents may be supported by other relatives, the Public Assistance scheme and philanthropic associations.

The incomes from family members, employment or business, personal savings, the CPF scheme and Public Assistance scheme will be investigated respectively in the following sections. Lastly, the poverty reduction of Singaporean's level of retirement income will be examined.

5.2.2 Family Support

As Table 5.7 shows, supports from children played an important role in older persons' retirement income in 1995 and 2005. Although the income from spouses was not sizable, it demonstrated that, together with incomes from children, family transfer (51.0% in 2005) constituted the dominant part of ageing members' incomes albeit decreasingly so. Table 5.8 further illustrates that the percentage of the ageing population who received cash supports from adult children dropped from 75.9% to 66.0% between 1995 and 2005, while the proportion of elders who obtained income from spouses went up slightly from 8.4% to 11.9% during the same period. Both surveys show that the proportion of elderly population who received income from children was greater in over-sixty-fives because more than four-fifths became economically inactive at this age.⁷ Moreover, the low rate of family support for those aged between fifty-five and sixty-four was in accordance with the findings that around half were still in gainful employment in 1995 and 2005 (MCYS 1995: 32; 2005: 34).

⁷ According to the survey of 2005, 80.1% of people aged between sixty-five and seventy-four and 94.3% of people aged over seventy-five responded as economically inactive.

Table 5.8 Income from Children and Spouse			
Category	Age	1995	2005
Children	55+	75.9	66.0
	55-64	68.9	56.3
	65-74	83.8	76.0
	75+	83.1	77.9
Spouse	55+	8.4	11.9
	55-64	13.1	16.7
	65-74	3.8	8.4
	75+	1.6	3.1
Note: All the numbers are in percentages. Source: Ministry of Community Development, Youth and Sports (1995: 19; 2005: 27)			

The living arrangements of elderly people in 1995 and 2005 (Table 5.9) indicate that, firstly, in general, the number of ageing persons who live alone or with children increased with age, while those who co-resided with both spouse and children or with spouse only dropped. Secondly, it was found that more retired parents and adult children were living alone by 2005 (an increase from 7.3% to 20.2% and 4.5% to 17.4% respectively) whereas those who co-resided with children and without spouse reduced markedly during this period (a decrease from 44.8% to 25.5% and 60.1% to 36.7%). Nevertheless, the number of older persons especially those aged between sixty-five and seventy-four, who lived with both children and spouse stayed at a similar level (increasing from 39.8% to 41.6%) throughout the decade, but went up by around ten percentage points amongst those over seventy-five in the same period. Furthermore, the number of ageing people who lived in other living arrangements, including those living with other older persons or living in rest homes, stayed at similar level in the two surveys, while the proportion of people aged more than seventy-five and living in other arrangements dipped from 7.0% to 5.2%. It is worth noting that the number of ageing people who lived with children dropped between 1995 and 2005, including those who lived with children with and without spouse, from 84.6% to 67.1% (age group “65-74”) and from 84.0% to 69.4% (age group “75+”).

Table 5.9 Living Arrangement of Elder Persons *				
Living Arrangement	1995		2005	
	65-74	75+	65-74	75+
Alone	2.9	4.4	7.5	8.0
With spouse only	7.3	4.5	20.2	17.4
With spouse and children	39.8	23.9	41.6	32.7
With children but no spouse	44.8	60.1	25.5	36.7
Others	5.3	7.0	5.2	5.2
Total**	100.1	99.9	100.0	100.0

Note: * All the numbers are in percentages.
** The total percentage may not be 100.0 due to rounding up.
Source: Ministry of Community Development, Youth and Sports (1995: 15) and Singapore Department of Statistics (2006: Table 93).

Table 5.10 depicts the income level of ageing persons in 1995 and 2005 and shows that income decreased as respondents got older. As illustrated, the percentage of people who received less than SG\$ 500 per month increased considerably from 33.7% to 78.2% in 1995 and from 25.3% to 55.8% in 2005, while that of the rest groups declined markedly as respondents' age grew. The findings also demonstrate that the number of people aged over seventy-five and who did not receive income from any source increased by 5.7 percentage points between 1995 and 2005. This indicates that although income security in old age has improved, poverty in the very old is on the increase.

Table 5.10 Income Level of Senior Citizens from All Sources								
Income Level (all sources)	1995				2005			
	55+	55-64	65-74	75+	55+	55-64	65-74	75+
None	0.9	1.1	0.7	1.0	1.9	0.7	1.2	6.7
<SG\$ 500	48.2	33.7	56.4	78.2	36.2	25.3	44.1	55.8
SG\$ 500-999	29.9	34.5	29.7	16.1	32.3	33.1	35.0	24.9
SG\$ 1,000-1,999	15.8	22.4	11.0	3.7	20.6	28.2	14.2	8.7
>SG\$ 2,000	5.2	8.3	2.2	1.0	9.0	12.6	5.5	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: All the numbers are in percentages.
Source: Ministry of Community Development, Youth and Sports (1995: 22; 2005: 29).

Table 5.11 shows the composition of family support of older persons' monthly income. It was found that the lower the level of income one received, the higher proportion contributed by economically active children in 1995. More than four-fifths of the income of the older persons who received less than SG\$ 500 per month was from children. In addition, slightly less than 30% of the income received by those with more than SG\$ 1,000 of monthly income in retirement was not made up by children, and 29.9% of respondents reported that children's support merely constituted less than one-fourth of their income. Hence, generally speaking, the findings on older persons who received less than SG\$ 500 per month suggest they had fewer sources of income

and relied heavily on children's transfers; while those who received more may have various sources of income at this stage of life.

Monthly Income (all sources)	Total	None	<25%	25-49%	50-75%	>75%
Total	100.0	11.2	12.9	8.5	5.3	57.7
<SG\$ 500	100.0	3.9	4.5	3.6	4.1	79.5
SG\$ 500-999	100.0	10.3	14.1	12.8	7.5	50.3
>SG\$ 1,000	100.0	28.3	29.9	13.6	4.9	19.6

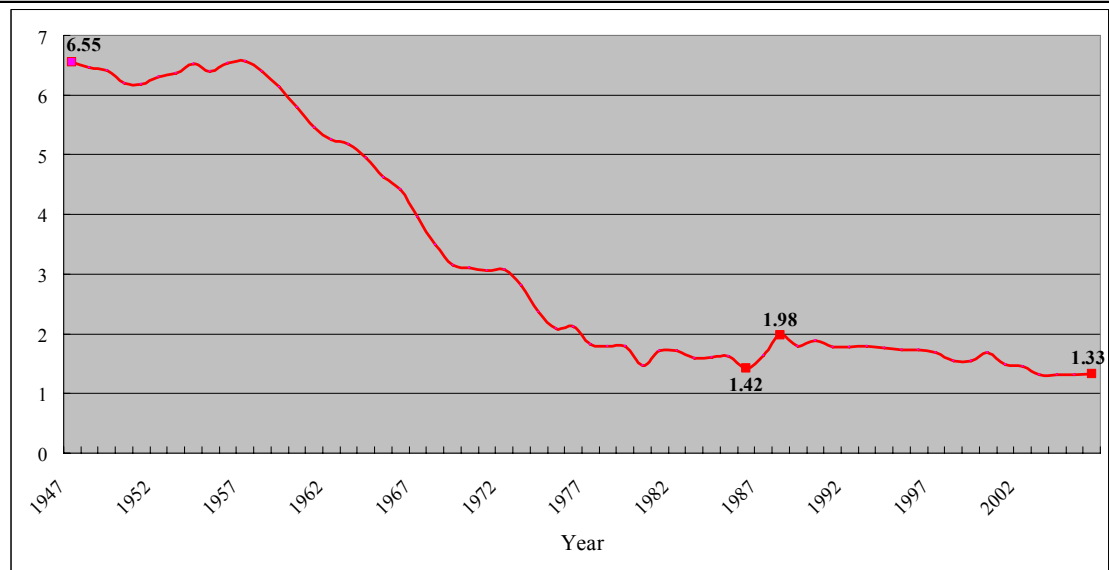
Source: Ministry of Community Development, Youth and Sports (1995: 24).

Because the Singaporean Government has concentrated chiefly on the family's role in retirement income support, the sustainability of the family support system in the following decades depends on whether the demographic structure in households and/or kinship will be robust. That is, if the number of members of the following generations is decreasing, then the family support system may not be sustainable.

There are two versions of the total fertility rate (TFR) in Singapore, one is for Singaporean residents and citizens and the other is for the total population in Singapore. According to official statistics, the number of non-permanent-residents or non-citizens in Singapore increased from 700,000 to nearly 1.2 million between 2000 and 2008.⁸ This group of people is working or living in Singapore and may apply for permanent residence or citizenship status. The residential version of TFR (Figure 5.3) indicated that between the late 1940s and 1960 the fertility rate fluctuated between six and seven then declined swiftly in the early 1960s. The TFR reached bottomed at 1.42 in 1987 and then rose quickly to 1.98 in 1989 then reduced gradually to 1.33 in 2006. The downturn of the TFR in the 1960s was because of the introduction of the "Stop-At-Two" family policy, which came with the slogan: "Girl or Boy – Two is enough". The government established the Family Planning and Population Board (FPPB) in 1966 to supervise family policies and integrated some other policies such as public housing, personal income tax, accouchement fees, maternity leave and education fees for children as well as campaigns to educate the public (Leong and Sriramesh 2006). Because the TFR dropped below the replacement level around 1975 and declined further to 1.42 in 1986, the government closed the FPPB and attempted to boost the TFR through a series of pro-natalist programmes (Saw 2007: 154-8; Straughan, et al. 2009: 183-4).

⁸ Please refer to the time series population estimation provided by the Singapore Department of Statistics (<http://www.singstat.gov.sg/stats/themes/people/hist/popn.html>). [accessed: 16.09.2009]

Figure 5.3 The TFR of Singaporean Residents (1947-2006)



Notes: The total fertility rate was based on the births given by Singaporean residents.

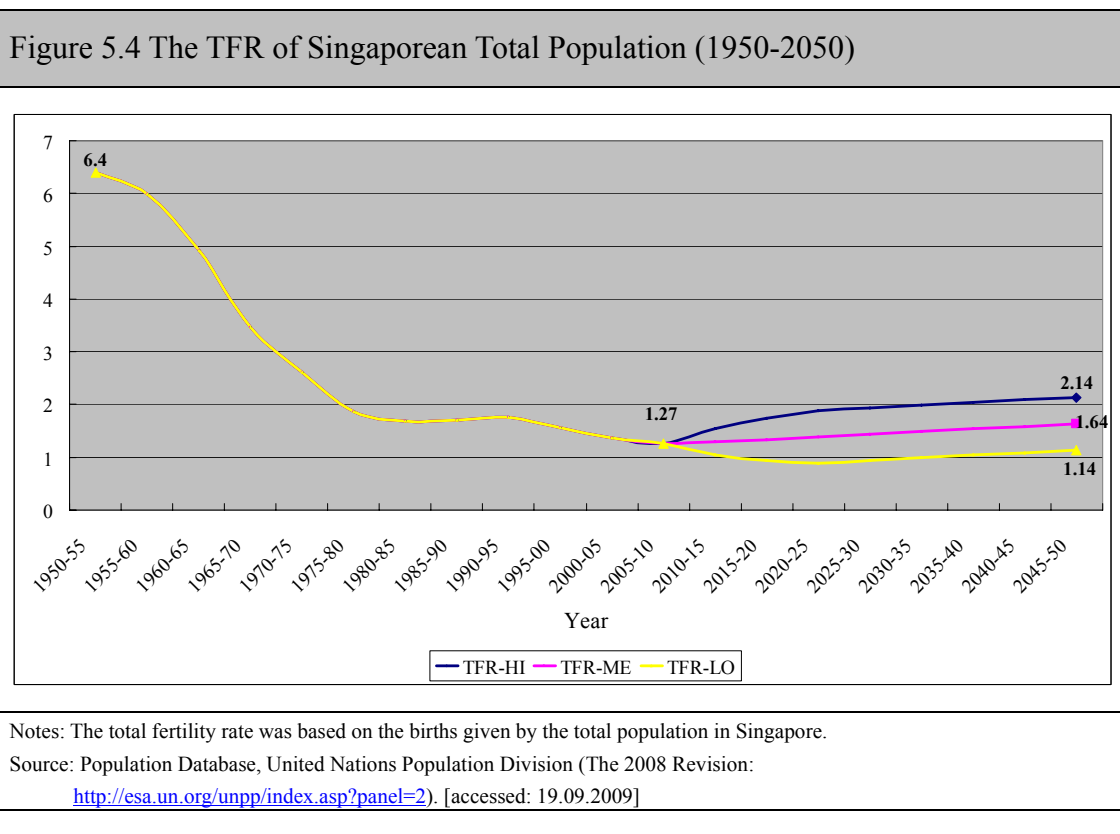
Source: Saw (2007: Table 8.2 & 8.9).

In 1987 the slogan “Have three, or more if you can afford it” was proposed and, as in 1960s, came replete with a series of schemes for working mothers in order to stimulate the fertility rate and advance postponed pregnancies including income-tax relief and rebates, childcare subsidies, public housing and unpaid maternity leave. The family policies increased the TFR to 1.98 in the next year (1988) but it has decreased gradually since then. For this reason, since 2000 government has offered some incentives for people who have three or four children. This series of programmes aimed at building up “A great place for families”, and emphasises work-life balance schemes and also makes them available to non-working mothers. Because no further increase of the TFR was achieved by these schemes, the government thought that people might have been put off by the hard-sell methods used to promote childbearing and introduced a soft-sell programme instead, ‘Romancing Singapore’ - a month-long celebration of romance and love intended to boost both marriage and birth rates, but it was in vain. In effect, the residential TFR stayed at a similar level (Biro and Rinella 2008).

Because of pessimism about Singapore’s demographic problem, Wong et al (2005: 279-80) propose that immigration policies should be taken into consideration to tackle Singapore’s double burden, namely a decreasing and ageing population. That is non-residents and non-citizens in Singapore should be included because they are in effect no longer immigrants, contribute to prosperity and, most importantly, could help alleviate demographic problems in the coming decades.

The latest TFR for Singapore, based on the United Nations (UN) population

projections of 2008 illustrated in Figure 5.4, includes the total population (both residents and non-residents) and total births in Singapore but was slightly lower than the residential version (Figure 5.3). The UN predicts that, as the bottom line shows, the TFR may drop below 1.0 in the coming decade then go up to 1.14 in 2050 if current family policies do not stimulate childbirth. However the UN report that the reduction of TFR may be arrested and recover to 1.64 or 2.14 depending on how people react to the family policies introduced.



The dependency ratios (DR) in Table 5.12 are based on the three scenarios in Figure 5.4. The “DR Total” is defined as the number of economically active people to one dependent (including people aged below fourteen and above sixty-five) and “DR 65+” is specified as the number of economically active people to one elderly person. The “DR total” increased with the growth of the gainfully employed population and relatively slower increase of the younger and older generations between 1980 and 2008. In 2010, as the “DR Total” shows, 2.9 economically active people will take care of one dependent, while the DR for people aged over sixty-five will drop to 7.3 due to the increase of ageing persons. After that, the numbers depict that, among all the scenarios, the “DR 65+” may fall below two economically active people to one ageing person between 2030 and 2040; while the DR total may increase to 2.9 in 2010 then slide to less than two working people to one dependent between 2020 and 2030.

Year	DR 65+**			DR Total***		
	High	Medium	Low	High	Medium	Low
1950	24.3			1.3		
1960	26.3			1.2		
1970	17.1			1.4		
1980	14.4			2.1		
1990	13.0			2.7		
2000	15.1			2.7		
2010	7.3			2.9		
2020	3.9			2.2	2.3	2.5
2030	2.2	2.2	2.1	1.4	1.5	1.6
2040	1.8	1.7	1.6	1.2	1.2	1.3
2050	1.9	1.7	1.5	1.3	1.3	1.3

Note: * The numbers are calculated and rounded up from UN's Population Database and represent in average how many economically active persons to take care one dependent.
** Dependency Ratio 65+ = (People aged 15-64) / (People aged 65+)
*** Dependency Ratio Total = (People aged 15-64) / (People aged 0-14 + People aged 65+)
Source: Computed from Population Database, United Nations Population Division (The 2008 Revision: <http://esa.un.org/unpp/index.asp?panel=2>).

Although the Singapore Department of Statistics is not engaged in population projection, some studies have simulated demographic trends and are optimistic about the TFR. Saw (1999: 221-2) forecasted in 1999 that the TFR may stay stable at 1995 levels (1.77) or, optimistically, may go up to 2.15 by 2015, but in fact it has dropped since then. In 2005, Saw conservatively suggested three scenarios of population projections. The high projection version was that the TFR would increase from 1.33 in 2003 to 1.63 in 2005 then to 1.83 in 2010, while the low projection scenario was an increase from 1.33 in 2003 to 1.43 in 2005 remaining constant thereafter (Saw 2005: 220-1). Despite the low scenario being close to reality, in effect, the fertility rate has not returned to 1.43 so far.

Some studies have observed the development of family policy and fertility rate and commented that, in the foreseeable future, it is unlikely that the TFR will recover to replacement rate (particularly PROJ19 in Hashmi and Tat 2002: 7-8; Suzuki 2006: 14). Teng (2009: 161-8 & 172-4) argues that the postponement of marriage and childbirth and the fluctuation of economy and unemployment, as result of globalisation and economic restructuring, are the main contributors to the fall in the TFR. This is one of the reasons why the government has put more resources into job creation in order to remedy the population problem. However, Straughan et al (2009: 191 & 199-201) find that economic development and women's participation in the labour force has had a negative impact on people's childbearing behaviour and the state is not building a family-friendly environment as it claims. They further note that people are concerned about the rocketing costs of raising kids and the inability of government provisions to meet their needs. Straughan et al's respondents indicate that the competitive education

system is another reason for refrain from having children because they do not want to see them suffer.

Another issue here is education: educational status has greatly improved over the past few decades and, most importantly, the target audience of family policies since 1987 is now highly-educated, but the government seems to have underestimated the potential for resistance towards their initiatives. The research of Drakakis-Smith et al (1993: 152 & 160) reports that the influence of the schemes since 1987 has been muted partly because educated people resent the government meddling in private affairs. The post-1987 policies may be irrelevant to the increase of birth rate in 1989 because, for one thing, the impact did not last long and, for another, the augmentation was mainly due to 1988 being an auspicious year in Chinese culture (the Year of the Dragon and a double eight). Equally, unintended results may occur when enforcing many schemes at the same time. Many policies were implemented in order to reduce the TFR but Singapore easily overshoot its policy goals (Anderson 2004: 378-81). As a result of the very successful fertility inhibition policies after 1966, the reversal strategies from 1987 were less likely to succeed in the short-term (Lee, et al. 1991: 69; Leong and Sriramesh 2006). Ultimately, as Cheung (1989: 47-8; 1990: 46) points out, it may not be possible to increase the TFR financial and monetary incentives alone because the general public's perception of family size will determine the number of children they want to have. As a result of this shift in popular perceptions, the top-down processes of policy enforcement may not work properly anymore, and the development of a family-friendly society through grassroots organisations may be a better strategy for encouraging marriage and childbirth (Wong and Yeoh 2003: 21).

Hill and Lian (1995: 140-58) contend that most of the problems discussed above are rooted in the nature of industrialisation, which encourages economic restructuring to improve competitiveness, causes the nuclearisation of families, and emphasises diligence and career as opposed to family or community. As a highly industrialised city-state, the main influence on Singaporean perceptions of family size is most probably career advancement, and small families are more compatible with people's aspirations in this respect. Hence, however much the government tries to revive the ideology of traditional family, the results may be no more than ordinary.

5.2.3 Employment Income

As depicted in Table 5.7, around one-fourth of people aged fifty-five and above reported that employment was their most important source of income, and nearly 40% of those aged between fifty-five and sixty-four responded that it was an essential source. The employment rate of the ageing population (Table 5.13) to some extent

corresponds to the findings in Table 5.7 and illustrates that: the employment rate of people aged between fifty-five and fifty-nine was slightly higher than that of the general gainful population between 2006 and 2008; and the rates of those aged between sixty and sixty-four and those aged over sixty-five reduced markedly. Besides, it should be noted that not only did the employment rate of the group “55-59” remain at a relatively high level, but also around half of people aged between sixty and sixty-four were employed in 2008.

Year	Aged 15+	Aged 55+	Aged 55-59	Aged 60+	Aged 60-64	Aged 65+
2006	63.3	37.5	66.3	24.0	46.3	15.1
2007	63.4	38.8	65.8	25.2	47.7	15.2
2008	62.3	39.0	63.9	26.8	49.3	15.9

Note: All the numbers are in percentages and based on mid-year surveys.
Source: The numbers are calculated from data provided by Ministry of Manpower (2007; 2008; 2009) and Singapore Department of Statistics (2007b; 2008b; 2009).

The numbers in Table 5.10 demonstrate that half of the ageing population received less than SG\$ 500 per month in 1995 and more than one-third were in the same position in 2005. With regard to ageing worker’s average earnings, shown in Table 5.14, significantly, the level was much higher than the figure shown in Table 5.10. This means that economically active people were less likely to be on a low income. Besides, it is worth noting that the earnings of employees aged between fifty-five and fifty-nine and those over sixty were a mere 58% and 40% respectively of the average income of general workers in 2008. This to some extent supports the MCYS (2005: 38) report, which found that 62.0% of retirees who decide to return to the labour market do so because they “need money for current expenses” or want to “lead an active life (14.1%)”. Furthermore, the CPF Board (computed from 2008: Annex J) statistics show that nearly half of those over sixty and economically active earned less than SG\$ 1,000 and around 6.4% less than SG\$ 500 in 2008. They indicate that, compared with the average number in Table 5.14, the distribution of earnings is markedly skewed.

Year	Total	55+	55-59	60+
2006	3,554	1,960	2,284	1,567
2007	3,773	1,937	2,282	1,560
2008	3,977	1,960	2,315	1,601

Note: The numbers are in SG\$.
Source: Computed from the data provided by CPF Board (2006; 2007a; 2008) and Singapore Department of Statistics (2009).

5.2.4 Central Provident Fund

As the National Survey of Senior Citizens in 2005 illustrates, although the CPF covers most Singaporean residents and is still the most important social provision scheme in the city state, it constituted a mere 3.5% of the retirement income of people aged fifty-five and over in 2005 (Table 5.7). It was widely argued that, as discussed earlier, the low level of balance for retirement maintenance was due to its multiple functions which not only allow people to disburse mortgages, medical expenditures and tuition fees, but also to manage investment portfolios from their deposits before retirement..

Because the CPF focuses on Singaporean residents, the calculations in this section will be made on this basis. Table 5.15 shows that participants in the CPF scheme constituted 88.8% of total residents in Singapore. However, among the CPF members, slightly less than half were active, and the active members composed just 44.2% of Singaporean citizens and residents in 2008. With regard to contributions to the CPF scheme, 86.9% of employees were contributing to their accounts according to the statistics of 2008.

Year	(A)	(B)	(C)	(D)	(E)*	(F)**	(G)***	(H)****
	Resident	Employed	CPF Member	Active Member	Coverage of Resident	Active to Resident	Active to total Member	Active to Employed
2001	3,325.9	1,582.5	2,922.7	1,270.0	87.9%	38.2%	43.4%	80.2%
2002	3,382.9	1,573.7	2,963.2	1,283.7	87.6%	37.9%	43.3%	81.6%
2003	3,366.9	1,605.4	2,978.5	1,283.0	88.5%	38.1%	43.1%	79.9%
2004	3,413.3	1,632.1	3,018.0	1,324.4	88.4%	38.8%	43.9%	81.1%
2005	3,467.8	1,647.3	3,048.6	1,381.1	87.9%	39.8%	45.3%	83.8%
2006	3,525.9	1,796.7	3,099.6	1,461.9	87.9%	41.5%	47.2%	81.4%
2007	3,583.1	1,803.2	3,163.0	1,545.0	88.3%	43.1%	48.8%	85.7%
2008	3,642.7	1,852.0	3,234.4	1,610.0	88.8%	44.2%	49.8%	86.9%

Notes: The numbers are in thousands and percentages.
* (E) = (C) / (A)
** (F) = (D) / (A)
*** (G) = (D) / (C)
**** (H) = (D) / (B)

Source: Numbers are computed from the data provided by the Ministry of Manpower (2007; 2008; 2009) and the Singapore Department of Statistics (2007b; 2008b; 2009).

The CPF is a huge system that collects up to 34.5% of national monthly employment earnings from residents. The statistics show that the total amount of the CPF funds constituted about 60% of GDP in 2008, and the savings relevant to retirement maintenance made up 42.1% of GDP. In addition, the amount of contribution as a percentage of GDP dropped from 12.0% to 7.9% between 2001 and 2008 (Table 5.16).

Table 5.16 The Balance of CPF as a Percentage of GDP (2001-2008)							
Year	(A)	(B)	(C)	(D)*	(E)**	(F)***	(G)****
	GDP	Total Balance of CPF	Total Contribution of CPF	Total Balance for Retirement	Total Balance to GDP	Total Contribution to GDP	Total Balance for Retirement to GDP
2001	153,164.7	92,221.2	18,322.3	N/A	60.2%	12.0%	N/A
2002	157,694.4	96,422.6	16,165.7	N/A	61.1%	10.3%	N/A
2003	162,382.1	103,539.6	15,870.0	73,718.0	63.8%	9.8%	45.4%
2004	185,364.5	111,873.8	15,320.1	79,764.5	60.4%	8.3%	43.0%
2005	201,313.3	119,787.5	16,105.1	85,024.4	59.5%	8.0%	42.2%
2006	221,142.8	125,803.8	16,547.1	88,535.8	56.9%	7.5%	40.0%
2007	251,610.1	136,586.9	18,185.0	96,897.4	54.3%	7.2%	38.5%
2008	257,418.5	151,307.1	20,293.6	108,378.9	58.8%	7.9%	42.1%

Notes: All the numbers are in million SG\$ and percentages, and N/A represents data are available.
* The total balance for retirement includes the deposits in the Ordinary Account, Special Account and Retirement Account.
** (E) = (B) / (A)
*** (F) = (C) / (A)
**** (G) = (D) / (A)

Sources: The numbers are calculated from the data provided by the Central Provident Fund Board (2001; 2002; 2003; 2004; 2005; 2006; 2007a; 2008) and Singapore Department of Statistics (2007b; 2008b; 2009).

As the regulations state, participants can withdraw their CPF savings on attending the age of fifty-five after allocating the prescribed amount of the Minimum Sum to the Retirement Account. Table 5.17 depicts the number of participants that claimed withdrawals and the amount of withdrawals from the CPF between 2001 and 2008. The statistics show that the number of people who claimed withdrawals and the amount withdrawn from 2001 to 2008 fluctuated, and the average amount per withdrawal ranged from SG\$ 4,270.5 to SG\$ 11,773.3 during this period.

Table 5.17 Withdrawal of CPF for Retirement (2001-2008)			
Year	Withdrawal for Retirement (million SG\$)	Number of People Claim Withdrawals (person)	Average Amount of Withdrawal (SG\$)
2001	1,730.6	405,250	4,270.5
2002	1,531.5	130,082	11,773.3
2003	1,871.2	290,736	6,436.1
2004	1,723.2	324,776	5,305.8
2005	1,837.7	357,255	5,143.9
2006	2,357.4	274,246	8,595.9
2007	2,404.3	204,808	11,739.3
2008	2,061.3	189,610	10,871.3

Source: Central Provident Fund Board (2001; 2002; 2003; 2004; 2005; 2006; 2007a; 2008).

It should be noted that because the withdrawals from the CPF after attending fifty-five years old are different from the aforementioned periodical retirement payment programme, they may not necessarily be used for the purpose of retirement maintenance. The National Survey of Senior Citizens in 1995 reported that two-thirds

of people who claimed withdrawals did not use the money to disburse living costs, and around one-fourth of the respondents indicated paying less than 25% of living expenses with their CPF withdrawals in 1995 (Table 5.18).

	Percentage
None	66.7
<25%	26.4
25-49%	4.6
50-74%	0.9
75-99%	0.4
100%	0.2
Confidential	0.8

Source: Chan (1999: 100).

Table 5.19 further conveys the uses of the withdrawals from the CPF in 1995 and 2005. The survey in 1995, on the one hand, reported that the utilisation of CPF withdrawals in household expenses increased along with the growth of age (from 34.5% to 40.2%), but the uses in purchasing property reduced while ageing (from 19.8% to 17.4%). Moreover, over half of older people claimed to have deposited the money in bank, but the rate dropped to 44.7% among those aged seventy-five and over in 1995. On the other hand, the report of 2005 survey found that using withdrawals to pay for household expenditures decreased with age but for paying mortgages increased. In addition, the report showed that older people allocated less for children's tuition fees and nearly six out of ten saved a part of the money in banks.

	55+	55-64	65-74	75+
1995				
Deposits in Bank	51.3	51.8	52.4	44.7
Household Expenses	36.2	34.5	38.5	40.2
Purchase of Property	19.6	19.8	19.6	17.4
Children's Education	7.3	8.3	4.8	6.3
2005				
Deposits in Bank	57.4	58.0	56.2	57.7
Household Expenses	44.6	45.5	44.8	40.7
Purchase of Property	12.0	11.7	12.4	13.0
Children's Education	8.2	10.4	6.0	4.0

Note: All the numbers are in percentages. Because the questionnaire was multiple choice the numbers were not excluded.
Source: Ministry of Community Development, Youth and Sports (1995: 30; 2005: 32).

However, the survey of 1995 pointed out that 39.2% of people aged fifty-five and over withdrew savings from CPF accounts and the proportion of participants dwindled as they grew older. Furthermore, 43.6% of ageing people who reported

withdrawals claimed that the level of balance was inadequate for their retirement, and the sufficiency decreased from 50.6% (group “55-64”) to 26.5% (group “75+”) in 1995 (Table 5.20).

Table 5.20 Possession and Sufficiency of CPF Deposits				
	55+	55-64	65-74	75+
Possession of CPF Deposits				
Yes	39.2	49.6	33.0	18.0
No	60.8	50.4	67.0	82.0
Total	100.0	100.0	100.0	100.0
Sufficiency of CPF Deposits				
Sufficient	43.6	50.6	30.5	26.5
Insufficient	55.8	48.9	68.6	72.8
Total	100.0	100.0	100.0	100.0
Note: The numbers are in percentages.				
Source: Ministry of Community Development, Youth and Sports (1995: 29).				

The simulation of the replacement rate of the CPF scheme in Table 5.21 uses average income balance and age-specified life expectancy as the basis for the computation. Because the balance of the Medisave Account usually constitutes around 30% of a participant’s total deposits,⁹ the account balance employed has been adjusted. Table 5.21 categorises the ageing population into two groups (namely “55-59” and “60+”) and calculates the level of replacement respectively. The findings indicate that, firstly, because the average account balance of the age group “55-59” (SG\$ 49,286.7) was generally higher than that of those over sixty (SG\$ 19,068.8)¹⁰ the average benefit and replacement rates are also likely to be higher. Secondly, the replacement rate for those aged between fifty-five and fifty-nine went up from 3.3% in 2003 to 6.2% in 2008 due to the growth of deposits during this period; while the rate for people aged sixty and above grew from 2.1% to 4.5% between 2003 and 2008. Asher’s (1999: 16-7) research, despite a different way of evaluation, also suggests that, in terms of average monthly salary, the payment equals less than one year of employment income.

⁹ It is concluded from various years of CPF statistics (<http://mycpf.cpf.gov.sg>).

¹⁰ The numbers are calculated from the account balance and the number of participants in Table 5.21.

Table 5.21 Replacement Rate of CPF Retirement Benefit by Age Group (2003-2008)						
Year	Number of Participant	Account Balance ('000)	Life Expectancy*	Average Monthly Wage	Average Level of Benefit	Replacement Rate**
Age 55-59						
2003	148,726	4,672,178.6	24.5	2,497.0	83.6	3.3%
2004	171,189	6,118,220.6	24.9	2,472.7	96.4	3.9%
2005	190,085	7,776,576.0	25.3	2,392.7	107.7	4.5%
2006	212,470	8,898,554.5	25.4	2,284.2	116.1	5.1%
2007	237,816	10,477,414.8	25.7	2,282.4	129.4	5.7%
2008	251,450	12,393,129.4	26.0	2,314.9	143.8	6.2%
Age 60+						
2003	416,647	3,187,135.4	18.0	1,629.7	34.1	2.1%
2004	431,157	3,801,946.6	18.4	1,632.0	38.2	2.3%
2005	432,740	4,377,055.0	18.7	1,596.3	43.1	2.7%
2006	450,418	5,372,229.5	18.9	1,566.7	49.8	3.2%
2007	453,064	6,882,580.8	19.0	1,560.4	59.4	3.8%
2008	476,038	9,077,493.1	19.2	1,601.2	72.7	4.5%
Note: The numbers are in persons, SG\$, years and percentages. * This life expectancy for age group "55-59" was based on the number for people aged fifty-seven, and the one for aged group "60+" assumed to be sixty-five. ** Replacement Rate = [Average Account Balance / (Life Expectancy * 12)] / Average Monthly Wage Source: Computed from the data provided by Central Provident Fund Board (2003; 2004; 2005; 2006; 2007a; 2008) and Singapore Department of Statistics (2008a).						

5.2.5 Private Insurance Policies

Table 5.7 reports that the importance of personal savings for people over fifty-five was 12.1%, which includes savings and deposits, own flats, investments, and insurance policies as listed in Table 5.22. According to the surveys in 1995 and 2005, the possession of all assets increased in each age group during this period. Among the four assets, the ownership of insurance policies amongst the population over fifty-five grew from 5.4% to 18.4%, and in policyholders aged between sixty-five and seven-four from 2.0% to 11.7%, and more than one-fourth of those aged between fifty-five and sixty-four possessed insurance policies.

Table 5.22 Possession of Assets				
Type of Asset	55+	55-64	65-74	75+
1995				
Savings/Fixed Term Deposits	68.3	71.7	67.3	59.8
Own Flat	67.7	76.5	63.1	48.8
Investment	7.5	10.6	4.8	2.6
Life/Endowment Insurance Policies	5.4	8.5	2.0	1.7
2005				
Savings/Fixed Term Deposits	79.7	82.5	77.9	74.3
Own Flat	73.7	82.3	70.5	53.1
Investment	13.9	17.0	11.7	8.3
Life/Endowment Insurance Policies	18.4	26.9	11.7	4.5
Source: Ministry of Community Development, Youth and Sports (1995: 26; 2005: 31).				

The coverage of insurance policy and its scale of funds are presented in Table 5.23. The Monetary Authority of Singapore does not distinguish the number of life insurance and endowment insurance policies, and policyholders by type of insurance are therefore not shown in the table. Nevertheless, the table does demonstrate that the insured amount of life/endowment insurance policies nearly doubled between 2001 and 2008 and the sum of annuity expanded by about three times in the same period. In addition, the number of policyholders of life/endowment and annuity insurance policies more than doubled between 2001 and 2008, which is shown by the coverage rate of more than two life/endowment and/or annuity insurance policies per person on average in 2008. The findings also indicate that the scale of insurance policies amounted to twofold of GDP in 2008. With regard to the insurance industry in Hong Kong and Taiwan, Taiwan's coverage of life/endowment and annuity insurance policies (196.0% in 2007) was commensurable to Singapore (217.8% in 2007) while the number in Hong Kong may be lower because nearly half of the population had not purchased any sort of private insurance policy. Despite this, the insured amount of life/endowment and annuity insurance as a percentage of GDP in Taiwan (29.4%) was much lower than in Singapore (211.0%) in 2008.

Year	Total Population ('000)	L/E Policy Sum Insured (SG\$ M)	L/E Premium (SG\$ M)	Annuity Payment (SG\$ M)	No. of L/E Policies	No. of Annuity	Coverage of Insurance Policy (%)	% of GDP
2001	4,138.0	283,205.9	5221.9	147.3	4,745,926	31,074	115.4	188.4
2002	4,176.0	301,282.1	5417.9	200.9	5,888,447	42,576	142.0	194.6
2003	4,114.8	315,450.1	5547.9	214.4	6,136,136	46,463	150.3	197.8
2004	4,166.7	331,514.1	5869.6	222.7	6,920,539	50,263	167.3	182.1
2005	4,265.8	430,973.7	6377.9	234.0	9,226,104	54,195	217.6	217.4
2006	4,401.4	456,053.9	6710.5	272.8	9,526,835	60,214	217.8	209.4
2007	4,588.6	491,389.2	7167.7	381.9	9,926,661	65,613	217.8	198.3
2008	4,839.4	534,944.4	7735.7	546.2	10,427,504	70,755	216.9	211.0

Sources: Calculated from data provided by Monetary Authority of Singapore (2003; 2004; 2005; 2006; 2007; 2008).

Because Singaporeans gradually phase out of the labour market after attending the age of sixty, the estimations presented by Table 5.24 apply the age sixty as the time point that one purchases annuity insurance with her/his deposits or claims benefits from life/endowment insurance policies. The findings demonstrate that the coverage of annuity insurance policies among the sixty-over population increased from 7.3% in 2001 to 12.3% in 2008. Moreover, the monthly payment from annuity insurance policies on average rose from SG\$ 395.0 to SG\$ 643.3 between 2001 and 2008.

Year	No. of Annuity	Annuity Payment (SG\$ M)	60+ Population	Coverage Rate of 60+ Population	Monthly Annuity Payment
2001	31,074	147.3	425,209	7.3%	395.0
2002	42,576	200.9	441,620	9.6%	393.2
2003	46,463	214.4	456,793	10.2%	384.5
2004	50,263	222.7	475,425	10.6%	369.2
2005	54,195	234.0	488,167	11.1%	359.8
2006	60,214	272.8	507,369	11.9%	377.5
2007	65,613	381.9	540,777	12.1%	485.0
2008	70,755	546.2	573,678	12.3%	643.3

Sources: Computed from the data provided by Monetary Authority of Singapore (2003; 2004; 2005; 2006; 2007; 2008) and the International Data Base (IDB) of the U.S. Census Bureau (<http://www.census.gov/ipc/www/idb/>) [accessed: 21.09.2009].

5.2.6 The Evaluation of the Poverty Rate

Estimation of Singapore's poverty rate were rare because studies (e.g. Lim, et al. 1993; Phang 2001) held that the prosperity of this city-state and the strict labour market policies enforced had significantly reduced or even removed absolute poverty. However, in fact, Lee (2001) reports that those who receive less education, female workers and older persons have a greater probability of living in poverty. As Yuen (2005) and the World Bank (2009) argue, although the development of housing

ownership policy in Singapore ostensibly swept away the squatters from the streets, in fact, poverty is now hiding in public housing and has not been eradicated by prosperity. As discussed above, housing policy was introduced in order to ease the unrest in the society since the early 1960s. For this reason, the government necessarily emphasised the ownership and rentals of public flats and therefore took this as a level of poverty in Singapore. The Housing Development Board indicated in 1996 that about 6% of households were unable to own public flats, and the number in 2004 was 37,823 households or around 4% of total households (Singapore Department of Statistics 2006: Table 37; Yuen 2005: 5).¹¹

Additionally, there are some other ways to draw the poverty line. On the one hand, because the Public Assistance (PA) scheme is deemed to cover a person who is unable to access family support and other sources of income up to the monthly minimum household expenditure level (MHE equal to SG\$ 330 in 2008) the MHE level represents the subsistence level and is to some extent recognised as the official poverty line in Singapore (Ramesh 1992). On the other hand, studies have been engaged in drawing the absolute poverty line since 1954. The survey executed in 1954 took people's demands for food, clothing, household operation and pocket money for adult household members into account and reported that the absolute level of poverty was SG\$ 102 for four-person households, including one male wage earner, one homemaker and two children, in 1954 prices. Lim (1988; cited in Lee 2001: Table 1) applied this poverty line in 1984 prices to investigate the poverty rate in that year and found that between 1954 and 1984, particularly in households of eight or more members, poverty decreased dramatically from 37.5% to 0.5%, and the rate for general households declined from 19.2% to 0.3%. However, because single-person and institutionalised households were not included in the survey of 1984, its validity was questioned. Another poverty line, deemed "moderate poverty", was established by the Amalgamated Union of Public Employees (AUPE). This amounted to SG\$ 240 for a four-member household or SG\$ 60 per head in 1974, and the level per head in 1984 was SG\$ 120 on the basis of AUPE poverty line. A third poverty line was proposed by the Population Planning Unit (PPU) of the Ministry of Health in 1991. The PPU's absolute poverty line in 1991 was SG\$ 510 for a four-person household living in a one-room flat, and the results of their research showed that 38,000 households or 5% of the populace living below the level of subsistence.

Because this thesis focuses on individual income maintenance in retirement and is not sensitive to the type of dwelling, the MHE level will be applied in the following

¹¹ According to the official statistics, the total number of household in 2005 was 1,024,458.

discussion. Likewise the data in Table 5.13 illustrated that the employment rate of people aged sixty and over was around a quarter and that of sixty-five-over group was about 15% and employment income had a strong effect on poverty reduction, it cannot be considered a key component of retirement income. Moreover, income from family support cannot be included because the data was not available. Therefore, the simulation in Table 5.25 took the payments from CPF and annuity insurance policies, and the annuity benefit was adjusted by coverage rate. The conclusion was that, on average, these two sources of income covered less than half of the subsistence level of living between 2003 and 2008 - hence support from family members, investments, private savings and even charities were more important.

Table 5.25 The Gap between Substance Level and Retirement Income (2003-2008)					
Year	MHE Level (SG\$)	Average CPF Payment (SG\$)	Annuity Insurance Policy		Gap* (SG\$)
			Average Annuity Benefit (SG\$)	Coverage Rate (%)	
2003	260	34.1	384.5	10.2%	-186.7
2004	260	38.2	369.2	10.6%	-182.7
2005	260	43.1	359.8	11.1%	-177.0
2006	290	49.8	377.5	11.9%	-195.3
2007	290	59.4	485.0	12.1%	-171.9
2008	330	72.7	643.3	12.3%	-178.2

Notes: * Gap = [Avg. CPF Payment + (Avg. Annuity Benefit * Coverage Rate)] – MHE Level
Source: Pai (2006: Table 4), Reisman (2006: 155-6) and the Ministry of Community Development, Youth and Sports (www.mcys.gov.sg).

Notwithstanding that employment is the best way to prevent destitution, some household types particularly those that are composed mainly of elderly persons are clearly more vulnerable to poverty. As Table 5.26 shows, one-third of single-person households did not have income according to the survey in 2005, and 27.2% of non-nuclear family households composed of two or more persons lived on less than SG\$ 500 per month. Besides, around a quarter of one generation households earned less than SG\$ 500 per month in 2005 and, among these, 21.7% lived without work income. This means that people in these three types of households are more likely to fall below the MHE level if they do not have other means of income to meet their living costs. Although around one-fifth of the remaining households, except ones with one or two generations in two family nuclei, received less than SG\$ 500 per month, few lived without employment income.

Table 5.26 Monthly Household Income by Household Types and Income Groups (2005)

Income Group (SG\$)	No Family Nucleus		One Family Nucleus			Two Family Nuclei		Three or More Family Nuclei
	One Person	Two or More Persons	One Generation	Two Generations	Three or More Generations	One or Two Generation	Three or More Generations	
Non-Working Persons	33.1	18.0	21.7	4.7	4.0	2.0	2.3	2.2
<250	0.9	2.0	1.0	3.4	5.0	2.0	4.6	2.9
250-499	1.5	7.2	3.8	11.1	16.3	4.9	14.3	12.5
500-749	4.2	9.5	5.3	13.7	16.0	10.9	17.5	13.9
750-999	4.5	8.1	4.7	12.2	14.9	10.7	15.0	14.0
1,000-1,499	9.7	14.8	9.4	19.8	18.8	22.8	22.1	16.8
1,500-1,999	8.2	9.9	8.8	13.1	10.4	19.4	10.4	16.1
2,000-2,499	7.1	8.0	8.2	7.7	5.7	11.2	5.2	12.1
2,500-2,999	5.8	6.0	7.0	4.5	2.9	6.5	3.2	5.2
>3,000	24.9	16.3	30.1	9.8	6.0	9.5	5.5	4.3

Note: All the numbers are in percentages.

Source: The numbers are calculated from the data provided by Singapore Department of Statistics (2006: Table 76).

Table 5.27 also demonstrates that an elderly couple living with adult children were the least likely to be destitute (23.9% received less than SG\$ 500 per month) in 2005; the most vulnerable were the 74.6% of elderly couples living alone and not economically active. The other elderly-couple-based households were more likely (64.6%) to live without employment income. The table also shows that slightly less than half of all elderly couples had an income of less than SG\$ 500 per month in 2005 and more than one-third were living without employment income.

Table 5.27 The Monthly Income of Elderly Household by Income Groups (2005)

Household Type	No Working Person	<250	250-499	500-749	750-999	1,000-1,499	1,500-1,999	2,000-2,499	2,500-2,999	>3,000
Elderly Couples	34.7	3.8	9.6	9.8	8.9	13.2	8.5	4.5	2.5	4.5
No Children in Household	74.6	2.3	6.8	5.2	3.2	3.3	1.1	0.9	0.4	2.2
With Youngest Child Below 16 Years	17.4	23.1	14.2	8.9	14.2	11.0	5.3	-	-	5.7
With Youngest Child Aged 16 Years and Over	8.2	4.4	11.3	12.9	12.7	20.1	13.5	7.1	3.9	6.0
Others	64.6	3.9	8.4	6.2	4.5	3.3	4.0	1.1	0.6	3.4

Note: All the numbers are in percentages.

Source: The numbers are calculated from the data provided by Singapore Department of Statistics (2006: Table 77).

5.3 Conclusion

Singapore's development of social policy is similar to Hong Kong in the way that,

firstly, both of them were British Crown Colonies that mainly focused on trading instead of people's welfare and, secondly, the welfare services and provisions were delivered by donation-based benevolent associations organised by local businessmen and leaders in the early stage. This to some extent denotes that the emphasis of political legitimacy and business gentry's benefits resulted in the underdevelopment of institutional welfare provisions. The first, and the only, pension system in Singapore, the Central Provident Fund (CPF) system, was not introduced by the Colonial Government until the mid-1950s. Because the CPF scheme centrally controlled the financial resources of this society, it became an important financial foundation of Singapore and helped fuel economic development (Asher and Nandy 2008: 59; Khan 2001: 14-5). The CPF system was further extended and premature withdrawals were allowed for specific purposes. In addition, the Maintenance of Parent's Act and the Public Assistance (PA) scheme were introduced in order to remind people about filial piety as well as relieve those who did not have family members to count on. With regard to the whole story, the government and business elites dominate the policy-making process, while people should be self-responsible if they are short of family members' supports.

The advantages of Singapore's pension system are twofold. Firstly, premature withdrawal of the CPF savings may help participants make the most use of their financial resources before, and perhaps after, retirement. The increasing number of private insurance policy purchases may result from the permission of paying insurance premiums with the deposits. This may to some extent relieve family members' social security responsibility. Secondly, the CPF LIFE programme annuitises the CPF's retirement payment and may improve people's pension right and old age income security.

The disadvantages of the Singaporean pension provisions are significant. Firstly, the replacement rate was low. Dixon (1993: 206-7) argues that the CPF does provide for an affluent standard of living during people's economically active years by allowing them to squander deposits and nearly run out of savings before retirement. Therefore, this to some extent is the trade-off imposed by the government, to enjoy the good times when one is able to work, but to bear the bad times when one retires. Secondly, the findings show that the average level of retirement income was unable to cover the poverty level. While the CPF LIFE programme will provide annuities for retirees, it, on the one hand, may not be helpful for those already-retired people (Dhamani 2008). On the other hand, this scheme is limited to those who have a specific amount of deposits. Thirdly, the government emphasises households' social security responsibility in order to relieve its burden on social assistance or any other sort of pension provision. However, the

population projection illustrates that the fertility rate and dependency ratio may stay at relatively low level which may endanger the reproduction of population and replacement of working cohorts in the future. Therefore, the security and sufficiency of retirement income seems unlikely to be met if the situation persists.

The findings of this chapter will be brought forward to Chapter Eight and Nine, where the inputs to and outputs of the Singaporean system will be compared with the other three Chinese Community pension systems.

Chapter Six China

China (the People's Republic of China) is one of the biggest countries in the world, in terms of territory, and its population of around 1.3 billion is the largest amongst all the nations. China was founded in 1949 after the Communists won the Civil War and Chiang Kai-Shek fled to Taiwan.

As with the other case studies in this thesis, this chapter intends to pursue the answers to the following questions: firstly, to what extent the Chinese government's ideology or the core values of the society affect the development of pension policy in the context of political, social and economic situations at different time points? Secondly, how and to what extent do these pension provisions reduce the problem of ageing poverty? In order to answer these questions, this chapter consists of two main parts: historical accounts and analysis of pension system. The historical review caters for the first question and the evaluation responds to the second.

This chapter will start with a historical review of the development of pension provisions under political, economic and social contexts. The ways in which the welfare thought of the government and society has changed, and the factors that have influenced these shifts in China, will be discussed. The time period over which China's pension policy has developed can be divided into three eras and the year 1991 and 2000 are taken as the critical points because of important amendments at these time points. The year 1991 is chosen because the government changed the urban pension provisions from an occupation-specified pension scheme to a system that covers the general urban working population of both the public and private sectors. The year 2000 is taken as a decisive point because this is when the experimental programme of the current pension policy was declared and put into practice. It is worth mentioning that although the choice of time points is based on the development of urban pension provisions, rural pension schemes are central to this thesis as well. Thus, the development of the pension systems in rural areas will be introduced and discussed in such a way as to fit into the timeline. The main features of each pension reform will be introduced along with the historical review therefore an additional section on the active pension system is not necessary.

The evaluation of the Chinese pension schemes starts by reviewing the studies on the income components of the elderly population in urban and rural regions to discover the important sources of retirement income for further assessment of the sustainability and reliability of those income sources. The level of poverty reduction of China's pension provisions will be investigated in order to comprehend the proportion of the

population who may fall below poverty line in retirement. The findings will be concluded at the end of the chapter.

6.1 The Development of Pension Provisions

6.1.1 The Development of Pension Provisions from 1949 (1949-1991)

Before the establishment of the Labour Insurance (LI) programme in 1951, an experimental programme, the Manchuria Temporary Labour Insurance Act, was launched in 1948. After the LI scheme was put into practice, the reforms of 1953 and 1958 extended the coverage of the provisions and isolated the pension programme from the LI system, and the reform of 1978 confirmed employers' obligations regarding pension provisions (Hua 2002: 345-6). In order to deal with the arrears of pension benefits and the financial vulnerability since the economic reform in 1978, the reform of 1986 asked employers and employees to mutually contribute to the pension scheme and announced the government would bear the ultimate responsibility for pension provisions.

The administration of the LI system was decentralised. The All China Federation of Trade Union (ACFTU) was authorised to manage both the system and funds, therefore the operation and its finance would not be influenced by political issues and the Chinese Communist Party (CCP) (Li and Liu 2005: Chapter 10 particularly). Basically, the LI scheme intended to prevent the side effects caused by industrialisation and urbanisation such as poverty, inequality of wealth distribution and income insecurity due to disability, old age, maternity leave, injury and sickness as more people gradually came to rely on wages, therefore it merely covered urban workers from the beginning (Brugger 1981a: 76-7). The initial LI programme in 1951 was as follows:

- It covered the staff and workers in State-Owned Enterprises (SOEs), collective-owned factories, mining fields and its subordinate units and administrations, undertakings owned jointly by public and private enterprises, private companies with more than a hundred employees, and workers in the railway, shipping, post and electricity industries.
- Three funds were established to finance the LI scheme. The Chief LI Fund was managed by the ACFTU, which financed the LI at the national level. The LI Fund was administered by the local and unit levels of trade unions for the

purpose of paying benefits, assistance and relief. The LI Buffer Fund collected the surpluses in the LI Fund to make up the deficit and provide social services that ACFTU deemed important for improving labourers' welfare (Whiteford 2003: 47).

- Benefits were provided for the non-working sick and injured, widowed, elderly and paid maternity leave, and social services were offered. The ACFTU could establish institutes to care for the disabled, elderly, sick and orphaned all disbursed from the LI Buffer Funds.
- The contribution rate was set at 3% of payroll and paid solely by employers. For the first three months, the whole contribution went to the Chief Fund, after which it was split with 30% going to the Chief Fund and 70% to LI Fund.
- The requirements for male and female workers were different. According to the regulations, male workers were entitled to a pension if they were over sixty years old and had served in the same unit for at least twenty-five years, whilst female employees had to be fifty years old with twenty years of service.
- Retirees were entitled to a full pension if they had worked for at least ten years. The replacement rate, which ranged between 35% and 60%, depended on one's seniority.

After the LI scheme was formally introduced in 1951, the government further extended its coverage, boosted the replacement rate and lowered the requirements for entitlement to a full pension in the amendment of 1953 in order to facilitate the First Five-Year Plan and the following planned economy programmes (The State Council 1953; Walker 1956: 169; Xinhua Monthly 1953). Moreover, the CCP won its conflict with the cadres of the ACFTU who had been resistant to CCP rule by issuing the Labour Insurance Card (Dixon 1981: 33 & 45-6). That is, the LI scheme turned into an instrument for manipulating and assimilating people's political ideologies and resulted in the embezzlement of the funds during the Cultural Revolution (Brugger 1981b: 73; Dixon 1981: 50; Walker 1956: 169). In 1958, the government further integrated the pensions for civil servants, servicemen, policemen and labourers into an isolated pension system. The key points of the revision are as follows (Ma 1957):

- The pensions for public servants and staff and workers in SOEs were integrated into a single system but private employees were excluded from this provision.

- The pooling of the pension funds was enlarged through extending the coverage without augmenting the contribution rate and jeopardising economic development.
- The retirement age of female cadres was raised to fifty-five, while that of male cadres and workers and female workers remained at sixty and fifty respectively.
- The requirement for pension entitlement was reduced from ten to five years of service in one work unit.
- The replacement rate ranged between 50% and 70% and depended on retirees' seniority in one unit. One would be entitled to 50% and 60% of replacement rate if five and ten years of seniority in one company were accumulated. She/He would be granted 70% after working in a unit for at least fifteen years.

As Yeh (2002), Salditt et al (2007: 16) and Williamson and Deitelbaum (2005: 259) note, the Chinese government proposed an amendment in 1966 suggesting that work units should be fully obligated to fund their own pension payments due to the disbandment of the ACFTU and the Ministry of Labour and the exhaustion of current pension funds. The coverage of pension provisions was then reduced because not every enterprise was capable of financing its own pension plan and the pension benefits were frequently in arrears (Takayama 2002: 3).

The development of social security programmes stagnated during the Cultural Revolution and was not reactivated until the launch of economic reforms in 1978. According to the pension reform of 1978, employers were still responsible for social security provisions. The main aspects of the pension reform of 1978 are as follows (The State Council 1978):

- Employees were entitled to pension payments either when they reached the statutory age of retirement or the minimum years of service in one work unit.
- The retirement age for both female cadres and workers was fifty-five, and that for male cadres and employees remained sixty years old.
- The entitlement to pension benefit was raised from five to ten years of consecutive service in the same work unit.
- The replacement rate was improved from between 50% and 70% to between 60% and 90%.

- Retirees' positions in previous work units could be inherited by one of their children if they had fallen into poverty after retirement.

In order to reduce the arrears of pension payments and enhance the stability and sustainability of social security systems, some provincial governments introduced unified provincial pension funds. These programmes were approved by the central government and launched in Guandong, Jiangsu and Liaoning from 1984. This was initial model of the unified social security fund the central government attempted to introduce from mid 1990s (Yeh 2002). The reform of 1986 focused on solving the financial issues by introducing mutual contribution and independent funds for social security and welfare expenditures (Chow 2002: 155). The contribution rates for employers and employees were 15% and 3% individually to the provincial unified social security fund. In addition, the government declared that the government would take ultimate responsibility for social security provisions. Therefore, the most importantly, employers were not the last resort of social security provisions anymore, and employees had to bear a part of the social security responsibility from then on (Ministry of Labour 1987; The State Council 1986).

In addition to the development of the pension scheme, due to the lack of social security programmes in rural areas, a rural social welfare system was gradually developed by communal governments from 1949. The content of the welfare payments depended on the ability of each commune, namely it was financed by the revenues of local production teams' productivities, therefore some established the basic Five-Protection scheme, including food, clothing, shelter, medical care and funeral expenses, and others extended to seven-, ten- or even sixteen-protection programmes. Eligible for benefits were those unable to work or to take care of themselves due to old age, disability, orphanage, weakness and infirmity, the so-called five-guaranteed status. Besides, because the entitlement of the benefits was decided by the communal governor and residents, applicants' political attitudes would be taken into consideration when reviewing their cases (Dixon 1981: 189-210). Although the Five-Protection schemes were generally established across rural areas from 1962, decisions about protection levels were left to local governments and the rules about resource distribution were not statutorily defined (Myrdal 1965: 162-3).

6.1.2 The Reform of Social Security Provisions between 1991 and 2000

In order to further improve the sustainability of the pension provisions, in 1991 the State Council suggested extending the coverage to all kinds of urban enterprises, including foreign companies, and proposed a multi-pillar framework to increase the

sources of retirement income. According to the proposal, the pension programme needed to consist of a basic pension scheme, an occupational pension plan and an individual savings programme, and the pension obligation should be borne by the state, employers and employees. Besides this, decentralisation of pension schemes was the main theme of this proposal. That is, the central government merely set up the basic rules and left the decision making of the combination of pillars, contribution rate and replacement rate to local governments (The State Council 1991). Because the proposal of 1991 was simply an outline, the notification of 1995 conveyed the details about the establishment of multi-pillar pension system. The content is summarised as follows (The State Council 1995a):

- A unified social security fund should be established, which was financed by a specific part of the contributions from urban employees and employers.
- The coverage was extended to all, both public and private, employees in urban regions.
- The retirement age remained at sixty (men) and fifty-five (women) years old.
- The first pension plan consisted of an individual account scheme only, which was financed by employees (the rate was 3% of the insured wage in the first year then increased by 1% every two years up to 8%) and employers (the rate was 20% of the local average wage, 16% and 4% going to employees' individual accounts and the unified social security fund respectively) contributions. The payment level was determined by the account balance divided by life expectancy, which was fixed at 120, i.e. ten years of retirement life. That is, retirees who lived longer than ten years could continuously receive the monthly payment, which was disbursed from the unified social security fund; while the dependents of those pensioners who lived less than ten years could receive the rest of the balance. The monthly pension benefit was awarded to those who accumulated fifteen years of seniority or worked ten straight years in one work unit; other retirees could receive a lump sum payment equal to her/his account balance.
- The second plan combined a defined-benefit pension scheme and an individual account system, and both the contribution rate for employers and employees and the replacement rate were decided by local governments. Ten years of contribution was the minimum requirement of being entitled to monthly pension payment, otherwise the lump sum payment would be the only option. The defined-benefit pension provisions consisted of two parts: social pension benefit

and contributive pension benefit. The replacement rate of the social pension benefit ranged between 20% and 25%, while that of the contributive pension benefit was between 1% and 1.4% for each year of contribution. The payment from the individual account scheme could be lump sum or monthly depending on retirees' preferences.

Some breakthroughs were achieved by the reform of 1995. The coverage of the system was extended and the mobility of the labour force was improved by including employees of private sector in the pension provisions and allowing accumulated seniorities to be transferred when shifting jobs (Piggott and Lu 2007: 6). This in turn helped enhance financial viability and adapt the system to the more competitive labour market after the economic reforms. In addition, the introduction of multi-pillar pension provisions enriched the sources of retirement income and helped boost the adequacy and sustainability of the pension system (Ministry of Labour and Social Security 1995).

As for the pension system in rural areas, the reform of 1992 was introduced to cover what amounted to over half of the Chinese population, who were still without a pension scheme guaranteeing retirement income (Ministry of Civil Affairs 1992; The State Council 1995b). The details of the rural pension scheme are as follows:

- People who were between twenty and sixty years old and were workers and staff in rural enterprises, faculty in private schools, and managerial personnel, staff and workers hired by local governments could voluntarily participate in this programme.
- The contribution was not related to earnings. As the regulations indicated, the amount of contribution ranged from 2 to 20 Renminbi (RMB) which depended on the level that a participant could afford. In addition, the contribution went to an individual account.
- The 120 rule applied to the calculation of payment levels for the rural pension scheme. That is, the benefit level was decided by the account balance divided by 120, which assumed the life expectancy of retirees was ten years on average. The local government would continue paying the benefits if one lived longer than ten years, while the dependents of those pensioners who died within ten years of retirement would receive the rest of the account balance.

Although the reform of 1995 made great progress with the introduction of the multi-pillar model, as Hu (2006: 13) observes the reform of 1997 was more important. This was because some international organisations, such as the World Bank, the Asian Development Bank (ADB) and the International Labour Organisation (ILO), played important roles through providing technical and financial support to China's pension reforms from the mid 1990s (Goto 2006; Oh 2004; Piggott and Lu 2007: 13-4; Qian 2001; Qian 2002; Qian 2005; World Bank 1997).

The framework of the 1997 reform was partly based on a World Bank report, proposed by a consulting group headed by Dr. Agarwala. This report suggested a three-pillar system for China's urban employees consisting of a compulsory defined-benefit (DB) pension provision, a mandatory individual account (IA) pillar and a voluntary supplement pension plan. The DB pension pillar, which would replace up to 24% of the local average wage, was financed solely by employers' contributions and disbursed from the unified social security fund. This pillar was also characterised by its redistributiveness, namely the low-wage earners were awarded a higher replacement rate than that of their high-income counterparts. The IA scheme would be contributed fifty-fifty by employers and employees and, the assumed 8% of contribution rate replace up to 36% of the last drawn wage (World Bank 1997: 44-5). The Chinese government's version of three-pillar model was slightly different from that which Agarwala envisaged. The contents of the reform are as follows (The State Council 1997a):

- It restated the intention to unify the social security fund by 2000.
- The new pension system consisted of a DB pension programme and an IA scheme and covered the whole of the urban workforce, but the arrangement of the contribution rate was different. That is, employers and employees would mutually contribute to the DB pension provision and IA scheme. The level of the contribution rate was left to local governments, but the rates for employers and employees were at least 20% and 8% respectively.
- People engaged in urban employment for more than fifteen years were entitled to monthly payments from both the DB pension scheme and IA balance. The replacement rate for the DB pension provision was 20% of the average local wage, while the benefit level of the IA scheme was determined by the aforementioned 120 rule. Retirees whose seniorities were less than fifteen years were not entitled to the DB pension payment, and could only claim lump-sum payment from the IA scheme.

In addition to the pension reform in 1997, the government announced the implementation of the Minimum Living Standard Scheme (MLSS) in urban areas in order to complete the social security net, reduce urban poverty and enhance economic development. The pilot programme was introduced in Shanghai from 1993 and six other cities implemented this scheme from mid-1995. By July 1997, the coverage extended to 206 cities. With the endorsement of the State Council, the coverage grew swiftly after it was promulgated in 1997 (Chen and Hou 2008). This scheme covered those who were unable to work, unemployed, alone and helpless as well as those who were recipients of social security provisions but the payment level was lower than the cost of living. Moreover, the benefit level and payment adjustments of the MLSS were based on local living standards and price and wage levels (The State Council 1997b). The regulation of the MLSS was declared by the State Council on 28th September 1999 and was put into practice from 1st October the same year (The State Council 1999). The MLSS in rural areas was implemented from 2007, and the regulations resembled the urban MLSS (The State Council 2007). The main aspects of the MLSS are as follows:

- With regard to human rights, the State Council announced that people should be entitled to the benefits if the per capita income of a household is lower than the local cost of living.
- The MLSS was financed by local governments' specific budgetary programmes and the Ministry of Civil Affairs was in charge of the management as a whole.
- The local living standard was determined on the basis of the subsistence level of expenditures on cloth, food, accommodation, water, electricity and gas bills and tuition fees for youngsters. It was then adjusted according to changes in the local wage level and price index.
- People who were unable to work, unemployed, ageing, alone and helpless or not economically active and not receiving social provisions could claim the full amount of payment; while those who were beneficiaries of social provisions but at a level lower than the living standard threshold could receive the difference between the level of the living standard and her/his benefits. The payments were mostly in cash and issued monthly.
- Local governments and street offices were in charge of examining the applications. Recipients' names and households should be published, and anyone could inform local governments if any recipient was thought to be improperly

claiming.

6.1.3 The Implementation of Pension Reform from 2000 to the Present

Because the State Council gradually realised the great inter- and intra-provincial difference of urban areas and the central government lacked resources or the ability to deal with it in a short time when attempting to introduce the reformed pension policy and the MLSS programmes to every corner of urban areas in the late 1990s, the government postponed integrating the pension programmes and turned to launching experimental projects in certain provinces instead (Shi 2009: 12). That is, it was decided that it might be easier to unify the pension systems after the individual pension provisions were established and well developed. For this sake, the reform of 2000 encouraged provincial governments to implement experimental pension schemes. This reform modified the three-pillar system proposed by the reform of 1997 as well as increased the replacement rate of the DB pension scheme. The main differences between the reform of 1997 and 2000 are as follows (The State Council 2000):

- Employers and employees no longer mutually contributed to both the DB pension programme and IA scheme. Rather, the contributions from employers and employees would finance the DB pension scheme and IA programme respectively. The contribution rate remained at 20% (employer) and 8% (employee).
- The replacement rate for the DB pension scheme was boosted from 20% to 30% of the local average wage.

As discussed above, the World Bank's proposal in 1997 was accepted by the Chinese government and modified in 1997 and 2000 to fit China's territorial characteristics and then put it into practice. The experiment in Liaoning province was one of the most important cases not only because it carried out the World Bank's suggestions, but also as it was a rustbelt area that had a faster growing elderly population, lower pension reform compliance rate and higher deficits of pension provisions compared to other provinces in China (World Bank 2006: 14-7). The main differences between the Liaoning programme and the reform of 2000 are as follows:

- The Liaoning programme specified the retirement age for male workers and cadres as sixty years old and for female cadres and workers as fifty-five and fifty years old respectively, which was not mentioned in the reform of 2000.
- The replacement rate of the DB pension scheme was 20% of the average local wage for those who just made the fifteen-year rule. Retirees would receive an additional 0.6% for every year of contribution after meeting the fifteen-year rule. Moreover, there was no cap on the replacement rate.

Along with experimental programmes in some provinces from 2000, a unified social security fund was established at the same time. This fund, named the National Social Security Fund, was derived from four sources: the Enterprise Workers and Staff Old Age Insurance Fund, Unemployment Insurance Fund, City and Township Medical Insurance Fund, and SOEs' Unemployed Basic Living Standard and Re-Employment Fund. It was financed not only by insurance premiums but also by the central government budget, the sale of SOEs' securities, national lottery, and investment revenues (The Ministry of Labour and Social Security 2001b). A computing programme was developed by the government in order to monitor the use of the fund and reduce embezzlement. It is true that some provinces with large social security fund surpluses preferred not to take a part in the unified fund because it was an important financial source for funding local development. It is also true that richer provinces perceived the unified pension fund as potentially detrimental to their social security provisions because the nature of the pooling fund meant assisting poorer provinces with their surpluses. If the progress was irresistible, then the provincial or municipal governments would minimise the surplus they had achieved by reducing contribution rates, encouraging early retirement and increasing benefit levels (Zhao and Xu 2002: 9-12).

The State Council (2005) issued a circular to reiterate its decision on pension policy for urban employees in 2005, which was based on the reform of 2000 and the Liaoning programme, and ordered every level of government to comply with it. The details of the current pension scheme are as follows:

- The requirement for being entitled to periodical pension benefits was at least fifteen years of urban employment. People who did not meet this condition could only receive lump sum payments from the IA scheme and were not eligible for the DB pension payment.

- Employers and employees' contributions went to the DB pension scheme and IA scheme respectively, and the contribution rates were 20% and 8%.
- The retirement age for male labourers and cadres was sixty, and that for female cadres and workers was fifty-five and fifty years respectively.
- Workers were awarded 1% of replacement rate for every year of contribution, and no ceiling was placed on this.
- The benefit level of the IA scheme was determined by the 120 rule. The payment would be continued if one lived longer than ten years after retirement and was disbursed by the National Social Security Fund.

Aside from the decision on pension policy, the State Council passed a regulation about setting up Five-Protection scheme in rural areas in 2006. As discussed above, the Five-Protection programmes were established by local governments from around 1962 to provide social security benefits in rural areas, therefore the content of payment as well as the payment level and conditions for qualification were not unified. The framework of the announced regulation in 2006 remained similar to the ones that had been implemented in rural areas. It stated that local governments should provide food, clothing, shelter, medical care and funeral expenses to those who were aged, disabled or younger than sixteen years old and in the Three-Have-Not status, namely without the ability to work, a source of income or economically active persons to depend on. This scheme was financed by the revenue earned by local production teams and local governments were authorised to set and modify the level of benefit, which was no less than the average local living standard (The State Council 2006).

6.2. Evaluation of the System

The evaluation of China's retirement payment programme will start by reviewing elderly persons' sources of income, in order to portray the main resources available in urban and rural areas; then each important composition of retirees' income will be discussed. In the following section, the family support system, pension provisions in urban and rural, employment status, the provisions of the Minimum Living Standard Schemes (MLSS) and Five-Protection system, and the evaluation of poverty rate will be discussed.

6.2.1 Sources of Income

Some research has been conducted on income components and how they have changed in urban and rural China (Benjamin, et al. 2008; Hao 1997, cited in Chen and

Fu 2009; Chen 2005; Gustafsson and Li 1997; Luo 2009; Ravallion and Chen 1999; Tian, et al. 2003; Uchimura 2005; NBS 2002, cited in UNFPA 2007). Among these studies, Hao's research and the surveys executed by the National Bureau of Statistics (NBS) in 2000 and 2005 concentrated on elderly persons' income maintenance.

Hao's work conveyed the findings collected from 20,083 elderly respondents in urban and rural China in 1997. It illustrated elderly persons' sources of income rather than the main resources of income maintenance thus the sum of the percentage was not a hundred. As Table 6.1 shows, 92.6% and 90.1% of urban male elderly persons received pension benefits and state assistance respectively in 1997, and the figures for their female counterparts in the same year were 54.5% and 75.6%. Besides, over half (55.8%) of non-working female people were supported by children, while 36.5% of male respondents in urban areas reported receiving help from children. In rural regions, 64.5% and 80.5% of male and female respondents relied upon family support, and assistance from the community was the second most important source of income for both male (24.5%) and female (27.3%) retirees. In addition, slightly more than one-tenth of rural female respondents reported receiving help from relatives and the state and a mere 0.7% of respondents participated in the rural pension plan. As for the male elderly in rural China, around one-fifth received assistance from the state and slightly more than one-tenth were supported by relatives and entitled to pension benefits in 1997.

Sources of Income	Urban		Rural		Total
	Men	Women	Men	Women	
Retirement pensions	92.6	54.5	11.3	0.7	38.8
Assistance from children	36.5	55.8	64.5	80.5	59.9
Assistance from other relatives	2.4	4.7	11.0	13.2	7.9
Assistance from the community	1.0	2.0	24.5	27.3	13.9
Assistance from the state	90.1	75.6	21.0	10.6	48.5
Others	4.7	4.1	2.6	1.2	3.1

Note: All the numbers are in percentage.
Sources: Hao (1997: 209, Table 3; cited from Chen and Fu 2009: 40, Table 3.1).

The survey of 2000 organised by the NBS involved about 8.58 million of the non-working elderly population and concluded that in urban areas, as Table 6.2 shows, the retirement payment scheme (56.2%) and family support (38.8%) were their most important source of income in 2000, while family support constituted 86.2% of elderly income in rural areas and the retirement pension a mere 8.2%. In addition, respondents in both urban and rural areas indicated that social allowance was the third important source of income, but its importance was just 3% and 2% respectively. Property incomes and insurance policies composed on average less than 1% of elderly

persons' income.

Table 6.2 Non-working Elderly People's Composition of Income (2000)			
Source of Income	Total	Urban	Rural
Retirement Payment	29.3	56.2	8.2
Social Allowance	2.4	3.0	2.0
Family Members	65.4	38.8	86.2
Property Incomes	0.3	0.4	0.2
Insurance	0.0	0.1	0.1
Miscellaneous	2.6	1.6	3.4
Total*	100.0	100.1	100.1
Note: The numbers are in percentages and elderly persons are defined as persons sixty and over. * Because all the numbers are rounded up, the sum of the percentage may exceed 100%. Source: National Bureau of Statistics (2002; cited from UNFPA 2007: 46, Table 51).			

Table 6.3 shows the most important sources of income in old age in 2005. The findings indicate that, for the general elderly population in China, family support (47.0%), wages (27.5%) and retirement income (21.7%) were older people's most important sources of income. However, due to the different pension policies in urban and rural China, rural ageing residents relied more on family support (53.2%) than their urban counterparts (29.5%). Because the pension system was relatively well developed in urban areas, 57.6% of the old age respondents in urban regions reported pension benefits were the most important source, which was markedly higher than for rural elderly persons (8.9%). In addition, the survey showed that more than one-third of rural older persons (34.1%) reported employment earnings as most important, while in urban areas the figure was a mere 9.0%.

Table 6.3 Elderly Chinese People's Most Important Source of Income (2005)			
Source of Income	Total	Urban	Rural
Employment Income	27.5	9.0	34.1
Retirement Payments	21.7	57.6	8.9
Family Support	47.0	29.5	53.2
MLSS Benefits	1.8	2.0	1.7
Property Income	0.3	0.6	0.2
Unemployment Payments	0.1	0.2	0.1
Others	1.7	1.2	1.9
Total*	100.1	100.1	100.1
Note: The numbers are in percentages and "elderly" is defined as people over sixty in 2005. This survey was done by the NBS and involved 17.05 million people in China, which was about 1.31% of total population, and the number of elderly respondents was about 2.2 million. * Because all the numbers are rounded up, the sum of percentages may exceed 100%. Source: The numbers are computed from the survey data of 2005 provided by the National Bureau of Statistics (NBS) (http://www.stats.gov.cn/tjsj/ndsj/renkou/2005/renkou.htm). [accessed: 05.01.2010]			

These three studies indicate that, in urban areas after 2000, the income from pension

benefits was more important than family support; while in rural areas, they not only show that the relative importance of these two elements was reversed, but also that rural elderly people were heavily reliant on family support because the poor coverage of the rural pension scheme and MLSS. As for family support, Cai et al (2006: 2249) indicate that, in urban regions, a one RMB reduction in retirees' income will typically result in a 0.26 RMB increase of monetary support from family members. They go on to state that this transfer behaviour is not based on altruism but gratitude and a sense of obligation, an exchange for parents' contributions in childhood. The survey of 2005 also illustrated that employment income was still an important source for the over sixties in rural areas. Therefore, pension provisions, family support and employment income will be discussed in the following sections. In addition, although the abovementioned research indicates that the income from social assistance programmes such as MLSS and Five-Protection scheme was not significant, they were in fact the provisions that the government concentrated on. For this reason, the MLSS in urban and rural and the rural Five-Protection scheme will be discussed as well. It is worth noting that personal savings in China may be an important resource for the elderly due to the fact that the savings rate was 40% in 2000 but it might have declined slightly since then (Peng 2008: 683) and personal savings may have been partially replaced by the contributions to the compulsory fully-funded pension scheme (Ang 2009: 1354-5). Nevertheless, the effect of personal and household deposits will not be discussed in the following sections because of insufficient information about savings at the personal and household level.

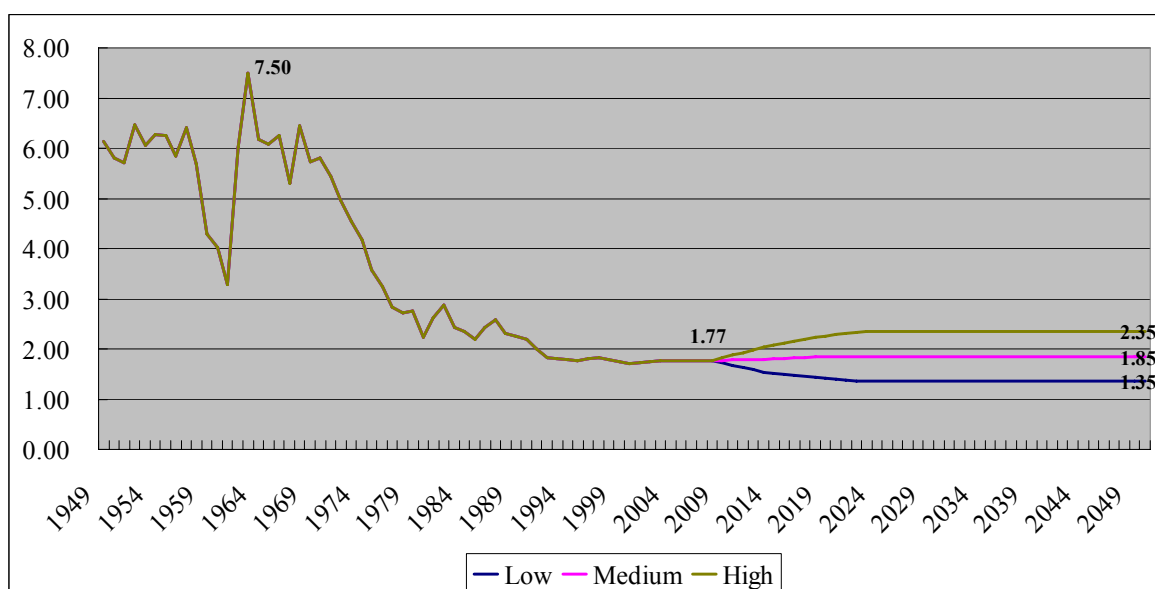
6.2.2 Family Support System

As Cai et al (2006) point out, inter-familial transfer plays an important role in reducing retirees' income insecurity. Lowry's (2009: 17) research further finds that, in rural areas, more than half of the retired expected financial supports from their sons (76.7%) and daughter-in-law (60.0%). To some extent this was due to the lack of social security provisions in rural areas but these researchers also believe that the economically active may have benefitted from economic development and therefore be in a better position to support their elderly parents. Although urban workers are entitled to retirement provisions when they attend retirement age, those who are not employed, the self-employed and unemployed are not covered by social security schemes and may rely on working household members. Therefore, demographic transition becomes the key to knowing whether the family support system will be sustained or not.

The total fertility rate (TFR) in China fluctuated at about 6.00 before 1958 then dropped drastically because of a famine between 1958 and 1961. The TFR reached an

all-time high of 7.50 between 1949 and 2050 due to the decrease of mortality rate and prolongation of life expectancy (Ji 2003: 11) then fell to 5.81 in 1970 because of turmoil caused by the Red Guard during the Cultural Revolution (Jackson and Howe 2004: 8). Since that time the TFR has not returned to its previous level and declined to 2.75 in 1979 because of the growing number of women using contraception, then dropped further to 1.70 in 2000 under the implementation of the One-Child Policy. Although the TFR went up slightly in the early twenty-first century due to the Chinese government softening its family policies, according to the United Nations, this shows that the TFR will return to replacement level only if the Chinese government adopts very childbirth-friendly family policies (Figure 6.1).

Figure 6.1 Total Fertility Rate of China (1949-2050)



Source: The TFR between 1949 and 1989 is derived from the Chinese Population Development and Research Centre (CPDRC) (<http://www.cpirc.org.cn/en/year.htm>) [accessed: 30 November 2009], the TFR between 1990 and 2000 are derived from Goodkind (2004: Table A1), and the number from 2001 is derived and, from 2008, estimated by the United Nations (Population Division of the Department of Economics and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2008 Revision*, <http://esa.un.org/unpp>. [access: 5 December 2009]).

The dependency ratio provides further clues about the sustainability of the Chinese family support system. The DP1 in Table 6.4 stands for the number of economically active to one elderly person between 1950 and 2050 in three scenarios, namely a low, constant and high fertility rate, while the DP2 is defined as the number of gainfully employed to one dependent i.e. people aged less than fourteen and over sixty-five. The DP1 illustrates that, for all scenarios, the ratio will fall constantly from 13.8 in 1950 to 6.0 in 2020 then decrease further to 2.3, 2.6 and 2.9 according to low, constant and high forecasted fertility rates in 2050. That is, in 2050, there will be less than three economically active persons to support one ageing person. As for the DP2

in Table 6.4, it shows that the ratio will peak around 2010 then decline to between 1.5 and 1.7 with regard to different plans of demographic development. In other words, the projections indicate that the number of working will decline from about 2010 as the ratio goes down due to the increase of the ageing population and slow growth of younger generations.

Table 6.4 Dependency Ratio of China (1950-2050)						
Year	Low		Constant		High	
	DP1	DP2	DP1	DP2	DP1	DP2
1950	13.8	1.6	13.8	1.6	13.8	1.6
1960	11.6	1.3	11.6	1.3	11.6	1.3
1970	13.0	1.3	13.0	1.3	13.0	1.3
1980	12.6	1.5	12.6	1.5	12.6	1.5
1990	12.0	2.0	12.0	2.0	12.0	2.0
2000	10.0	2.1	10.0	2.1	10.0	2.1
2010	8.7	2.6	8.7	2.6	8.7	2.6
2020	6.0	2.5	6.0	2.5	6.0	2.5
2030	4.2	2.3	4.2	2.1	4.3	1.8
2040	2.7	1.8	2.9	1.7	3.1	1.6
2050	2.3	1.7	2.6	1.6	2.9	1.5

Notes: * DP1 = population 15-64 / 65+ population
** DP2 = population aged 15-64 / (0-14 aged population + 65+ population)
Source: Population Division of the Department of Economics and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2008 Revision*, <http://esa.un.org/unpp>. [access: 5 December 2009]

Both the TFR and dependency ratio illustrate that returning to replacements level of fertility in China is not likely in the coming decades and the dependency ratio for the ageing population may be markedly aggravated from 2010. From the family policy viewpoint, the promotion of contraceptive methods in the early 1970s and the One-Child Policy from the late 1970s are the measures that helped to significantly reduce the fertility rate in China in the second half of the twentieth century.

The One-Child Policy is the central tenet of family planning in China. It was first promoted during the mid-1970s and formally introduced in 1979 in order to reduce the birth rate, each married couple being allowed to have one child at most in urban and rural areas. The Marriage Law and the constitution of China were amended to enforce this rule in 1980 and 1982 respectively. According to the amendments, people are obligated to abide by the regulations of family planning, namely the One-Child Policy (Hom 1991: 264-7). Although it seemed to work in the early years, non-compliance particularly in rural areas incurred the government's attention and urged the country as a whole to enforce this family planning programme from 1989. According to the Policy, women were, in urban areas particularly, coerced to install IUDs (intrauterine devices) soon after childbirth as well as to undertake regular

ultrasonic checkups to make sure they were not pregnant. Unplanned pregnancies, according to the Policy, had to be aborted compulsorily (Kaufman, et al. 2006: 17). Chinese officials attributed the decrease of the TFR in the early 1990s to the success of the One-Child Policy and the application of contraception, abortion and IUDs. Nevertheless, some population studies have indicated that the statistics may be biased due to their limited coverage of the population, the household registration system and migrant workers as well as the distortion of the statistical system and underreport of childbirth (Cai 2008: 276-7; Gu, et al. 2007; Klasen and Wink 2002: 302-3; Lively and Freedman 1990; Li and Cooney 1993; Population Council 1993; Wang and Mason 2008: 156-7; Yan 2003; Yang and Chen 2004). Regarding this, some academic researches have found that local governments may underreport newborn babies by as much as 37.28% (Zeng 1996: 29-33) to cover up their failure to enforce the Policy and make their regions seem relatively more prosperous and developed (Cai 2008; Feeney and Yuan 1994; Zeng 1996). Goodkind (2004: 293) even asserts that the number of newborn babies in 1992 census triples if underreported babies are counted.

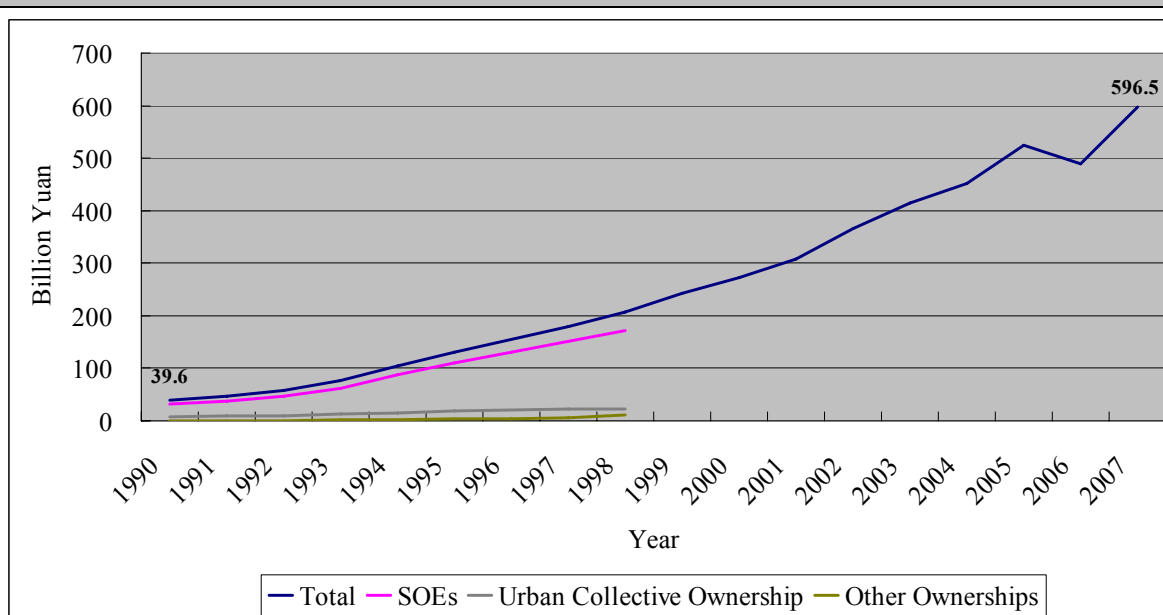
Some scholars observe that the One-Child Policy may not last long in the 21st century because the TFR has fallen far below the replacement level, economic reforms have opened up a new environment and government birth controls are no longer coercive (Gu, et al. 2007: 144; Kaufman, et al. 2006: 17-8; Wang 2005: 8-9). Nevertheless, the legacy of the One-Child Policy remains, along with other factors difficult to control from a family planning perspective (Zhang and Zhao 2006: 316). For one thing, the fertility rate in urban areas has always been lower than it is rural areas, which is closely related to urbanisation. It is true that the economic reforms from 1978 accelerated the level of urbanisation and gradually changed people's ideas about childbearing and marriage, which were also influenced by women's increased social, economic and educational status under Mao's rule. At that time, most women were in jobs and found that they in effect did not have enough time and energy to have more than one kid (Nie and Wyman 2005: 332-3). This atmosphere has prevailed in urban areas since that time and has cemented in minds of the younger generations (Cooney and Li 1994). As McDonald's (2008: 21) work illustrates, in Shanghai, for example, this effect resulted in a very low TFR of 0.60 childbirths per woman of child-bearing age in 2005. It should be noted that, as Lutz et al (2006: 173-7) propose, falling below 1.5 TFR means being dragged into a low-fertility trap that is not easy to get out of in the short-run due to youngsters in urban areas imitating their parents and further reducing the birth rate. For another thing, Logan et al (1998: 879) observe the diminishing of filial piety in urban areas and argue that the One-Child Policy was closely related to the alteration of younger people's behaviour in marriage, family support and living arrangements as the only child of both families. To a great extent,

this means either set of parents may end up living alone and hence have to prepare their own source of income for retirement. Yet another thing is that, because of the One-Child Policy, the excessive protection and lack of love from parents, couples, and siblings and cousins may result in the imperfection of children’s personality. Ye states that it “is a serious handicap to their nature and may lead to personality flaws” (Shanghai Daily 2007).

6.2.3 Urban and Rural Pension Provisions

As mentioned above, the original social security fund was embezzled at the beginning of the Cultural Revolution, thus every firm had to accumulate its own pension fund until the National Social Security Fund was established. As shown in Figure 6.2, pension benefits paid to people retired from SOEs constituted around 85% of the total amount, which vividly describes SOEs’ pension burden. The amount of pension expenditures grew alarmingly from 39.6 billion RMB to 596.5 billion RMB between 1990 and 2007 and this also depicts the crisis of the pension system. The point is that SOEs’ profits have decreased year after year since the economic reform in the late 1970s and as a result their pension schemes are under-funded. This was the reason many pensioners retired from SOEs around the nation reported retirement payment and payroll arrears (Giles, et al. 2006: 77-8; Lee 2005: 11). Although the government ordered the integration of municipal and provincial pensions into a centralised system and promised to clear the arrears, Lee reports that the fund remained short of funds.

Figure 6.2 The Expenditures on Pension Provisions (1990-2007)



Notes: The expenditure includes the payments to Terminations, Retirees and Resignations. All the numbers are in billion RMB.

Source: The numbers are from both China Statistical Yearbook (The National Bureau of Statistics of China 2006; 2007; 2008) and China Labour Statistical Yearbook (The Ministry of Labour and Social Security 2000).

The coverage and dependency ratio of a pension programme can not only illustrate its popularity, but also provides an approximation of its sustainability and the sturdiness of its finances. Table 6.5 depicts that the coverage of the basic pension system grew from 33.5% to 51.7% between 1989 and 2007. Despite the government indicating that employers in urban areas should register all of their employees with the basic pension scheme, the compliance rate still seemed to be low by 2007. In addition, because of the prolongation of life expectancy and the low retirement age in China, the number of retirees increased faster than number of the insured workers between 1989 and 2007, therefore the dependency ratio of the system dropped significantly from 5.4 active members to one pensioner in 1989 to 3.1 working members supporting one retiree in 2007. Although the ratio seemed to be stable at about 3.0, the baby boomers of the 1950s and 1960s are going to retire in the 2010s and may greatly aggravate the ratio.

Table 6.5 Coverage of the Urban Basic Pension Provision (1989-2007)					
Year	Employed	Insured Workers	Retirees	Insured to Employed (%)	Contributor to Pensioner (%)
1989	143.9	48.2	8.9	33.5	5.4
1990	170.4	52.0	9.7	30.5	5.4
1991	174.7	56.5	10.9	32.4	5.2
1992	178.6	77.8	16.8	43.5	4.6
1993	182.6	80.1	18.4	43.9	4.4
1994	186.5	84.9	20.8	45.5	4.1
1995	190.4	87.4	22.4	45.9	3.9
1996	199.2	87.6	23.6	44.0	3.7
1997	207.8	86.7	25.3	41.7	3.4
1998	216.2	84.8	27.3	39.2	3.1
1999	224.1	95.0	29.8	42.4	3.2
2000	231.5	104.5	31.7	45.1	3.3
2001	239.4	108.0	33.8	45.1	3.2
2002	247.8	111.3	36.1	44.9	3.1
2003	256.4	116.5	38.6	45.4	3.0
2004	264.8	122.5	41.0	46.3	3.0
2005	273.3	131.2	43.7	48.0	3.0
2006	283.1	141.3	46.4	49.9	3.0
2007	293.5	151.8	49.5	51.7	3.1

Notes: * The numbers of population are in millions.
 ** Dependency Ratio = (Insured Workers) / (Total Beneficiaries)
 Source: The numbers are derived and calculated from China Statistical Yearbook(The National Bureau of Statistics of China 2008) and the Ministry of Labour and Social Security (2001a; 2005).

The replacement rate of a retirement payment scheme is an important perspective from which to observe the level of pre-retirement living standards that a pensioner can maintain. Table 6.6 not only demonstrates the replacement rate of the urban pension scheme, but also weights the average benefit level between 1990 and 2004 in Purchasing Power Parity (PPP) terms. It illustrates that the replacement rate dropped

from 82.2% (1990) to 61.0% (2004) and the nominal benefit level increased from 1,760 to 9,715 RMB during this period. Under the suggestion of the International Labour Organisation (ILO) regarding the sufficiency of pension payments (45%), China's urban pension scheme seemed to be higher than the criteria. Moreover, the average benefit level after PPP is another index to compare the affluence of pension benefit. It showed that the average level of annual benefit increased by more than three times from 858 to 2,855 USD between 1990 and 2004.

Year	Average Wage in Urban Area (RMB)	Average Benefit (RMB)	PPP Conversion Rate (RMB/USD)*	Average Benefit after PPP (USD)	Replacement Rate (%)
1990	2,140	1,760	2.051	858	82.2%
1991	2,340	1,975	2.116	933	84.4%
1992	2,711	2,300	2.238	1,028	84.8%
1993	3,371	2,824	2.520	1,121	83.8%
1994	4,538	3,656	2.977	1,228	80.6%
1995	5,348	4,335	3.316	1,307	81.1%
1996	5,980	4,923	3.463	1,422	82.3%
1997	6,444	5,458	3.455	1,580	84.7%
1998	7,446	5,972	3.387	1,763	80.2%
1999	8,319	6,614	3.296	2,007	79.5%
2000	9,333	7,190	3.293	2,183	77.0%
2001	10,834	7,784	3.286	2,369	71.8%
2002	12,373	8,881	3.252	2,731	71.8%
2003	13,969	9,407	3.267	2,879	67.3%
2004	15,920	9,715	3.403	2,855	61.0%

Notes: Replacement rate = (Benefit Level) / (Average Wage)
* The PPP is based on current price.
Source: The numbers are computed from the data provided by Ministry of Labour and Social Security (2002; 2003; 2005), the National Bureau of Statistics of China (2006; 2008), and the IMF World Economic Outlook Database, October 2009
(<http://www.imf.org/external/pubs/ft/weo/2009/02/weodata/index.aspx>) [accessed: 03.01.2010].

The pension plan for rural workers was launched in 1992 but its coverage and popularity have remained low since the onset, due to the fact that the system is based on voluntary participation, the assumed replacement rate is low and people tend to earn incomes from the activities they undertook to make a living even after attaining retirement age (Benjamin, et al. 2003; Pang, et al. 2004). Table 6.7 shows that the rural pension scheme is not as popular as its urban counterparts and coverage of the current working population has fallen slightly, to around one-tenth. As for the dependency ratio of the system, the figures demonstrate that the ratio rapidly decreased from 54.5 contributors to one pensioner in 2001 to 13.3 in 2007. The decrease of insured workers and the increase of retirees caused a sharp reduction of the dependency ratio between 2001 and 2007.

Table 6.7 The Coverage Rate of the Rural Retirement Payment Scheme (2001-2007)

Year	(a)	(b)	(c)	(d)	(e)
	Insured Workers	Employed	Retirees	Insured to Employed	Contributor to Pensioner
2001	60.0	490.9	1.1	12.2%	54.5
2002	54.6	489.6	1.2	11.2%	45.5
2003	54.3	487.9	2.0	11.1%	27.2
2004	53.8	487.2	2.1	11.0%	25.6
2005	54.4	484.9	3.0	11.2%	18.1
2006	53.7	480.9	3.6	11.2%	14.9
2007	51.7	476.4	3.9	10.9%	13.3

Notes: * The numbers in column (a) to (c) are in million persons.

** (d) = (a) / (b)

*** (e) = (a) / (c)

Source: The data are from the National Bureau of Statistics of China (2008) and the Ministry of Labour and Social Security (2002; 2003; 2004; 2005).

Because the total amounts of payments before 2004 were not available, the replacement rate between 2005 and 2007 was computed according to the total pension payment, number of retirees and average annual wage. The results were that the replacement rate of the rural pension system increased from 21.5% to 24.8% from 2005 to 2007 (Table 6.8). It may also be important that the payment level in rural areas was less than one-tenth comparing to the level of rural pension scheme in 2005 (700.0 RMB or 203.0 USD) with that of the urban basic pension plan in 2004 (9,715 RMB or 2,855 USD) in the last row of Table 6.6.

Table 6.8 Average Payment and Replacement Rate of Rural Pension Provision (2005-2007)

Year	Total Payment	Avg. Annual Payment	Avg. Annual Wage	PPP Conversion Rate (RMB/USD)	Avg. Annual Payment after PPP	Replacement Rate
2005	2.1	700.0	3,254.9	3.448	203.0	21.5%
2006	3.0	833.3	3,587.0	3.460	240.8	23.2%
2007	4.0	1,025.6	4,140.4	3.614	283.8	24.8%

Note: The total and average payments are in billion RMB and RMB respectively.

Source: The numbers are derived from the Ministry of Labour and Social Security Statistical Bulletin (http://w1.mohrss.gov.cn/gb/zwxx/node_5436.htm) [accessed: 07 December 2009] and the National Bureau of Statistics of China (2006; 2007; 2008).

Table 6.9 displays the proportions of the ageing population covered by urban and rural pension schemes. This computation was accomplished by applying the constitution of ageing population by sex between 2001 and 2007 as well as taking the difference of retirement age of male (sixty for both cadres and workers) and female (fifty-five for cadres and fifty for workers) employees into account. Because the exact numbers of the age- and sex-specified population were not surveyed every year, the number in 2001 was derived from the population census while the rest were estimated from the 1% population survey each year. The results show that, in urban areas, elderly men

and women constituted 3.0% and 4.5% of urban male and female residents respectively in 2007, while the numbers were 3.7% and 5.5% for the rural counterparts. The ratio of pensioners to ageing population in urban and rural areas can therefore be evaluated. The findings are that the pension systems in urban and rural regions covered 49.9% and 3.2% of elderly people in 2007 respectively, and that pensioners as a whole constituted less than one-fourth (24.2%) of the national ageing population. These figures can be compared with the results illustrated in Table 6.2 and 6.3, which showed that whereas 56.2% and 57.6% of urban elderly people responded pension benefit was an important source of retirement income in 2000 and 2005 respectively, just 8.2% and 8.9% of their rural counterparts reported this. Besides, thinking of the bias that surveys and the evaluation in Table 6.9 may cause, basically, these two sets of studies imply that pension payment is an important source of retirement income for those who receive it, and, specifically, it has a strong de-familial effect. That is, when taking urban areas as a group in which half of the population enjoys pension provisions and rural regions as the ones where the pension scheme barely exists, then the importance of family support increased from 38.8% to 86.2% in 2000 (Table 6.2) and from 29.5% to 53.2% in 2005 (Table 6.3). The consideration of employment income in 2005 survey may partly cause the smaller effect of de-familialisation than in the 2000 survey.

Year	Urban Pensioners	Rural Pensioners	Total Population	Urban** (%)		Rural** (%)		Coverage (%) ***		
				Male	Female	Male	Female	Total	Urban	Rural
2001	33.8	1.1	1,276.3	1.9	2.7	3.2	4.5	22.3	57.4	1.1
2002	36.1	1.2	1,284.5	-	-	-	-	-	-	-
2003	38.6	2.0	1,292.3	2.4	3.4	3.5	5.0	21.8	51.2	1.8
2004	41.0	2.1	1,299.9	2.5	3.6	3.5	5.1	22.4	51.1	1.9
2005	43.7	3.0	1,307.6	2.7	3.3	3.6	4.3	25.5	55.6	2.9
2006	46.4	3.6	1,314.5	2.9	4.2	3.7	5.4	23.6	49.9	3.0
2007	49.5	3.9	1,321.3	3.0	4.5	3.7	5.5	24.2	49.9	3.2

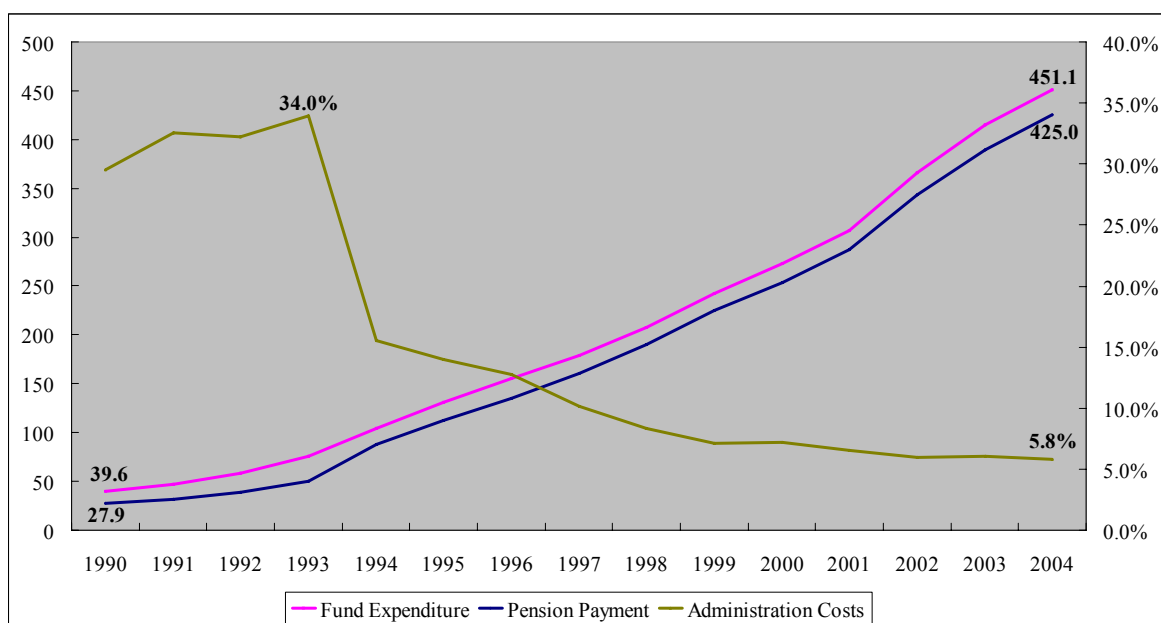
Notes: * The numbers of pensioners and total population are in millions, and the ratios are in percents. “-” stands for data unavailable.
 ** The percentages of urban and rural retirees by gender are calculated according to the population by age and sex provided by sample survey and census executed annually or periodically. In addition, according to the Labour Insurance Law, the retirement age of male and female workers are sixty and fifty-five (for managerial jobs)/fifty (for other jobs) individually.
 *** Coverage of Ageing Population = (Urban and/or Rural Pensioners) / [(Total Population) * (Sum of Percentage of Urban and/or Rural Ageing Population)].

Source: The numbers are calculated from the data provided by the Ministry of Labour and Social Security (2002; 2003; 2005) and the National Bureau of Statistics of China (2002; 2003; 2004; 2005; 2006; 2007; 2008).

The administration costs of a pension scheme, namely the ratio of costs to total expenditure, can be used to estimate its efficiency and economy of scale. That is, the greater the costs the less efficient the system is. Despite this, the composition of administration costs may be higher in the early stage of a system then scaled down steadily before bottoming out. The Chinese case shows that the amount of fund

expenditures and pension payments increased accordingly by more than ten times between 1990 and 2004. With expansion came economies of scale and costs declined dramatically from 34.0% in 1993 to 5.8% in 2004, remaining stable at around 6.0% (Figure 6.3). This partly resulted from the aforementioned integration of pension funds. The funds were managed and organised by municipal governments and SOEs until the central government announced it was going to put them all together in the early 1990s and the process of integration seemed to boost the efficiency of the pension provisions significantly.

Figure 6.3 Basic Pension Fund Expenditures and Administration Costs (1990-2004)*



Notes: The amounts of pension fund expenditure and pension payment are in million RMB.

* Administration Costs % = (Fund Expenditure – Pension Payment) / Fund Expenditure

Source: The numbers are computed from the data provided by Ministry of Labour and Social Security (2002; 2003; 2005) and the National Bureau of Statistics of China (2006; 2008).

Because the exact amount of pension payment, instead of the total amount of fund expenditures, has not been officially declared since 2005, knowing the constitution of administration costs may help us to estimate the sum of pension benefit in the following years. The calculation of the amount of urban pension benefit and its replacement rate is demonstrated in Table 6.10 which assumes 6% administration costs between 2005 and 2007. The results indicate that the average payment fluctuated considerably during these three years but the replacement rate fell continuously from 62.1% to 45.8% between 2005 and 2007.

Year	Total Expenditure	Pension Payment	Recipients	Avg. Wage	Avg. Payment	Replacement Rate**
2005	525.3	493.8	43.7	18,200	10,621.4	58.4%
2006	489.7	460.3	46.4	20,856	9,325.4	44.7%
2007	596.5	560.7	49.5	24,721	10,647.8	43.1%

Notes: The amount of expenditures/payments and average wage/payment are in billion RMB and RMB individually. The number of recipients and replacement rate are in million person and percentage respectively.

* The numbers for pension payment, average payment and replacement rate are calculated under the assumption that the pension fund administrative costs constitute 6% of total pension expenditures.

** Average payment = pension payment / recipients

*** Replacement rate = Average Payment / Average Wage

Source: The numbers are computed from the data provided by Ministry of Labour and Social Security (2002; 2003; 2005) and the National Bureau of Statistics of China (2006; 2008).

Table 6.11 evaluates the average pension benefit received by the retired elderly in urban and rural China between 2005 and 2007. It turns out that the average benefit of urban residents dropped significantly from 2005 to 2006 due to the estimated amount of urban pension payment fluctuating then rising to 5,313.3 RMB (1,470.2 USD) in 2007. The number for the rural elderly increased constantly between 2005 and 2007, and the average amount was 32.8 RMB (9.1 USD) per month in 2007.

Year	Urban			Rural			Avg. Benefit after PPP	
	Avg. Benefit (RMB)	Coverage (%)	Avg. Benefit for all (RMB)*	Avg. Benefit (RMB)	Coverage (%)	Avg. Benefit for all (RMB)*	Urban (USD)	Rural (USD)
2005	10,621.4	55.6	492.1	700.0	2.9	1.7	142.7	0.5
2006	9,325.4	49.9	387.8	833.3	3.0	2.1	112.1	0.6
2007	10,647.8	49.9	442.8	1,025.6	3.2	2.7	122.5	0.7

Note: The PPP conversion rate is derived from Table 6.8.

* Average Monthly Benefit for all = (Avg. Benefit * Coverage rate) / 12

Source: The numbers are collected from Table 6.6 and Table 6.8 of this thesis.

It is worth noting, however, that the results cannot be over-generalised because the coverage of the rural pension scheme was as low as 3.2%. The pension provisions mean nothing to those not entitled to old age benefits, who have not benefited from any of the schemes on offer. As for urban older people, although the table shows that around half of the ageing population is entitled to pension benefits and the average payment is adequate, the benefit level is determined by pre-retirement jobs, positions in work units and the level of political resources and human capital. In other words, one's status in the Communist Party or local political organisations as well as her/his educational status and skills were decisive to one's pension and complementary welfare payments (Boermel 2006: 21-2; Davis 1993: 183-4; Li and Zhong 2009: 828-9; Raymo and Xie 2000). It also has to be pointed out that the great difference in

coverage and level of payment between the urban and rural pension schemes may stem from the unbalanced development of pension provisions around the country. This inequality between the regions and differences of lifestyle consequently exacerbate the imbalance in pension provisions and people’s behaviour towards taking part in the rural pension programme, therefore parents may emphasise family support. However, due to the changes in the younger generation’s attitude towards filial piety, young working adults may provide less support to older parents (Pang, et al. 2004: 91-2; Yan 2003: 168-71 & 178-84). As a result, the importance of establishing a social security net that protects the ageing population from falling below the appropriate living standard is imperative.

6.2.4 Compliance with Social Security Obligations

When the unified Social Security Fund (SSF) was established in 2000, the National Council for Social Security Fund (NCSSF) was also set up to manage and operate the SSF. The Individual Account (IA) fund was entrusted to the NCSSF from February 2004 on. The rules state that employers have to contribute an amount equal to at least 20% of workers’ wages to the SSF and pay 8% of employees’ wages to the IA scheme. After the system was put into practice, the government found that not many companies complied with the rules. With regard to the firm-level survey executed by the Shanghai Bureau of Labour and Social Security between 2001 and 2003, the non-compliance rate of social security contribution was as high as 71.0% and 81.8% in 2001 and 2002. The drop in the incompliance rate in 2003 was achieved by local government strictly monitoring each company’s record of contribution, which raised the rates of “paid the prescribed amount” and “over compliance” from 4.7% and 24.3% in 2001 to 34.6% and 30.0% in 2003 individually (Table 6.12).

Year	Under compliance	Paid the prescribed amount	Over compliance
2001 (n=2,234)	71.0	4.7	24.3
2002 (n=5,212)	81.8	1.9	16.3
2003 (n=5,480)	35.4	34.6	30.0

Note: All the numbers are in percentage.
Source: The numbers for 2001 are derived from Nyland et al. (2006: Table 3) and the numbers for 2002 and 2003 are cited from Nielsen and Smyth (2008: Table 1).

This low compliance rate resulted from, firstly, as Lin (2004: 44; cited in Lee 2005: 11) and Zheng (2007: 15-9) observe, some local governments tolerating employers registering just 10% to 20% of employees with the pension programme. However, it is true that, weighing the abated competitiveness of SOEs, collective owned units and private ownerships as well as taxes that local governments could levy from them,

despite violating the rules, to keep companies alive through sacrificing employees' pension rights may optimise the benefits of both local governments and residents. Nyland and his colleagues (2006: 209-11) found that larger local companies and foreign firms (including Hong Kong/Macau/Taiwanese firms, EU/US firms, and other Foreign-Invested Enterprises) paying higher wages were likely to evade the social security obligations. That is, on the one hand, larger firms were discouraged from paying premiums because the amount was much larger than smaller work units, even though they were the most capable of doing so. On the other hand, high-wage earners may be satisfied with their salary level and tend to collude with employers especially if the owners were willing to share the profits with workers. Nielsen and Smyth (2008: 242) further point out that the reduction of the non-compliance rate was significantly related to the decrease of wage level. This means that the social security costs would eventually transfer to employees but not be afforded by employers. Secondly, as Dorn (2004: 437-9) and Yu (2007: 260-1) argue, because the aggregate rate of contribution is high and the funds are centrally managed by the NCSSF, these may cause concerns over the reliability, transparency and political manipulation of the funds. This would certainly be the case as the government asked the NCSSF to allocate a part of the funds to SOE securities in order to write off a proportion of pension deficits. Besides, if the government attempts to acquire, as it has been suggested, competitive return for IA funds, they may have to leave the funds freely operating in the markets then the rate of return may be competitive but not ensured since it is determined by the markets and managers' skills. Moreover, approving the allocation of funds to private financial institutions through the NCSSF may enlarge the scope for political manipulation and cause moral hazard and insider-trading¹.

Béland and Yu (2004) conclude that the current pension fund administration plus economic development could easily result in the fragmentation instead of the unification of the pension system. On the one hand, the centralisation of pension fund management and the level of economic reform and development in each province are different therefore some provinces may contribute more to the central government. Besides, the pension provisions deficits in each province vary and the government would distribute more to worse-off provinces. In this case, provinces that contribute more may not receive a commensurable pension fund and payments in the beginning, unlike the ones that have the largest ageing population. On the other hand, business units, including SOEs, collective and private ownerships and foreign companies may

¹ According to a news report on Chinese National Radio on 26th October 2009, the government will soon pass regulations to allocate a specific proportion of IA funds to private financial institutions (http://211.89.225.4:82/gate/big5/china.cnr.cn/gdgg/200910/t20091026_505531222.html). [accessed: 25.11.2009] (in Traditional Chinese characters)

be less likely to comply with this system. It is true that the government may need to raise the contribution rate in order to honour the vested pension rights of the baby boomers born between the 1950s and early 1970s, therefore employers may tend to preserve their profits to survive in the marketplace rather than faithfully comply with the rules.

6.2.5 Urban and Rural Minimum Living Standard Schemes (MLSS) and the Five-Protection System

This section will review the statistics on urban and rural MLSS programmes and the Five-Protection system in rural areas. Although MLSS provisions play an important role in taking care of those who live below the minimum living standard, with or without other social security benefits, expenditure on MLSS programmes does not seem to constitute a significant proportion of GDP. As Table 6.13 shows, the expenditure on urban MLSS grew from 0.02% to 0.13% of GDP between 1999 and 2008, while that spent on the rural counterparts constituted 0.07% of GDP. In other words, in 2008, MLSS programmes amounted to 0.2% of GDP. Moreover, the amount spent on the Five-Protection scheme was 0.7 billion RMB in 2008, which constituted a minute proportion of GDP².

Year	GDP	Expenditures on MLSS		Expenditures as % of GDP	
		Urban	Rural	Urban	Rural
1999	8,967.7	1.4	-	0.02%	-
2000	9,921.5	2.2	-	0.02%	-
2001	10,965.5	4.2	-	0.04%	-
2002	12,033.3	10.9	-	0.09%	-
2003	13,582.3	15.3	-	0.11%	-
2004	15,987.8	17.3	-	0.11%	-
2005	18,321.7	19.2	-	0.10%	-
2006	21,192.4	22.4	-	0.11%	-
2007	24,953.0	27.7	10.9	0.11%	0.04%
2008	30,067.0	39.3	22.2	0.13%	0.07%

Note: The numbers of GDP and expenditures on MLSS are in billion RMB.
The numbers of rural MLSS is available from 2007.
Sources: The numbers are from the Ministry of Civil Affairs (1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008) and the National Bureau of Statistics (2008).

The payment level of urban and rural MLSS programmes is calculated from the average cost of a specific set of products deemed necessary to maintain a subsistence level of living, which is shown as the “Avg. Amount of Consumption” in Table 6.14.

² The number is computed from the Annual Report of the Ministry of Civil Affairs for 2008 (www.mca.gov.cn). [accessed: 03.01.2010]

With regard to people's leisure and recreational needs, an appropriate amount is added to the average amount of consumption and this becomes the minimum living standard. Comparing with the USD-a-day level, the urban minimum living standard surpassed the USD-a-day criteria between 2004 and 2009; whereas, the rural minimum living standard was lower than the USD-a-day level between 2007 and 2009, but the gap was closing (the minimum increased from 19.4 to 26.3 USD per month during this period³).

Year	Urban MLSS		Rural MLSS		Five-Protection		PPP Conversion Rate (RMB/USD)
	Avg. Consumption	Avg. Min. Living Standard	Avg. Consumption	Avg. Min. Living Standard	Level for Collective Care	Level for Non-Collective Care	
2004	65	152	-	-	-	-	3.403
2005	72	156	-	-	-	-	3.448
2006	84	170	-	-	-	-	3.460
2007	102	182	39	70	163	119	3.614
2008	141	205	50	82	181	135	3.793
2009	158	224	60	98	209	149	3.724

Note: The numbers are in RMB per month and the numbers of 2009 are calculated until Q3 2009. The PPP conversion rate stands for RMB to one USD.

Sources: The Ministry of Civil Affairs (2004; 2005; 2006; 2007; 2008), the Monthly Report of the Ministry of Civil Affairs (<http://files.mca.gov.cn/cws/200911/20091102104844314.htm>) [accessed: 03.01.2010], and the IMF World Economic Outlook Database, October 2009 (<http://www.imf.org/external/pubs/ft/weo/2009/02/weodata/index.aspx>) [accessed: 06.01.2010].

It must be emphasised that China is a vast country and the minimum living standard varies from province to province, based on the level of economic development and prosperity. Table 6.15 illustrates the fact that the average minimum living standard in eastern provinces, coastal areas as well as better-off areas nationwide, was higher than in the central and western regions. Furthermore, the living standard levels in the same area may differ a lot. For instance, the difference between the highest (400 RMB in Shanghai) and lowest (178.3 RMB in Guangxi) minimum levels in eastern areas was about 222 RMB per month. Intra-group differences in central and western areas were less than in eastern areas, and most minimum living standard levels were lower than the national average.

³ The numbers are derived from the average minimum living standard divided by the PPP conversion rate.

Table 6.15 The Urban Minimum Living Standards Set by Province and Municipalities, 2008								
Eastern Areas	2008		Central Areas	2008		Western Areas	2008	
	Min. Living Std.	% of National Std.		Min. Living Std.	% of National Std.		Min. Living Std.	% of National Std.
Beijing	390.0	190.2	Shanxi	200.2	97.7	Inner Mongolia	195.0	95.1
Tianjin	396.7	193.5	Jilin	161.9	79.0	Chongqing	231.2	112.8
Hebei	196.0	95.6	Heilongjiang	200.5	97.8	Sichuan	190.0	92.7
Liaoning	224.0	109.3	Anhui	212.4	103.6	Guizhou	158.3	77.2
Shanghai	400.0	195.1	Jiangxi	193.3	94.3	Yunnan	197.7	96.5
Jiangsu	278.2	135.7	Henan	169.0	82.4	Tibet	255.8	124.8
Zhejiang	296.6	144.7	Hubei	187.7	91.6	Gansu	157.2	76.7
Fujian	211.1	103.0	Hunan	180.4	88.0	Qinghai	188.2	91.8
Shandong	234.6	114.5	Shaanxi	172.3	84.1	Ningxia	187.1	91.2
Guangdong	256.1	124.9				Xinjiang	143.0	69.8
Guangxi	178.3	87.0						
Hainan	189.3	92.3						
Average	270.9	132.1	Average	186.4	90.9	Average	190.3	92.9

Note: The numbers are in RMB and percentages. The average minimum living standard in 2008 was 205 (Table 6.12).
Sources: The Ministry of Civil Affairs (MCA) (<http://cws.mca.gov.cn/article/tjsj/bz/bz/200902/20090200026273.shtml>) [accessed: 02.01.2010].

Table 6.16 depicts the national minimum living standard in rural regimes and its deviation from the national level in each province and municipality in 2008. The numbers indicate that inter- and intra-group inequality is much greater in rural China. In the rural areas of Shanghai, Beijing and Tianjin, the minimum living standard is about 2.5 to 3.3 times higher than the national average, but only 62.5% in Guangxi which is in the eastern part of China as well. In the central and western regions, Heilongjiang province and Chongqing were the only places that surpassed the national average, and the level in rural Tibet was only 31.7% of the national minimum.

Table 6.16 The Rural Minimum Living Standards Set by Province and Municipalities, 2008

Eastern Areas	2008		Central Areas	2008		Western Areas	2008	
	Min. Living Std.	% of National Std.		Min. Living Std.	% of National Std.		Min. Living Std.	% of National Std.
Beijing	212.2	258.8	Shanxi	67.5	82.3	Inner Mongolia	74.7	91.0
Tianjin	209.7	255.7	Jilin	50.3	61.3	Chongqing	120.9	147.5
Hebei	73.0	89.0	Heilongjiang	88.7	108.2	Sichuan	62.4	76.1
Liaoning	90.9	110.9	Anhui	69.1	84.3	Guizhou	59.5	72.5
Shanghai	266.8	325.4	Jiangxi	81.4	99.2	Yunnan	56.8	69.2
Jiangsu	164.2	200.2	Henan	61.1	74.5	Tibet	26.0	31.7
Zhejiang	185.3	225.9	Hubei	62.9	76.6	Gansu	53.6	65.4
Fujian	113.4	138.2	Hunan	58.8	71.8	Qinghai	73.1	89.1
Shandong	88.7	108.1	Shaanxi	51.9	63.2	Ningxia	48.6	59.3
Guangdong	178.0	217.1				Xinjiang	57.0	69.5
Guangxi	51.2	62.5						
Hainan	109.3	133.3						
Average	145.2	177.1	Average	65.7	80.2	Average	63.2	77.1

Note: The numbers are in RMB and percentage. The average minimum living standard of 2008 was 82 (Table 6.12).

Sources: The Ministry of Civil Affairs (MCA) (<http://cws.mca.gov.cn/article/tjsj/bzbz/200902/20090200026273.shtml>) [accessed: 02.01.2010].

It is worth noting that, although the minimum living standard determined by MLSS is taken as the poverty level and its scale of eligibility is deemed as the poverty headcount rate, in fact, the MLSS and Five-Protection programmes do not cover all destitute households and individuals. The Ministry of Civil Affairs (MCA) conducted two sample surveys in 2000 and 2002 to measure the differences between recipients of MLSS and the proportion of the population that fell below the MCA poverty line in urban areas. These studies found that at least 25.0% and 17.9% of the deserving poor were not covered by MLSS in urban areas in 2000 and 2002 respectively (Chen and Barrientos 2006: 10; Hussain 2003: 25, Table 10). Local officials blamed the situation on budget shortages, which meant they had to rule out those who were receiving unemployment payments and those able-bodied who were employed. However, because these provisions are based on application, the result was that some of the deserving did not apply for the payments due to stigma associated (Solomon et al., 2004, cited from Chen and Barrientos 2006: 14; Panday 2008: 185-6). Therefore, the coverage rate illustrated below simply describes the proportion of people who received the payments. Table 6.17 shows the number of recipients of the urban MLSS programme in total, the ageing population and the coverage rate of these two groups between 2001 and 2009. It indicates that MLSS coverage in urban areas increased from 2.4% to 4.3% between 2001 and 2003 then gradually declined to 3.8% in 2008. As for the elderly population in urban areas, the number of beneficiaries dipped in 2008 to 2.8 million then rose to 3.1 million in 2009, while the coverage slightly decreased from 3.0% (2007) to 2.7% (2008).

Table 6.17 Coverage of Urban MLSS (2001-2009)

Year	Total			Old Age		
	Recipients	Population	Coverage*	Recipients	Population**	Coverage*
2001	11.7	480.7	2.4%	-	-	-
2002	20.6	502.1	4.1%	-	-	-
2003	22.5	523.8	4.3%	-	75.4	-
2004	22.1	542.8	4.1%	-	80.2	-
2005	22.3	562.1	4.0%	-	78.6	-
2006	22.4	577.1	3.9%	-	93.1	-
2007	22.7	593.8	3.8%	3.0	99.1	3.0%
2008	23.3	606.7	3.8%	2.8	104.7	2.7%
2009	23.2	-	-	3.1	-	-

Notes: The numbers are in million persons and percentages, and the number for 2009 is computed until Q3.
 * The headcount poverty rate is defined as the ratio of recipients to total and elderly population.
 ** The elderly population in both rural and urban areas is calculated according to the population by age and sex provided by sample survey and census executed annually or periodically. In addition, the computation is based on a retirement age of sixty and fifty five for male and female workers (for managerial jobs)/fifty (for other jobs) respectively.
 Sources: Chen and Hou (2008), the National Bureau of Statistics (2002; 2003; 2004; 2005; 2006; 2007; 2008) and the Annual Report of the Ministry of Civil Affairs various years (<http://cws.mca.gov.cn/article/tjbg/>) [accessed: 01.01.2010].

The rural MLSS and Five-Protection systems can be put together to see the coverage of social allowance schemes for general residents and old age people in rural China (Table 6.18). As discussed above, MLSS and Five-Protection cover different groups of the worse-off population. On the one hand, the Five-Protection scheme covers the worst-off, namely those in the Three-Have-Not situation; on the other hand, the MLSS provides assistance to those not in the Three-Have-Not category but nevertheless living under the prescribed standard. The results indicate that elderly people were more likely to suffer from a shortage of income than other age groups of rural residents because, as shown in Table 6.18, the ratio for the whole rural population, 5.4%, boosted markedly to 12.9% among aged people in 2008.

Table 6.18 The Coverage of Rural MLSS and Five-Protection System (2007-2009)						
Year	Groups other than Old Age			Old Age		
	Recipients	Population	Coverage*	Recipients	Population**	Coverage*
MLSS						
2007	27.5	606.0	4.5%	7.0	121.5	5.7%
2008	30.5	596.9	5.1%	12.3	124.5	9.9%
2009	45.2	-	-	15.1	-	-
Five-Protection System						
2007	-	606.0	-	-	121.5	-
2008	1.7	596.9	0.3%	3.7	124.5	3.0%
2009	0.8	-	-	4.7	-	-
Total						
2007	-	606.0	-	-	121.5	-
2008	32.2	596.9	5.4%	16.0	124.5	12.9%
2009	30.9	-	-	19.8	-	-
Notes: The numbers are in million persons and percentages, and the number for 2009 is computed until Q3. All the numbers are rounded.						
* The headcount poverty rate is defined as the ratio of recipients to total and elderly population.						
** The elderly population in both rural and urban areas is calculated according to the population data by age and sex provided by sample survey and census executed annually or periodically. In addition, the computation is based on the retirement age of male and female workers as sixty and fifty-five (for managerial jobs)/fifty (for other jobs) respectively.						
Sources: The National Bureau of Statistics (2002; 2003; 2004; 2005; 2006; 2007; 2008) and the Annual Report of the Ministry of Civil Affairs various years (http://cws.mca.gov.cn/article/tjbg/) [accessed: 01.01.2010].						

Table 6.19 shows the average level of benefit for the three main forms of social security provisions in urban and rural areas. In urban areas, the MLSS payment increased from 100.8 to 148.4 RMB per month between 2007 and Q3 of 2009; while in rural areas, the benefit level of MLSS rose from 26.3 to 61.2 RMB per month from 2007 to 2009. The average benefit level of the Five-Protection system was two- to three-fold the rural MLSS, and the payment increased from 98.3 to 129.3 RMB per month between 2007 and Q3 of 2009. However, it has to be kept in mind that the benefit level is determined in accordance with local living standards and the territorial difference from province to province and from city to city in China is considerable, as depicted in Table 6.15 and 6.16. Therefore, the average level of benefit merely shows the average perspectives of these provisions but not the whole story.

Table 6.19 The Average Monthly Benefit of Urban and Rural MLSS and Five-Protection Schemes (2007-2009)

Year	Urban MLSS			Rural MLSS			Five-Protection			PPP Conversion Rate (RMB/USD)
	Recipients	Spending **	Avg. Benefit	Recipients	Spending **	Avg. Benefit	Recipients	Spending **	Avg. Benefit*	
2007	22.7	27.5	100.8	34.5	10.9	26.3	39.8	-	98.3	3.614
2008	23.3	38.5	137.5	42.8	22.2	43.2	48.3	0.7	130.5	3.793
2009	23.2	3.4	148.4	45.2	2.8	61.2	50.7	0.7	129.3	3.724

Notes: The numbers of recipients, spending and average monthly benefits are in million persons, billion RMB and RMB individually.

* The number for the 2007 average monthly benefit of the Five-Protection scheme is calculated from 1,179.6 divided by 12.

** The numbers for spending on Urban and Rural MLSS programmes in 2009 are derived from the monthly data of September 2009, and that of the Five-Protection are monthly data.

Sources: Annual Reports of Ministry of Civil Affairs (2007; 2008), Quarterly Report of Ministry of Civil Affairs (www.mca.gov.cn) [accessed 03.01.2010], and IMF World Economic Outlook Database, October 2009 (<http://www.imf.org/external/pubs/ft/weo/2009/02/weodata/index.aspx>) [accessed: 06.01.2010].

6.2.6 Labour Participation Rate

Due to insufficient information about age-specified labour force participation and wage levels, discussions in this section are based on the findings of academic researchers who have collected data in their own surveys and interviews in rural and urban China. Raymo and Xie's (1997) urban research is based on the Survey of the Support for the Elderly in Urban China (SSEUC) executed in 1992, which found that 18.2% of those who attended sixty years old and over were in jobs. In addition, a survey organised by the NBS in 2005 indicated that the importance of employment income was 9.0% (Table 6.3). Although it might not represent the labour participation rate, it does to some extent imply the degree that elderly persons are involved in gainful activities. As for the rural ageing, more than one-third (34.1%) of elderly people responded that employment was an important source of income for them in the survey of 2005 (Table 6.3). Pang and her colleagues (2004) observe that in 2000 the participation rate of people aged between sixty and sixty-nine (67.6%) was around the average level (69.0%) then decreased to 19.0% (age group "70+") (Table 6.20). They also indicate that older women's labour participation rate was around thirty percentage points lower than that of the male elderly (age group "60-69") in 2000, while the rate of older old male and female residents (age group "70+") working dropped to 31.3% and 10.7% respectively.

Table 6.20 Labour Force Participation Rate of Ageing Rural Residents (2000)

	All Elderly	Men	Women
All Ages (n=963)	69.0	80.8	55.4
50-59 (n=505)	89.9	95.4	82.7
60-69 (n=253)	67.6	80.3	50.0
70+ (n=205)	19.0	31.3	10.7

Note: The number of all ages refers to people aged sixteen and above.

Source: Pang et al (2004: Table 1).

Pang et al (2004) argue that the high labour participation rate of the rural ageing was not related to poverty but more to do with their physical condition and living arrangements. Their findings were that the participation rates of older people in each income quartile were similar but illness significantly reduced and living in a smaller household significantly increased their tendency to work. The transformation of living arrangements has decreased the number of household members co-residing with the elderly, and the figures illustrate that elderly households contained more migrant workers. These changes are encouraging elderly people to remain in the labour market or on-farm works. Pang and her co-workers remark that the rural elderly participation rate may even increase in line with age due to the effect of the One-Child Policy. In other words, like their urban counterparts, the rate may result from changes in the younger generation's attitudes towards filial piety and the shrinking of family support system as well as the lack of pension provisions in rural areas. These socio-cultural changes mean that the rural ageing now have to look for alternatives to the traditional social security system, and for many ceaseless toil is the only option available nowadays (Benjamin, et al. 2003). Xie and Zhu's (2009: 183) study of the urban elderly also suggests that the transformation of social norms and the ideology of family support is one of the root causes of older people continuing to work into the post-retirement period, particularly the worse-off elderly. They even debate whether sexual discrimination will break down as son and/or daughter's monetary supports are no longer an important source of parents' retirement income.

6.2.7 The Evaluation of Elderly Poverty

Some researchers have attempted to estimate elderly poverty in China. A recent World Bank (2009) report, for example, uses Urban Household Survey data to calculate the poverty rate at the two and three USD-a-day levels (Table 6.21). It argues that, at the two and three USD-a-day levels, the total poverty rate of elderly urban residents in 2003 was 4.7% and 18.4% respectively. In addition, this study found that a higher proportion of older women (5.4% and 20.3% at the two and three USD-a-day levels) fell below the poverty line than male residents (3.9% and 16.5% respectively) did.

Table 6.21 The Poverty Rate of Elderly Urban Residents (2003)					
60+ Population	No. of Sample (million)	Twice World Bank Level*		Thrice World Bank Level**	
		No. of Poor (million)	Share of Poor (%)	No. of Poor (million)	Share of Poor (%)
Men	20.6	0.8	3.9	3.4	16.5
Women	20.2	1.1	5.4	4.1	20.3
Total	40.8	1.9	4.7	7.5	18.4

Notes: * Twice World Bank Level = 1,124 * 2 = 2,248 RMB per year
 ** Thrice World Bank Level = 1,124 * 3 = 3,372 RMB per year
 Source: The numbers are calculated from World Bank (2009: Table 4.36) figures.

Knight and Li (2006) measure the poverty rate of urban ageing residents with national income and consumption criteria and divide poverty into three categories: income and consumption poverty; income not consumption poverty; and consumption not income poverty. The “income and consumption poverty” group is the worst-off of all and refers to those who perceive their decreased income as permanent then reduce consumption to fit the resources available to them; in this case both income and food consumption are below national levels. Knight and Li state that people who fall into the “income not consumption poverty” category can be “temporary income non-poverty concealing persistent poverty”. They might, for example, have reduced their consumption to save for their retirement. The last type of poverty, “consumption not income”, includes those who anticipate their income will drop below the poverty line. If one predicts income will return to the poverty line or above, then she/he may experience transient poverty; but if income remains below the poverty line, then the poverty becomes persistent. Table 6.22 depicts the percentage of urban residents that are likely to fall below the poverty line in each category, and the overall poverty rate is the sum of percentages for each age group. The findings indicate that younger (particularly below forty-five years old) and older age (especially above sixty-six years old) groups were more likely to fall below the poverty line in 2000, and “consumption not income poverty” was the main cause of poverty in urban China. They further illustrate that although the overall poverty rate dropped from 8.85% (group “56-60”) to 4.22% (group “61-65”) it increased to 9.83% for the group “over 66”, and “consumption not income poverty” (5.51%) and “income and consumption poverty” (2.72%) were the main causes. Therefore, even though the Chinese government had launched some social allowance programmes and reformed the pension system from the mid-1990s, over one-tenth of urban residents aged above sixty-six were still living at less than the presumed minimum income and consumption level in 2000.

Age distribution	Overall Poverty (%)	Income and consumption poverty (%)	Income not consumption poverty (%)	Consumption not income poverty (%)
Less than 35	12.50	3.43	2.03	7.04
36-40	12.02	2.86	2.86	6.30
41-45	11.44	4.07	3.01	4.36
46-50	6.73	2.57	1.24	2.92
51-55	5.84	1.89	0.24	3.71
56-60	8.85	1.65	2.24	4.96
61-65	4.22	0.57	0.46	3.19
More than 66	9.83	2.72	1.60	5.51

Note: The numbers represent for the percentage possibility of falling below the poverty line.
Source: Knight and Li (2006: 374, Table 2).

Saunders (2007) draws on the data of the Sample Survey of the Aged Population in Urban and Rural China (SSAPURC) executed by the China Research Centre on Ageing (CRCA) to estimate the poverty rate of the urban older population in 2000. He concludes that 27.7% and 31.3% of the urban ageing population over sixty fell below the 50% median income and 50% mean income lines, and the numbers for people aged above sixty-five increased to 29.2% and 32.8% respectively. Moreover, he indicates that single elderly people were more likely than couples to fall below the poverty line. Regarding the 50% mean income level, the findings illustrated that more than half of single older people were in poverty, while the numbers were slightly less than 50% with regard to the 50% median income line (Table 6.23).

Table 6.23 The Head-Count Poverty Rate of China's Urban Elderly (2000)						
Age Group	50% Median Income			50% Mean Income		
	Single	Couple	All	Single	Couple	All
60+	46.5	24.5	27.7	52.3	27.7	31.3
65+	47.2	25.6	29.2	53.5	28.6	32.8

Note: All the numbers are in percentages and respondents' incomes are equivalent. Information about 50% median and mean incomes are not provided by this research.

Source: The numbers are quoted from Saunders (2007: Table 1 & 2)

6.3 Conclusion

With regard to the development of the Chinese pension system, political concerns seemed to override economic and welfare issues in the beginning whereas political and economic concerns dominate the reforms of pension system nowadays (Lo 2006: 63). In other words, people's needs may not be the priority. The establishment of Communist China's Labour Insurance (LI) system in late 1940s was to gain the proletariat's support for the so-called revolution against the Nationalist Chinese Government. The LI scheme was then extended to include all the State-Owned Enterprises (SOEs) and governmental employees in the early 1950s in order to solidify its political legitimacy and initiate the first five-year planned economy. Because the financial resources of the LI funds were abundant, the contests for the domination of the LI system became intensive. Although the finance of the pension system was isolated from the LI system from 1958, the pension funds were embezzled to support the Cultural Revolution in mid-1960s. Since that time, business owners were obligated to provide pension payments. Not until the late 1980s did the Chinese government sense the vulnerability of the pension finance, and attempt to centralise the pension system and extend the coverage to the whole working population in urban areas. Nonetheless, local governments' incomppliance obstructed the integration of the pension system and the financial problem remained.

Because of the great differences between urban and rural pension systems, their advantages and disadvantages will be concluded separately.

For the urban pension provisions, there are four advantages: firstly, the contributory earnings-related pension programme provides a basic retirement income to the whole working population, which may help reduce the risk of old-age poverty in urban areas and improve the system's financial viability. Secondly, the finance of the basic pension payment is guaranteed by the government, which enhances the certainty of the benefit as well as secures policyholders' pension rights (Ramia, et al. 2008: 9 & 14-5). Thirdly, the basic pension plan is topped up by an individual-account-based pension programme to enrich participants' retirement income. Fourthly, family members' social security responsibility is therefore lessened. However, the disadvantages of the urban pension system are significant. Firstly, the feeble finance and stigmatisation of the Minimum Living Standard Scheme (MLSS) hinder people who need this provision from applying. Secondly, on average, the old-age poverty in urban regions is still high. Thirdly, the high evasion rate of social security responsibility may endanger labour's pension rights and the pension system's financial sustainability.

As for the rural pension scheme, the only advantage is that the finance of the voluntary contributory pension plan is guaranteed by the government. While the disadvantages are various: firstly, there is no other public contributory pension scheme to secure elderly people's retirement income. Secondly, similar to the urban counterparts, the MLSS and Five Protection schemes in rural areas are short of finance. Besides, the neighbourhood surveillance that is employed to monitor welfare frauds may enhance the stigmatisation of social assistance programmes and avoid the poor from claiming the benefits. Thirdly, elderly people lack sources of income and are forced to work longer to meet their living costs. Fourthly, the family support system remains the main source of retirement income, but, as illustrated, the demographic situation is predicted to remain unfavourable in the future. Fifthly, the pension system in rural China may not be able to effectively reduce people's risk of poverty in retirement.

So far, although China has walked a long way in its attempts to reform the social security system over last three decades, it seems that these reforms have been unable to reduce the poor ageing population in urban and rural areas or to boost the limited coverage of pension schemes in urban and rural regions. The incompliance with the centralisation of social security provisions, the inability to promote nation-wide social security schemes and the necessity for demanding the cooperation of provincial and local governments and employers - strictly speaking, the reforms may be doomed to

fail.

With regard to the great difference of pension provisions between urban and rural China, the further analysis and comparison of the Chinese pension system in Chapter Eight and Nine will be split into urban and rural pension programmes.

Chapter Seven Methods and Indicators for Assessing Pension Schemes

The comparative analysis of the pension systems of the Chinese Community states is to answer the last question raised in Chapter One: how do the Chinese Community pensions compare to each other? In other words, the comparative research aims at examining the advantages and disadvantages of the pension provisions. Besides, it intends to find out the possible plans for further reforms for improving the adequacy of pension benefit and the sustainability of pension systems. In the beginning of organising a comparative research, the methodology applied by this thesis as well as the ways the indicators are selected that help facilitate the comparative evaluation in Chapter Eight and Nine have to be introduced first. This is the purpose that this chapter intends to achieve.

This chapter consists of three main parts. The introduction of the methodology for evaluation constitutes the first part which illustrates the ways to convert raw data to radar chart score and show the result on a radar graph. In addition, the method to compute the area circumvented by the radar chart through the Surface Measure of Overall Performance (SMOP) approach will be described in the same section. The discussions about the indicators employed in Chapter Eight and Nine will come next. The difference between the criteria adapted to these two chapters is that the indicators in Chapter Eight measure the “inputs” of these pension systems, while the Chapter Nine evaluates the “outputs” of the pensions. The definition of “inputs” and “outputs” of a pension policy will be elaborated in this section. The last part of this chapter will discuss the weaknesses the following evaluation chapters may encounter in order to help understand the shortcomings of this methodology and avoid biased expressions of the findings.

7.1 Methodology for Evaluation

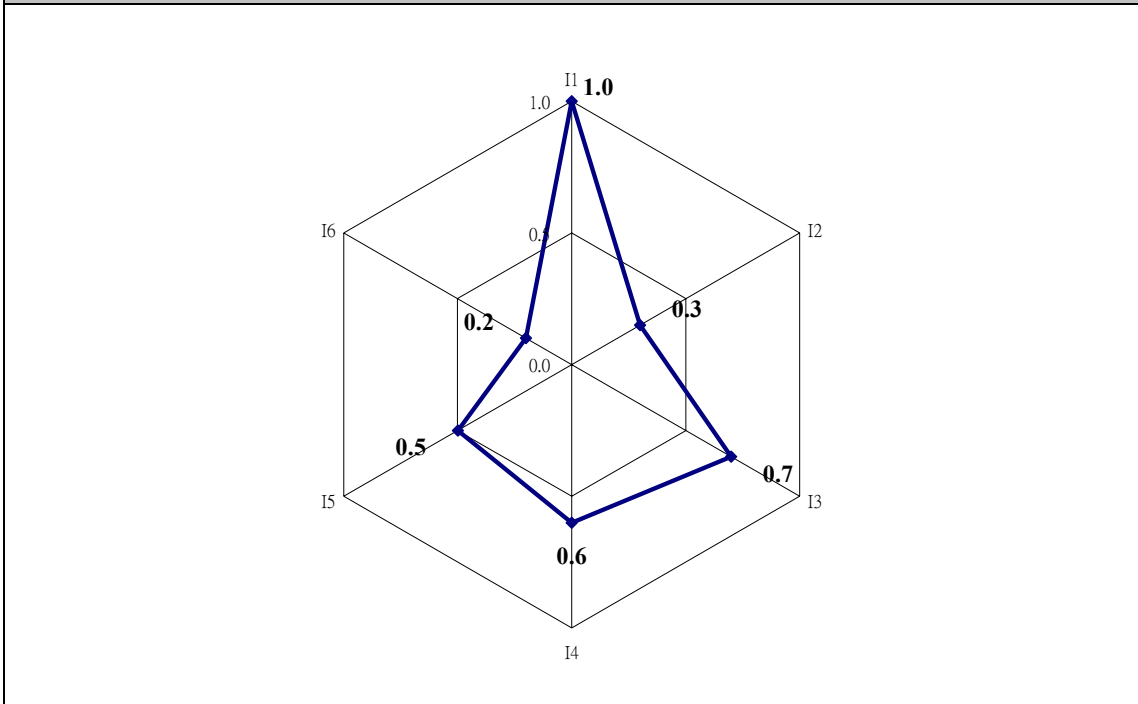
This chapter attempts to assess the performance of pension systems in China, Hong Kong, Singapore and Taiwan with the radar chart approach to provide a multi-dimensional perspective on the policies and compare the strengths and weaknesses of each selected goals. This technique, at a time, measures the advantages and disadvantages of each aspect of one or more social policies through observing the performance and measuring the distance between each case at one or several time

points. It can also illustrate the performance of some dimensions of a policy in several countries at a time point.

The radar chart approach, also known as the Measures Matrix Chart (or M-Squared (M^2) Chart) (Madigan 1993) and spider chart approach, was first applied as a tool to review the performance of Eastman Kodak, IBM and Chevron (Bogan and English 1994: 58-61) and to measure the business environment, the efficiency and effectiveness of field services (Behara and Lemmink 1997). This approach was then introduced in the evaluation of labour market policies in European countries, the USA and Japan and was for the first time adapted to the social sciences. The Surface Measure of Overall Performance (SMOP) was then developed for calculating the area that the radar chart obtains as the score of overall performance of each case analysed (Mosley and Mayer 1999; Schmid, et al. 1999; Schütz, et al. 1998). As for other fields of social policy research, Plantenga and Hansen (2001) applied this approach to analysing the gender gap in employment opportunities, wages, and the sharing of unpaid work in fifteen European Union member states in 1999, and Mósesdóttir (2001) used this method to assess and compare the level of gender equality in Iceland in 1992 and 2000. In addition, Finch (2006) employed the radar chart and SMOP approaches to establish de-familialisation and de-gendering familialising indices for evaluating the dual carer/dual earner model.

The computation of the SMOP scores has two stages. The raw data of each indicator in the first step has to be transferred and standardised into a value that ranges between zero and one, which will be called the radar chart score in Chapter Eight and Nine of this thesis, in order to examine the distance between the performance of a policy field of a case and the benchmarking. Three methods of selecting the standards are suggested: theoretical benchmarks; best performer benchmarks; and institutional benchmarks (Mosley and Mayer 1999: 7-10). Once the benchmarking system has been determined, it has to be applied throughout the calculation of radar chart scores, and the radar charts are produced according to the score that a case obtains from each indicator. Figure 7.1 illustrates an assumed system that scores 1.0, 0.3, 0.7, 0.6, 0.5 and 0.2 on policy fields I1, I2, I3, I4, I5 and I6 individually. Each of the neighbouring points is linked and an area that stands for the performance of the case is obtained.

Figure 7.1 The Hexagonal Radar Chart



The SMOP score is calculated from the geometric area decided by the six radar chart scores in the hexagon shown in Figure 7.1. For this purpose, in the second stage, the following formula will be applied, where n means the total number of indicators and I_n refers to the value of each indicator:

$$SMOP = ((I1 * I2) + (I2 * I3) + (I3 * I4) + \dots + (I_{n-1} * I_n) + (I_n * I1)) * \sin(360^\circ / n) / 2$$

The equation for computing the area of the hexagon in Figure 7.1 is as follows and a value of 0.66^2 is obtained from this calculation:

$$SMOP = ((I1 * I2) + (I2 * I3) + (I3 * I4) + (I4 * I5) + (I5 * I6) + (I6 * I1)) * \sin(360^\circ / 6) / 2$$

However, one of the weaknesses of the SMOP approach is researchers may acquire different SMOP scores whenever the arrangement of the indicators is changed, which is caused by the assumption of a compensating effect in this approach's means. That is, an

² All the numbers are rounded up. $\sin 60^\circ$ equals to 0.8660.

indicator with higher value may be offset by an index with lower value (Schütz, et al. 1998: 40-1). Therefore, when the indicators are arranged into I1, I3, I5, I2, I4 and I6 and I1, I6, I3, I4, I5 and I2 in clockwise order, then the equation will be varied into SMOP₁ and SMOP₂ and acquire 0.75 and 0.65 of SMOP scores individually³:

$$SMOP_1 = ((I1 * I3) + (I3 * I5) + (I5 * I2) + (I2 * I4) + (I4 * I6) + (I6 * I1)) * \sin(360^\circ / 6) / 2$$

$$SMOP_2 = ((I1 * I6) + (I6 * I3) + (I3 * I4) + (I4 * I5) + (I5 * I2) + (I2 * I1)) * \sin(360^\circ / 6) / 2$$

Despite the fact that researchers can run all the theoretical combinations of the arrangement to acquire as large an SMOP score as possible, it is not practical and time-consuming. For this sake, as Mosley and Mayer (1999: 49) suggest, this thesis will calculate the average SMOP score from three different theoretical arrangements in Chapter Eight and Nine in order to diminish any bias of the overall SMOP score that may occur and to make this approach easier to operate. Thus, the average SMOP score of the example demonstrated in Figure 7.1 is 0.69⁴. Because the average SMOP score may bias the results, Finch (2006: 270) further suggests carrying out a sensitivity analysis to check if the rank of the cases concluded by SMOP scores is in accordance with the rank determined by the radar chart scores. This analysis will be operated through the comparison of the average SMOP score and the proportion of the full radar chart score that a case acquires. For instance, in Figure 7.1, the hexagon obtains 0.69 of the average SMOP score and 55% of the full radar chart score⁵.

Besides, Schütz et al. (1998: 41) propose that researchers may unavoidably be forced to pick the second-best data to fit in the evaluation due to the unavailability of some information. This may consequently result in under-representative and overlapping analysis, something which will be discussed more detail below. In addition, it is noteworthy that the value of indicators should ideally be less than eight, or the polygon will become over complex and it will be difficult to display the results (Mosley and Mayer 1999).

³ The numbers are computed through the aforementioned formula with sine value equals to 0.8660, and the result is rounded up.

⁴ The average SMOP score = (0.66 + 0.75 + 0.65) = 0.69. All the numbers are rounded up.

⁵ The proportion of full radar chart score = (1.0 + 0.2 + 0.3 + 0.5 + 0.6 + 0.7) / 6 = 0.55

7.2 The Selection of Indicators

As mentioned earlier in this chapter that this thesis separates indicators into two groups – “inputs” and “outputs” –to evaluate the pension systems in these four Chinese Community states. Then, what principle is applied to distinguish the “inputs” and “outputs”?

Atkinson and his colleagues (2002) propose a set of principles for selecting indicators about evaluating social inclusion among the European Union member states. This work suggests, due to different statistics collected, and means taken, by each member state, to examine whether the targets of a policy are accomplished (outputs) is more important than determining what policies being employed to deal with a specific circumstance (inputs). That is, although all kinds of pension and social assistance schemes are implemented in a country, the commonly agreed goal – old-age poverty reduction – may still be in vain. Atkinson (2004: 111-3) further points out that social outcomes reflects the “principles of subsidiary”, and the “principles of subsidiary” are mostly determined by the institutions in order to achieve the generally agreed social goals. In other words, for instance, replacement rate measures the “input” of a pension scheme, while poverty level indicates the “output” of the policy. The output and input indicators chosen by this thesis are as follows, and the order of the indicators expresses the sequence they show up in Chapter Eight and Nine respectively instead of a logical arrangement:

- Input indicators: arrangement of pension systems; indexation mechanism and vested rights; coverage rate; system dependency ratio; replacement rate; and administration costs. (Chapter Eight)
- Output indicators: poverty reduction; de-familisation; gender inequality; redistributiveness; scale of public and private pension expenditures to GDP; and evasion of pension contributions. (Chaper Nine)

The input indicators employed by this thesis are widely adopted in comparative pension studies reviewed and discussed in Chapter Two, while the outputs denote the questions that this thesis pursues. Among the output indicators, the “poverty reduction” examines whether retirees’ incomes from public pension provisions can meet minimum level of living or remove pensioners’ risks of old-age poverty and longevity. The “family solidarity” compares the proportion of people who provide

informal cash transfers from gainful children to retired parents as knowing from the case studies that four out of these five pension systems (except China's urban pension scheme) do not fully reduce ageing poverty. The public social expenditure simply responds to the question that if public pension benefits are inadequate to remove old-age poverty, then how large is the scale of economic resource the state focuses on it; whereas the level of private social expenditure replies to the insufficiency of public pension provisions by investigating the economic scale of retirement incomes from private insurance payouts. The "evasion of pension contributions" reflects target participants' perception about the advantages and disadvantages of public pension provisions as well as its popularity. Moreover, the "redistributiveness" responds to the government's principle of wealth redistribution and social solidarity, and the "gender inequality" concentrates on the gendered equity of pension system for both working and non-working female population.

The following section will divide indicators into input and output groups and review and discuss its application in previous comparative pension studies, the difficulties this thesis encounters when employing some of the indicators (e.g. accessibility and availability of statistics) and the ways to tackle the problems (e.g. to propose own definition of an indicator and discuss alternative source of information).

7.2.1 Input Indicators

7.2.1.1 Arrangement of Pension Systems

Because this indicator is based on the judgement on good or bad arrangement of pension provisions, reviewing the development and debates about pension reforms may help justify the views about what is a better pension arrangement than the others.

After the first public pension insurance scheme was launched in Germany in the 1880s by Bismarck, the idea spread to the rest of Europe, e.g. the old-age pensions of the UK in 1908 (Ogus 1982), as well as Chile in Latin America in 1924 (Mesa-Lago 1978) and to the USA via the Social Security Act of 1935 (Skocpol 1995: 155). Although they were all named pension insurance schemes and the benefits were defined (DB) when one retired, the content varied significantly. Different from the occupation-specified scheme implemented in Germany, the American system covered general labourers while the Chilean scheme rewarded the loyalty of civil servants to solidify its political power. In addition, the financial systems differed from each other in that they ranged from partly-funded (e.g. the USA and Chile) to fully-funded (e.g. Germany) and each insured person's working condition or annual contribution to the

society as a whole was recorded by the authorities concerned. The Pay-As-You-Go financial principle was proposed in 1952 by the German economist and sociologist Gerhard Mackenroth who argued that the fully-funded principle introduced in the 1880s was incapable of dealing with the inflation of prices and devaluation of national currency, and the active population may not be able to produce the quantity of products necessary to meet all pensioners' demands at once (De Deken 2002: 288-9; Kuo 1997: 29-30; Zöllner 1982: 66). In fact, his idea demonstrates how the use of current active workers' contributions to support current pensioners' benefits in a way corresponds to Adam Smith's (1776: 104) argument that "[t]he annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes."

In the meantime, the debate over the Social Security system's financial principle gradually became a hot issue in the US. The Nobelist in economics, Paul Samuelson (1958: 481-2), again, resonating with Smith's idea, argued that pensioners should use "money" as the means to claim goods from active people who produce products. Moreover, as Mackenroth notes, although money can be accumulated in active years and carried forward to retirement to exchange for goods, the danger is that prices and the value of money may be changeable. The Pay-As-You-Go principle, in Samuelson's opinion, was the ideal tool for increasing the value of money over time and maintaining pensioners' purchasing power. After that, the foundation of the thesis of intergenerational contract became more concrete (Petersen 1986). Mackenroth and Samuelson's ideas have been challenged mainly by economist Martin Feldstein (1974; 1976; 1996; 1998) who claimed that the American social security system should be privatised for it hindered the accumulation of capital and national and personal savings. Besides, he asserted that the increase of the dependency ratio of pensioners and low return rate of the social insurance scheme would eventually cause enormous deficits as the baby-boomers retire, thus endangering its financial sustainability. Feldstein's arguments have been refuted by a few seminal works (Aaron 1966; 1982; 1997; Barro 1974; 1976; Kaufmann and Leisering 1984; Samuelson 1975). Baker and Weisbrot (1999: 153-5) and von Maydell (1998: 137-40) further comment that the opinions held by these privatisation advocates are phony because most of the problems can be adjusted through the mechanisms already installed; whereas they barely inform about the true issues, particularly the existing inequality of wealth distribution and the deepening of inequities after privatisation.

The new Chilean pension system, introduced in 1981, provided a stronghold for the supporters of privatisation approach and conservative think tanks (Béland and Waddan 2000). The Pinochet's military government enforced large scale privatisation

including the selling of most state-owned companies at a cheap price and the operation of the new Chilean pension scheme, also known as the Individual Account (IA) system, by some approved private financial institutes (Mesa-Lago 1994). This series of pension reforms was suggested and designed by the “Chicago Boys” who earned postgraduate degrees from the Department of Economics at the University of Chicago in the US and returned to serve in the government. When Allende was overthrown by Pinochet in 1973 these Chicago Boys hid themselves in financial management positions and the Department of Economics at the University of Chile. These radical rightists convinced the government to replace the old system with a privatised pension scheme to minimise the state’s role in pension provisions and that the return of investment would be high enough to offset inflation and provide adequate retirement income. When Pinochet accepted their advice in 1979 some of the Chicago Boys were given the task of running the new pension system others remained in private financial institutes. From that time, the measure of economic and political power in Chile was through pension funds and these Chicago Boys had both (Borzutzky 1991; 2002: 174-6; 2003: 87; Fazio and Riesco 1997: 98). However, the outcome of the reform was unexpected. It could not be called a “privatised” system *per se* because the government devoted more resources to regulating the new system to control corruption and was forced to guarantee the basic retirement payments of IA participants and non-covered people. Nevertheless the level of guarantee payment was far below the poverty threshold. Moreover, the high level of commission fees ate most of the revenues and the gendered-inequality of working conditions and inequities between classes in active years lasted into retirement due to the lack of risk-pooling effects. Plus, most of the approved pension companies were obtained by foreign financial institutes through mergers and acquisitions (Townson 2001: 73-88). Mesa-Lago’s (2001; 2005) research further points out that, due to low wage rates, high contribution rates (20% afforded solely by employees), interruption of working records and employers’ incompliance with transferring workers’ contributions to their accounts, less than half of the covered people remained active in the system. The Chicago Boys’ control of the pension system ended as Pinochet fell out of power in 1990. Although the democratic government continued the system, it declared a return to the previous public social insurance system in 2006 in order to arrest the rise of poverty in Chile (Skidmore 2009: 3).

The Chilean Model became the World Bank’s (1994) paradigm private pension system and was promoted to the rest of the world, especially countries asking for loans from the World Bank and IMF in Asia, Caribbean and Africa (Stiglitz 2002). Kay (1997) argues that although privatisers have proposed the privatisation of the American social security scheme, strong finance and healthy management mean the

system remains intact so far. The three-pillar model proposed by the World Bank is centred on a private-financed mandatory IA scheme supported by a public-financed means-tested pension payment as well as topped up by a voluntary private pension plan. The debates between the supporters (Holzmann 2000; James 1996; 2000) and opponents (Barr 2002; Beattie and McGillivray 1995; Brown 1997: 10; Esping-Andersen 1999: 176; McGillivray 2002: 10-11) of the World Bank's proposal basically continue the arguments of the 1950s but concentrate more on demographic trends. As for the World Bank's debate about the political risks of social insurance systems, Orszag and Stiglitz (1999) respond that privatisation simply trades imagined political risks for real financial and longevity risks. Although the disaster of the Argentine pension system in the early 2000s (Kay 2009) and Chile's return to a social insurance system have knocked the wind out of the World Bank's sails, the promotion is still ongoing.

A Swedish pension reform took place around the time that the World Bank's proposal was published, but the directions were different. The new Swedish model consists of three pillars: a public-financed guarantee pension scheme; a combination of a Notional Defined-Benefit (NDC) scheme and a Financial Defined-Contribution (FDC) scheme; and a voluntary personal or occupational pension plan. The NDC scheme is a Swedish invention which gives each participant an account for recording their contributions throughout their active years, and life expectancy at the time of retirement and assumed future growth in real wage are considered as the divisor of the accumulated assets in one's account in order to calculate the monthly payment. The level of pension benefit is modified along with the balance ratio computed from price and wage indices (Cichon 1999; ISSA 1998: 199-200; Lindquist and Wadensjö 2006: 161-89; Schludi 2005: 97-108; Svensson 1998: 198). While the FDC scheme to some extent illustrates the effect of privatisation on the Swedish model it nevertheless composes a relatively small part of contributions (2.5% out of 18.5% of the total pension contributions) and is entirely based on free market mechanisms. However, Sundén (2006: 142-3) observes that, as the Chilean case indicated, the return and commission rates are not as high and low as expected. Besides, the over-complexity of the investment information makes most participants confused therefore the governmental funds gain more support from policyholders. As for the way the payment level of the guaranteed pension scheme is determined, this is done, on the one hand, by the period of years one lives in Sweden and, on the other, by the benefit level one gains from the NDC and FDC programmes. The residence tests decide the proportion of the full guaranteed pension scheme and the benefit level of the earnings-related pension scheme determines the proportion of guaranteed pension to be offset. In order to maintain pensioners' purchasing power, the payment of the

guaranteed pension is adjusted along with the price index (Försäkringskassan 2007: 30; Wadensjö 2002: 64).

Since the new Swedish model was launched in the mid-1990s and proved to be workable, the International Labour Organisation (ILO) has suggested that countries in the process of pension reform can either introduce a four-pillar pension model grounded on a mandatory Pay-As-You-Go DB scheme and supported by a public-financed means-tested pension scheme, a compulsory private-managed IA scheme, and a voluntary private-managed occupational pension plan; or an NDC scheme as implemented in Sweden (Gillion 2000: 62-3).

With regard to the review of the development of pension reforms above, this thesis deems “certainty” and “stability” as the main goals that a pension scheme should fulfil. It is true that both Pay-As-You-Go DB and Fully-Funded DC (e.g. IA scheme) schemes may have their advantages and disadvantages. It is also true that the pursuit of a higher return rate and the multi-pillar proposal are merely the notions of portfolios that are widely held in capital and financial markets. That is, nevertheless the multi-pillar of pension scheme arrangement is added from three to four and even five, as proposed by the World Bank (Holzmann and Hinz 2005: 42), the aim remains to establish a reliable pension system that secures a sufficient level of retirement income (Modigliani and Muralidhar 2004: 2-8). This thesis recognises Pay-As-You-Go DB scheme is superior to Fully-Funded DC and IA scheme for its reliability and predictability thus a pension system that centres on a Pay-As-You-Go DB scheme will be awarded higher radar chart score than a scheme that is based on Fully-Funded DC and IA system.

7.2.1.2 Indexation Mechanism and Vested Rights

This indicator combines two elements: indexation mechanism and vested rights. These two components may seem to be different ideas, but the similarity between them is significant. That is, both of them denote the protection of pension rights, while the difference is the level of vested rights and method of payment adjustment measure the level of pension right protection before and after retirement.

Holzmann (2000: 24) comments that indexation procedure is an important issue to be considered when devising pension systems and the means which maintains benefit levels in real terms. Barr (2002) and Iyer (1993: 192-3) further argue that issuing inflation-indexed government bonds, which means supporting the mechanism with general tax revenue, is the most effective method because the state is possibly the only organisation that is competent of offsetting inflation. If a pension scheme, IA pension plans especially, is without an indexation mechanism, the benefit level will be greatly

devaluated if there is a sudden recession of the national economy, for instance, such as that experienced in Argentina in the early 2000s (Kay 2009; McGillivray 2002; Rofman 2004). As Gillion and his colleagues (2000: 62-5) note, adjusting pension benefits along with the price index, although budget-consuming, means pensioners' purchasing power can be kept at the same level throughout their retirement; whereas modifying the payment level along with the wage index, although it is more financially affordable and is an ideal way of sharing the output of the economy with society, may diminish retirees' standards of living. The regularity of benefit indexation is another issue to be considered because the payment level may lag behind current living standards if it is only done occasionally. Moreover, the index of vested rights assesses the reliability of pension payments from the perspective that government will fully, partially or barely guarantee retirees' pension rights and continue the payments.

The detail definition and computation of this indicator will be presented in Chapter Eight.

7.2.1.3 Coverage Rate

Coverage rate is an important indicator of the popularity of a pension programme and, in terms of pension provisions, the proportion of people that may fall below the prescribed standard of living in retirement. Gillion (2000: 58) argues that coverage rate and administration of pension schemes are the main problems nowadays because inappropriate administration may cause evasion of coverage. Gent (2001: 172-7) further states that extending pension coverage is helpful for alleviating old-age poverty and strengthening its finance. Aaron (1966: 374) views this issue from the perspective of economies of scale and suggests that both DB and IA schemes have to raise coverage rate to improve the generated well-being. In other words, regardless of which DB or IA scheme a country applies, the greater coverage can not only enhance the stability and sustainability of its finance and prevent the elderly from income poverty, but also, particularly for IA policyholders who have purchased annuity from financial markets, reduce management costs and commissions to a minimum. For this reason, a universal retirement payment scheme is the ideal arrangement of pension provision but it only appears in some countries e.g. the Swedish guaranteed pension scheme (Gillion 2000: 38; Wadensjö 2002: 64).

In order to evaluate the coverage of the pension programmes in the selected countries, this thesis is going to apply two definitions of coverage rate. Bollé (2000: 199) suggests defining the rate as "the ratio of the number of people receiving a pension to the number of people over 60 years of age", which helps researchers examine the ratio of old people who may need other sources of income to support their retirement. This

thesis also uses “the ratio of the number of people contributing to pension schemes to the number of employed population” as another way of estimating the proportion of the working population covered by existing pension plans. This index helps evaluate the pension coverage of the next cohorts.

The difficulty of this indicator is that the outcomes of Singapore and Taiwan may be inaccurate because they provide lump-sum benefits only. This problem has been discussed in Chapter Three and Five, and the numbers applied to the evaluation in Chapter Eight are derived from Chapter Three and Five individually.

7.2.1.4 System Dependency Ratio

The idea of system dependency rate is similar to dependency ratio in demographic terms and is used to evaluate the sustainability of pension schemes (Fukawa 2007; Jensen and Lassila 2002; Nektarios 2000; Schmähl 2007; Trinh 2006). This index is defined as “the ratio of contributors to pensioners” and the rate stands for how many gainfully employed there are to support each pensioner. It is applied by the German pension system for adjusting the pension-point value in order to keep the scheme sustainable (OECD 2009: 199).

The applicability of this indicator to these four selected countries is an important issue because it seems suitable for the assessment of Pay-As-You-Go DB schemes and social allowance provisions only. Of all the selected pension systems, China’s urban pension schemes, Hong Kong’s social allowance programmes and Taiwan’s LI schemes are definitely feasible for this evaluation. That is, the payouts of these three systems are directly financed by pension contributions or tax revenues therefore the relationship between supporters and dependents is easily defined. China’s rural pension scheme and Singapore’s CPF system are virtually DB schemes because they are characterised by continuous payments, regardless of whether the participants may run out of account balance or live beyond the life expectancy. In other words, an individual account is the means with which to accumulate and define the pension rights that one can claim in retirement, and this idea resembles the Notional Defined Contribution (NDC) system currently implemented in Sweden (Asher 2002; Cichon 1999; McGillivray 2002; Palmer and Wadensjö 2004).

The problem is that this index seems to overlap the indices of coverage rate in the same radar chart, it is noteworthy that, according to Madigan (1993: 81), the overlapping effect in the same chart can be omitted when the researcher deems the index is important and indispensable for the whole study.

7.2.1.5 Replacement Rate

Replacement rate, defined as the ratio of the amount of retirement payment to retirees' last drawn wage or average wage of a specific period of time before retirement, is a widely applied indicator for measuring the sufficiency of retirement maintenance provisions (ILO 1984b: 63-4). This concept is normally applied to DB schemes for defining the payment level and is then introduced to evaluate the rate of IA pension plans. It is noteworthy that the replacement rate of IA schemes is calculated by the accumulated account balance, average wage and life expectancy at retirement. It should also be noted that, because private sources of retirement income are difficult to exhaust, this thesis merely focuses on mandatory public pension schemes.

The difficulty of computing replacement rate in the countries that provide lump-sum benefit is the issue to be tackled. Because the replacement rates applied in Chapter Eight are derived from the case studies, the problem has been discussed and solved in these chapters.

7.2.1.6 Administration costs

The measure of administration costs, defined as the ratio of the amount of costs to the amount of pension funds, is applied for evaluating the efficiency of a pension system regardless of whether it is on a Pay-As-You-Go DB or IA basis. Research indicates that the administration fees of Pay-As-You-Go DB (ranges between 3% and 4%) and NDC systems are normally lower than IA pension plans (around 20%) (Bateman and Mitchell 2002; Büttler and Teppa 2006: 33; Eatwell 1999: 59; Zaidi and Grech 2007: 303). Blackburn (2007: 89) further points out that the administration costs of universal public pension programmes based on either the Pay-As-You-Go or pre-funded principle should amount to less than 1% each year, which has been proved significantly lower than privately run pension plans. However, the inclusion of investment costs in the calculation of administration costs is an issue. Bikker and de Dreu (2006: 16) argue that, if applied, it may lead to the findings being biased because it is not directly related to pension funds' administration; whereas the other side contends that investment costs have to be considered because they are a part of the total expenses of this system (Rusconi 2005: 84-5). In addition, it must be remembered that the abovementioned definition may only provide limited information about the efficiency and sturdiness of its finance. For this sake, the thesis applies the formulas "administration costs / pension payouts" and "administration costs / contributions" suggested by Gillion and his colleagues (2000: 247-8). The first formula measures the details of a pension schemes' efficiency and the second formula investigates the sustainability. The investment costs are not included in this evaluation due to availability issues (e.g. Singapore's CPF

system).

It should be mentioned that the second indicator may have trade-off with the indicator that evaluates the ratio of the number of contributors to the number of employed because the larger the number of active members may lead to the higher the amount of contributions. Nevertheless, as Madigan (1993) and Schütz et al. (1998) state, it can still serve as an indicator in spite of the overlapping issues.

7.2.2 Output Indicators

7.2.2.1 Poverty Reduction

As Palacios (2003) observes, notwithstanding that insured employees accumulate pension rights in DB pension plans or deposits in IA pension schemes throughout their careers, the programmes do not necessarily bring them an adequate level of retirement income at the end of the working lives due to low salaries, short seniorities or unstable finance and a poorly regulated system. The ILO (1984a: 24) notes that DB and IA schemes may provide a good foundation for retirement income security therefore social assistance programmes can focus on specific groups more efficiently, despite DeFina and Thanawala (2004) arguing that social assistance schemes did not work as expected according to headcount poverty rates, poverty gap ratio and the degree of income inequality.

The poverty level employed in this evaluation is an issue to be discussed. Robert Walker states that liberalists and universalists pursue different levels of living maintenance, namely adequacy and sufficiency respectively. The level of adequacy means the benefit level should barely satisfy daily needs, while the level of sufficiency indicates the level of payment should render beneficiaries modest comfort. Walker (2005: 135) further defines the adequacy level as the “resources necessary for a unit comprising one or more individuals to sustain a specified, usually minimal or modest, standard of living for a specified period.” In order to determine the feasible level of poverty rather than applying abstract terms such as adequacy and sufficiency, for instance, Gordon and Pantazis (1997a; 1997b) and Gordon (2000) employ the idea of necessities to find out what British people’s daily needs are to help draw the breadline under the assumption that the perception of necessities in a society may change as the society becomes richer or poorer. However, the problem of deciding the poverty level in this evaluation is that it is not easy to specify a standard for calculating the poverty threshold that fits all societies. For this reason, the thesis tends to apply national poverty levels or the levels defined by relevant studies for countries that do not have official

poverty lines to compare with because, for one thing, there is not yet a poverty level that can be applied to all the selected countries and, for another, the proper level of living standards is gradually considered by the governments and researchers when drawing the line. Among these five states being investigated in Chapter Eight, China defines the poverty level according to a set of food and products deemed as necessities, while Taiwan determines the line according to a specific proportion of average expenditures on consumption goods. Singapore draws the poverty level according to the minimum household expenditure level. Because Hong Kong does not have an official poverty level, the “Basic Living Protection Line” (Wong 2005), as discussed in Chapter Four of this thesis, is taken as the threshold in this evaluation. The UK’s poverty line is determined by the benefit level of Pension Credit.

The definition for calculating this indicator will be presented in Chapter Nine.

7.2.2.2 De-familisation

The main purposes of pension provisions are not only to reduce old-age poverty, but also to relieve the family’s burden of maintaining elderly members’ retirement income especially when the demographic situation may jeopardise the viability of the family support system. Because “de-familisation” generally refers to whether social provisions can reduce the family’s social security responsibility, this thesis recognises that higher levels of adequacy of pension provision may lessen households’ responsibility of ageing members’ income maintenance. The “responsibility of ageing member’s income maintenance” in this thesis is defined as “family solidarity”. With regard to the fact that the statistics of these countries normally highlight the importance of family solidarity as well as the inverse relation between de-familisation and family solidarity, the calculation of the de-familisation index will be based on the level of family solidarity. Therefore, this section will focus on the method for examining the level of family solidarity.

Three models of family support system – the power and bargaining model, mutual-aid model and altruistic model – are proposed in order to explain people’s attitudes towards this kind of altruistic behaviour. The mutual-aid model indicates that household members pool resources earned from the market to support members without an income during a specific period of time e.g. retirement, disability, illness, injury and unemployment. The households thus become a sort of insurance institute because members provide implicit insurance coverage to each other. It differs from the power and bargaining model in the sense that children know they will receive a bequest from ageing parents therefore showing their respect to, and taking care of, them. It is virtually a transaction rather than reciprocity (Kotlikoff, et al. 1986; Kotlikoff and

Spivak 1979; Kotlikoff and Spivak 1981). The altruistic model proposed by Becker (1974; 1993: 30-53 and 135-154 particularly) assumes that altruism is deeply rooted in people's minds and will not be discarded simply because of changes to demographic conditions, particularly in East Asian countries (Lin and Fu 1990). Because the values of filial piety and family support are repeatedly cultivated and conveyed, especially in extended families, fulfilling these obligations is an ongoing concern (Finer 2000: 27 and 30). In fact, the family support system not only pools resources in households, but also renders reciprocity among members such as elderly members providing housekeeping and childcare services for working adult members; while, younger members can provide long-term care for elderly members (Hermalin 1999; Ofstedal, et al. 1999). However, the problem is that the changes of family structure from extended to core family caused by industrialisation might diminish the insurance-like support system in these four Asian countries.

Aspalter (2001: 66; 2002: 135) observes that the impact on the family structure in these four countries differs. In Hong Kong, for example, the increasing demand for social services in the late 1990s expressed the aggravation of demographic structure and the diminishment of extended family thus made people nervous about the decrease in the working population and adult children's failure to fulfil their social security responsibilities in the future. Although the Taiwanese government used to emphasise the social security obligation on working adults and refrain from dependency-creating monetary provisions, the government gradually began to concentrate on both contributory social insurance schemes and non-contributory social allowance to complete the social security net (Haggard and Kaufman 2008: 227-8). In the West, some scholars point out that reciprocity remains an important part of family solidarity even though the state has partly assumed the family's social security obligations (Attias-Donfut and Arber 2000: 13; Kohli 1999; Lowenstein and Daatland 2006: 218-9). The findings show that the relief of financial stress from the state significantly has improved family solidarity by enhancing the emotional relationship between household members. That is, reciprocity, instead of resource exchanges or pools, becomes the core of family solidarity. Komter (2005: 162) further argues that the trend of familial solidarity in the North Europe is more difficult to anticipate than in the South because the North relies more on choice and affection in its social security framework. While the South and East Asian countries concentrate more on economic development, cultural contexts and social control mechanisms through the legal and sanctioning systems (Streib 1987). Therefore, Crow (2002: 55) concludes that social policy may modify people's ideas but cannot change their obligations and affection towards family members.

As discussed above, the evaluation of family solidarity may have to consider both monetary supports and reciprocal services between family members. However, the availability of statistics on reciprocity varies from country to country; it is difficult to be employed to assess the family solidarity. Therefore, the calculation of the de-familisation index will be based on the “proportion of retirement income constituted by cash transfers from kinship” and detailed in Chapter Nine. The information about family solidarity has been demonstrated in the case studies of this thesis.

7.2.2.3 Gender inequality

It is true that the role of breadwinner is no longer solely played by men in industrial and post-industrial societies like Hong Kong, Singapore, Taiwan and urban China. Sainsbury (1996: 40-4) divides household types into male-breadwinner and individual households. The male-breadwinner model gives the role of caregiver to women and bases their pension rights on their husband or partner’s working status, a policy which is mostly implemented in conservative welfare states; while the pension rights are in accordance with male- and female-breadwinners’ working status in the individual household model. The latter type includes Swedish and American welfare regimes. Daly and Rake (2003: 174 particularly) further categorise three types of households: promoter of female labour participation (e.g. Sweden), supporter of stay-at-home motherhood (e.g. Germany); and pursuer of productivist welfare capitalism, people accessing welfare services with the exchange of income from the labour market (e.g. the USA and the UK).

The transformation of breadwinner structures is relevant to the debates about the feminisation of poverty and poverty risks of women since the early 1960s. These hold that the inequality of working conditions and unequal distribution of resources within households mean women have a greater possibility of falling below poverty level than their male counterparts (Bianchi 1999; Lee 1998; Mc Lanahan, et al. 1989; Pearce 1978; Pressman 1989). Studies of the feminisation of poverty in Hong Kong, Singapore and Taiwan began in the early 1980s (Bo 1985; Salaff 1981; Salaff 1988). In Taiwan, for instance, scholars focused on the poverty amongst ageing women, female-breadwinner households and single old-age women, and later linked the feminisation of poverty to inferior working conditions (Hsueh 2002a; Hsueh 2002b; Hsueh 2004; Wang and Ho 2005; Wang and Ho 2006). As Orloff (1993: 57) argues if an industrialised society is overly focused on the reduction of gendered poverty and reform of the pension system, then the government may ignore the issue of women’s unequal treatment in labour market (e.g. low wage levels, higher proportion of part-time employment and shorter seniority) which is exactly what deteriorates their pension rights and results in low benefit levels. Some researchers have echoed Orloff and proved that this is true of both

DB and IA pension scheme participants. In addition, it has been found that privately-managed IA schemes might do more harm to women in part-time jobs and general low-income earners because the management costs are fixed and constitute a larger proportion of their retirement accounts. Research also shows that IA pension plans did not guarantee the minimum level of benefit and the take-up rate was lower than for the DB counterparts because, on the one hand, contributions reduced the income they brought home and, on the other, the benefits did not give them a secure retirement income. Therefore, the analysis of the inequality of pension rights has become more important particularly in these four countries, which have not only attempted to privatise the pension systems but also oppose improving the vested rights and extending the coverage of basic pension provisions (de Mesa and Montecinos 1999; Ginn 2003: 21-6; Ginn and Arber 1991: 391; 1992; 1999: 326-7 and 337; Ginsburg 1979: 81; O'Connor 1993: 514).

It is true that, as Hill (2006: 217-8) and Crow (2002: 56) argue, these issues may not be easy to analyse statistically but some clarity can be achieved through the review of labour market statistics, the arrangements of social security system, the statistics about female employees' working records and the data of social security contributions. This index will consist of both contributive and non-contributive pension components, and the detail definition and computation of this indicator will be illustrated in Chapter Nine.

7.2.2.4 Redistributiveness

Assessments of redistributiveness have been undertaken by a few seminal works adopting Bismarckian and Beveridgean models as the two ends of the spectrum representing purely-non-redistributive and totally-redistributive schemes respectively. Econometric models are applied by some researchers (Bossi 2008; Casamatta, et al. 2000a; 2000b; Conde-Ruiz and Profeta 2007; Koethenbueger, et al. 2008; Lefévre 2007) to evaluate the associations between political support for redistributive social security programmes and the level of public expenditure, the differences of system arrangement between DB and IA schemes, the return rate of DB schemes, the interest rate of financial market or private pension plans, private social security spending and the degree of gendered inequality in labour market. This series of studies concludes that social insurance systems with less redistributiveness may gain support from both higher and lower earners because, on the one hand, high-income groups prefer earnings-related plans and, on the other, the decrease of redistributed resources is bearable for low-income earners.

Notwithstanding that some studies have proposed methods to examine

redistributiveness in the West the different economic, cultural and political contexts may hinder researchers from using the same approaches in the East. As Keating (2009: 268-70) argues, in the West, the redistributiveness of social security schemes and social solidarity came with the formation of nation states and the introduction of redistributive schemes enhanced national identity. The extension of a borderless economy, as Ohmae (1990) points out, may weaken the nation states and people will ask for decentralisation and privatisation of social security schemes, thus further undermining national solidarity. While in the East, as discussed above, governments tend to develop social provisions only when they recognise its importance for improving productivity. In order to encourage diligence and discourage laziness and dependency, governments limit the redistributiveness of social provisions, minimise the states' financial guarantee of payments and revive the tradition of the family support system (Holliday 2000; Jones 1990; 1993; Rieger and Leibried 2003: 254-5; Walker and Wong 2005). Therefore, redistribution of resources is confined to kinship, and Confucianism and paternalism are the means by which social norms are established and social policies introduced to society (Kuo 2009; Neher 2002: 164 and 168; Sinn and Wang 2003: 3; Standing 2002: 117).

Another stream is to apply national value surveys to quantify people's attitudes toward, and identification with, social insurance and welfare provisions as well as the perception of justice and need in a society (Arts and Gelissen 2001; van Oorschot 2000; 2002). Wong et al. (2006) initiated the first attempt in the East, using self-interest and emotion as factors to evaluate people's support for the welfare state in Hong Kong. The results indicated that larger number of respondents were characterised as self-interested persons and expressed different values on the recipients of means-tested benefits i.e. CSSA and SSA schemes, and people who suffered from disasters. That is, people tended to stigmatise the beneficiaries of social assistance schemes but praised those who made donations to help the deserving people with whom they sympathised. Nonetheless, this research found that the reciprocity, which normally existed between family members, was still honoured by these self-interested persons. For this, the authors argue that Hong Kong is still able to develop welfare provisions through reviving the sense of mutuality and breaking the boundary between we-family-members and they-outsiders. In this way, solidarity in this society may reach everyone and thus a welfare state of Hong Kong's kind may be initiated.

Because social surveys about people's attitudes toward redistribution of wealth are not available in all the Chinese Community states, this thesis tends to measure redistributiveness through calculating the ratio of the amount of redistributive social

expenditures to the amount of total social expenditures. In this way, this indicator investigates in the degree of redistributiveness agreed by the government and/or society. The details are presented in Chapter Nine.

7.2.2.5 Scale of Pension Expenditures to GDP

Public expenditure has been an important dimension for examining and comparing the efforts of welfare states and categorising them into several regimes (O'Connor and Brym 1988; Quadagno 1987; Skocpol and Amenta 1986). Korpi (1989: 3) argues that public expenditure may not actually contour the features of modern welfare states and to some extent merely indirectly maps out the profile of social citizenship, which he thinks is essential for differentiating welfare regimes. He establishes an index on social rights composed of GDP growth, days of industrial conflicts, the proportion of civil servants to total population, ballots gained by left parties, the number of cabinet seats possessed by left parties and the level of unionisation. Esping-Andersen (1990: 49-50) also employs public expenditure to analyse welfare state outputs; and establishes the de-commodification index to complete the rest of the evaluation as mentioned earlier.

In addition, some scholars suggest looking into people's income components (as illustrated by Shaver 1998) and decomposing public expenditure in order to measure the outcome of welfare states from different perspectives. Castles (1994) introduced a disaggregated social spending approach because different types of welfare state may have different profile of expenditure and this hinders researchers from investigating the whole scale of social expenditure. As Castles notes, Singapore exemplifies welfare regimes with a lower level of public social expenditure than Western counterparts, but the payments from private sources were higher than in the West. Jacobs (1998) and Rieger and Leibried's (2003: Chapter Five particularly) studies of selected East and Southeast Asian social security systems correspond to Castles' observations. Besides, Castles (2008), Castles and Obinger (2007) and Gugushvili (2009) further develop the disaggregated social expenditure method for assessing the relationship between citizenship and people's support for redistributive social security systems as well as the association between the poverty rate of each group (e.g. disabled, elderly and unemployed) and corresponding category of social spending. This is grounded on the idea that different kinds of social expenditure e.g. old age benefit, unemployment benefit and sickness benefit, should not be equally weighted when evaluating the relation between, for instance, retirement income and poverty rate.

With regard to the discussion above and the importance of private sources of retirement income particularly in East and Southeast Asian countries, applying "the ratio of the amount of private social expenditure on retirement payments to the sum of the public

social spending on old age benefits” as an indicator may show the difference of the scale between private and public sources of income. However, it seems unlikely that the higher the radar chart score on this index the greater the performance of the pension system. Therefore, two indicators will be created and defined as “the ratio of aggregate public old-age expenditures to GDP” and “the ratio of aggregate private old-age expenditures to GDP” to examine the scale of public and private resources of the society allocated to retirees respectively. The idea derives from Diamond (1977: 297), Faure (2006: 164), Hindriks and De Donder (2003: 2649 and 2655) and Moene and Wallerstein’s (2001: 871-2) findings that public and private sources of retirement income may have a trade-off effect. Namely, in a country where the social security system is underdeveloped then people’s demands on private pension insurance policies may increase accordingly. For availability reasons the statistics on private social spending for the four countries in this evaluation are based on the payouts of private insurance programmes. It is true that the expenditures on private insurance policies, including life, endowment and annuity insurances are accessible; while that of the average level of personal income components are not. However, the weaknesses of solely applying the spending on private insurance policies are, on the one hand, the scale and development of the private insurance market in these countries may differ and, on the other, not everybody can afford to pay the premiums. Besides, because not all the authorities concerned with the private insurance market separate the expenditures on life, endowment and annuity insurances, this analysis employs the general expenditures on life insurance. These issues may be solved through improving social statistics and transparency of information in the future; then this indicator can be used to exactly evaluate the scale of private sources of retirement income.

7.2.2.6 Evasion of Pension Contributions

Compliance with social security obligations shows the popularity of a programme and the government’s capability of enforcing the institution on the whole country. The estimation of contribution evasion is therefore closely related to the finance of a social security scheme as well as the degree to which targeted people are complying with the system. That is, the evasion of contribution will not only endanger the financial sustainability of a pension system and jeopardise participants’ entitlement, but also informs the government about the scale of people who may demand social assistance benefits to meet the subsistence or nationally prescribed minimum standard of living. The possible scale of evasion, from the perspective of the government, is determined by the coverage of economically active population defined by the system, the degree of enforcement that the social security system is authorised and the efficiency of the recordkeeping system. Taking the Chilean model for instance, Mesa-Lago (2001) and

Queisser (1995) observe that the considerable contribution evasion was due to the expansion of the informal labour market but the government did not take effective action to deal with it. As a result, the compliance rate normally fluctuated below 50% and the evasion rate of the self-employed was more than 90%. The government thus had to emphasise more resources on social assistance schemes to maintain minimum standards of living (de Mesa 1998: Table 4; cited from McGillivray 2004: 320; Schmidt-Hebbel 1999: Table 3). Gillion et al. (2000: Chapter 10 particularly) suggest that employers and employees may have incentives not to report, or even engage in, the evasion because business owners may want to save labour costs, or already have alternative arrangements for occupational pension plans, or find it cheaper to bribe the labour inspectors into silence than paying contributions.

Because not every system provides these kinds of statistics or the form of information is inconsistent with each other, this thesis applies McGillivray's (2004: 319) suggestion to measure the gap between the theoretical and practical amount of contribution.

7.3 Weaknesses of the Methodology

Some weaknesses of the approaches for evaluation in this thesis may be significant. In terms of the case study method adopted, Mishra (1977: 9-12) argues that the deeper the analysis in one or several countries then, the more difficult the generalisation of the findings. Nevertheless, this thesis proves that the influences of Confucianism in different societies may vary and are present in different forms of social policies as has been proposed by some researchers (Goodman and Peng 1996; Jones 1990; Jones 1993; Kwon 1997; Zhang 2003). In terms of the methods of comparative evaluation in Chapter Eight and Nine, it is true that not all the material employed are from official statistics for availability and accessibility reasons and these might be seen as second best sources biasing the findings. For instance, the statistics about income components, social values of social solidarity and the level of evasion are unavailable and/or the methods for acquiring this information are inconsistent among these countries. In this way, the sources of income, the level of social solidarity and the evasion of social security responsibility may not have been accurately examined. Moreover, the nature of family support system may not be well defined because kinship assistance is a positive value in the East but the higher level of de-familisation in the West may result in a poor score on this indicator. This does not mean the family system in the West is worse than the East, but simply indicates that in the West income security is not dependent on the household pooling system as it is in the East. It is also true that the indicators may not be representative and exactly display the advantages and disadvantages of these Asian pension systems as well as the similarities and

dissimilarities between the Western and Eastern pension provisions. Besides, the definition of each indicator may differ from the reality. For example, can gender equity be measured simply by labour-market and non-labour-market factors? Does it make sense to ignore the financial issues when considering the arrangement of pension provisions? Can the definitions of poverty line employed in this thesis measure the level of poverty reduction? Can the whole amount of private insurance payouts represent the scale of private social expenditures? All of these defects will perhaps be sorted out by further efforts in this series of studies as well as the improvement of official statistics in these countries.

This chapter introduces radar chart and SMOP approaches which will be used as the tool for evaluating the inputs and outputs of Chinese Community pensions in Chapter Eight and Nine respectively. The review of the weaknesses helps understand the shortcomings of the following assessments and avoid biased findings.

Chapter Eight Comparison and Evaluation of the Inputs of the Chinese Community Pensions

This chapter is going to answer the last question of this thesis – how do these four Chinese Community pensions compare to each other? – by establishing a policy index of the inputs of pension systems in China (divided into urban and rural systems), Hong Kong, Singapore and Taiwan with eight criteria using the radar chart approach and Surface Measure of Overall Performance (SMOP) method. The methodology, operation of indicators and the findings of the evaluation will be presented and discussed in the following sections. The results of SMOP approach will be examined by sensitivity analysis in order to check the consistency with the findings of the radar chart approach. The advantages and disadvantages of these Chinese Community pensions will be concluded in the last section of this chapter. The appendix for the following examination is attached at the end of this chapter.

The UK's pension system will be brought in as the control of this evaluation to assess the performance of these five Asian pension systems. The reasons for applying Britain in this examination are, for one thing, Britain has operated an old age pension scheme and the National Insurance system for around a hundred years from 1908 and 1911 respectively (Ogus 1982). Although the British pension system may not be the best and most typical among the Western industrialised countries, its long history implies its reliability and sustainability. For another thing, as discussed in Chapter Two of this thesis, Esping-Andersen (1997: 185-8) takes Japan as an example and argues that the East Asian welfare regime resembles a mix of residualist and corporatist welfare capitalism. It has to be mentioned that Esping-Andersen's (1990: 74) work also denotes that the British welfare regime is characterised by its moderate residualism and corporatism. That is, the UK's welfare system is to some extent a combination of residualist and corporatist welfare regimes similar to those explored in Esping-Andersen's Asian study. Therefore, bringing in the British case may not only help compare the performance of pension provisions between the UK and the four Asian states, but may also highlight the differences and similarities between countries that arguably share some ideas about how welfare should be provided.

8.1 Indicators for Evaluation and Comparison

The “input indicators” that are discussed and selected in Chapter Seven for following evaluation are listed below:

- Arrangement of retirement payment scheme;

- Mechanism of indexation and the status of vested rights;
- Ratio of pensioners to total old age population;
- Ratio of contributors to total employed population;
- System dependency ratio;
- Replacement rate;
- Ratio of administration costs to pension payments; and
- Ratio of administration costs to pension contributions.

The raw data illustrated in Table 8.1 is the basis for computing the radar chart and SMOP scores, which will be displayed in Table 8.3. The data applied for computing the UK's scores is demonstrated in Table A8.1 of the Appendices section. Moreover, it has to be noted that China's urban and rural pension schemes are separated in this evaluation because they are significantly different in terms of coverage, popularity and payment level.

Table 8.1 Raw Data for Evaluation of the Pension Schemes of China, Hong Kong, Singapore, Taiwan and Britain, 2001 and 2007

Indicators	China (urban)		China (rural)		Hong Kong		Singapore		Taiwan		UK	
	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007
Arrangement of retirement payment scheme	2.5		0.5		1.8		1.0		1.5		2.5	
Mechanism of indexation and the status of vested rights	2.5		2.5		0.3		0.5		1.3		2.5	
Ratio of pensioners to total old age population (%) *	57.4	49.9	1.1	3.2	60.8	54.3	94.3	85.8	68.7	76.4	93.1	94.2
Ratio of contributors to total employed population (%) **	45.1	51.7	12.2	10.9	93.5	94.9	80.2	85.7	82.9	85.5	89.0	95.8
System dependency ratio	3.2	3.1	54.5	13.3	6.2	6.1	3.6	2.7	5.9	5.9	2.5	2.6
Replacement Rate (%) ***	71.8	43.1	21.5	24.8	11.7	10.5	3.3	6.2	9.7	10.7	37.1	30.8
Ratio of administration costs to pension payments (%) ****	7.0	6.0	10.8	7.7	7.0	4.3	4.9	4.4	2.0	2.0	1.7	2.3
Ratio of administration costs to pension contributions (%) *****	8.1	4.6	5.0	3.1	0.8	0.8	0.6	0.8	2.0	2.5	1.5	1.8

Notes: The numbers are rounded up.

* The numbers are derived and computed from CLA's statistics ($68.7\% = 115,275 / 167,784$; $76.0\% = 142,053 / 185,987$), Figure 4.6 (the sum of the percentages of CSSA and SSA), Table 5.17 (with people aged above fifty-five = 662.0 thousand persons), and Table 6.9.

** The numbers are derived and computed from Table 3.4, Table 4.15, Table 5.15 and Table 6.5.

*** The numbers are derived and calculated from Table 3.4, Table 3.5, Table 3.9, Table 3.10, Figure 4.6, Table 4.13, Table 4.14, Table 5.21, Table 6.8, Table 6.9 and Table 6.10. Because of unavailability of information, the data of 2001 in China and Singapore is replaced by the data of 2005 and 2003 respectively, while Taiwan's data of 2007 is replaced by the data of 2006.

**** Because Hong Kong and Taiwan's data are available from 2004 and 2003 respectively this thesis applies these statistics for evaluation of this indicator. Taiwan's administration costs are based on Table 3.8, while the data for the other three countries are from the Yearbook of Statistics and annual report of each year. In addition, the administration costs of the Chinese urban pension is based on the statistics shown on Table 6.10 of this thesis, and the administration expenditures of rural China's pension system is derived from Table 8-26 and 11-40 of China Labour Statistical Yearbook in 2001 and 2003 respectively.

***** The year of the administration expenses applied by this indicator is the same as the "ratio of administration costs to pension payments", and the numbers of contribution are derived from annual reports of each country. The urban and rural Chinese pension schemes share the same statistics because these two systems do not have separate data in this field.

Sources: The numbers illustrated in this table are derived and computed from the Yearbook of Labour Statistics of Taiwan (BLI 2004; BLI 2007; Council of Labour Affairs 2009), Annual Report of Mandatory Provident Fund Authority (2005a; 2005b; 2008a; 2008b), Annual Report of Central Provident Fund Board (2001; 2007), China Labour Statistical Yearbook (Ministry of Human Resources and Social Security 2001; 2003), and the Yearbook of Statistics of China (The National Bureau of Statistics of China 2002; 2005; 2008) by this thesis.

8.1.1 Arrangement of Pension Provisions

As it was discussed in Chapter Seven a pension system with many pillars does not necessarily mean the payments provided will be secure. Rather, the certainty of pension rights and the stability of pension payments are the main goals that a pension system should achieve (Modigliani and Muralidhar 2004: 2-8). Therefore, certainty and stability will be the criteria for judging the arrangement of pension programmes, whereas financial issues will not be a concern here. According to these two standards, this thesis deems that a defined-benefit (DB) scheme providing annuities is superior to an individual account (IA) plan paying periodical or lump-sum benefits on the basis

of participants' capital accumulations because the DB scheme takes both certainty and stability into account while the IA plan does not. In addition, social assistance provisions will be considered in this indicator because it is usually the supplementary provision of retirement income financed by tax revenues. The principles for scoring are as follows:

- The countries will be awarded scores of 1.0 and 0.5 if mandatory DB and IA plans constitute the main part of pension benefits respectively. Countries that do not operate mandatory contributory pension programmes will be marked zero.
- The countries will be awarded scores of 1.0 and 0.5 if universal and means-tested social allowance provisions are available individually. Countries that do not have social assistance schemes will be scored zero.
- The social assistance programmes are deemed as supportive provisions in this research thus the weight of pension schemes is doubled. As a result, the full score becomes three points.

According to the abovementioned rules, the Chinese urban system can be scored 2.5 for 2001 and 2007 because a mandatory DB pension scheme has been implemented in urban areas and is supported by a means-tested social assistance benefit. China's rural pension scheme meanwhile receives zero as a voluntary pension system and 0.5 as a means-tested retirement benefit scheme. As a result, the radar chart score of the Chinese rural pension scheme is 0.5 for 2001 and 2007. Hong Kong is scored 1.8 for its IA pension plan (Mandatory Provident Fund; MPF) and the application of both means-tested and universal social assistance programmes. Singapore's retirement payment system is based chiefly on an IA pension scheme (Central Provident Fund; CPF) while payments from the social assistance schemes are nearly nonexistent, therefore the system is scored 1.0. The Taiwanese pension system is scored 1.5 because it consists of two lump-sum retirement benefit programmes and some means-tested schemes. The British pension system is constituted by a flat-rate national insurance pension provision (Basic State Pension; BSP) and a contributory earnings-related state pension scheme (State Second Pension; S2P). Although S2P can be contracted out, BSP and S2P are recognised as DB pension schemes and obtain a 1.0 score from this perspective. Besides, a non-contributory means-tested Pension Credit (PC) scheme is applied to support the DB schemes for making up the gap between the poverty and retirement benefit levels. Because eligibility for the PC scheme is decided by means tests, it receives 0.5 on this dimension. After being weighted, UK's

pension system is marked 2.5 in this indicator (Table 8.1).

8.1.2 Indexation Mechanism and Status of Vested Rights

This indicator measures whether the benefit level of the pensions can keep pensioners' standards of living at a certain level over time, as well as whether the pension rights are appropriately protected. The thesis, as discussed in Chapter Seven, recognises that systems adjusting the benefit level along with the price index throughout pensioners' retirement lives will maintain purchasing power and that this is better than wage indexed pensions or a combination of price and wage indexes. Besides, protecting the pension rights through government budgets is better than partly backing up the rights through governmental finance or relying totally on individual responsibility. The criteria for scoring this indicator are as follows:

- The countries will be scored 1.0 if benefit level is adjusted along with the price index and 0.5 if it is modified by the wage index or a combination of price and wage index. The countries will be marked as zero if benefit indexation is not available.
- The countries will get 1.0 and 0.5 points if benefit modification is operated on a regular and occasional basis respectively; while states do not have an indexation mechanism will be scored zero on this dimension.
- The countries will be marked as 1.0 and 0.5 if the governments fully and partially (including guaranteeing return rates) take responsibility for pension payouts individually. The governments that do not guarantee the finance of pension provisions will get nought in this dimension.
- The abovementioned scores will be added up and the full score is three. The higher the score the better the performance in terms of maintaining the level of pension benefits and preserving participants' pension rights.

The Chinese urban pension scheme is scored 2.5 because the pension level is adjusted annually (1.0) according to local wage levels (0.5) and the government is fully responsible for the payments (1.0). Although the rural pension system in China is not a compulsory scheme, the way it modifies benefit level and protects pension rights is identical to its urban counterpart and thus obtains 2.5 in this dimension. Hong Kong's MPF scheme does not have an indexation mechanism (0.0). Although the MPF scheme guarantees a minimum level of return rate, the Prescribed Savings Rate (PSR), in 2007 was merely 0.01% (0.0). Furthermore, nevertheless the Comprehensive Social

Security Assistance (CSSA) and Social Security Allowance (SSA) schemes did not have the mechanism for modifying benefits these two government-financed programmes were to some extent guaranteed by the government. Therefore, Hong Kong is scored 0.3 overall in this dimension. Singapore gets zero from indexation mechanism as the government modifies pension level along with the changes in the market interest rate but the rate is rather stable. Besides, Singapore is scored 0.5 from the perspective of vested rights because the guaranteed return rate is relatively higher than the market savings rate. As a result, Singapore's overall score in this dimension is 0.5. Taiwan's pension system is scored 1.3 because the Labour Insurance (LI) scheme adjusts benefit level along with the price index (1.0) whenever the changes of price accumulate up to 5% (occasionally, 0.5); while the Labour Pension (LP) scheme does not have such a mechanism. In addition, the government merely guarantees the return rate of both pension funds according to the average term-deposit interest rate (0.5). LI and LP are equally weighed because the contribution rates are similar. The British pension scheme obtains 2.5 score from this indicator because the modification of benefit level is in accordance with a combination of price and wage index (0.5) annually (1.0) (Department for Work and Pensions 2009: 27). In addition, the Pay-As-You-Go financed (BSP and B2P) and tax-funded means-tested (PC) programmes ensure the stability of the finance of pension payments therefore the British system receives 1.0 on this aspect (Table 8.1).

8.1.3 Coverage Rates

As discussed in Chapter Seven, two definitions of coverage rate are applied in the following evaluation:

- The ratio of the number of people receiving a pension to the number of people over 60 years of age.
- The ratio of the number of people contributing to pension schemes to the number of employed population.

It is noteworthy that because Hong Kong, Singapore and Taiwan provided lump-sum payments in 2001 and 2007, the numbers may be biased due to the fact that the available information may not represent the whole picture of pension provisions. Hong Kong's data is derived from the total number of applicants to the Normal and Highly Old Age Allowance schemes in 2001 (60.8%) and 2007 (54.3%) due to the concern that, on the one hand, the history of the MPF scheme is brief and, on the other hand, the number of recipients of MPF retirement benefit is unknown. Singapore's

data is based on the ratio of the number of non-active account holders to the number of people aged above fifty-five in 2001 (94.3%) and 2007 (85.8%), therefore the number may be much higher than the coverage rate of contributors to employed population. Taiwan's data is derived from those who claim old-age benefits divided by the number of people attaining sixty years old in 2001 (68.7%) and 2007 (76.4%) because the thesis assumes that the insured individuals claim the payment once they attain sixty years old. The numbers for China's urban areas are 57.4% (2001) and 49.9% (2007), while the statistics of its rural counterparts are 1.1% (2001) and 3.2% (2007). The calculation of Britain's ratios of pensioners to the total elderly population attaining retirement age is based on the data listed in Table A8.1 in the Appendices section. It shows that pensioners constituted 93.1% and 94.2% of the ageing population in 2001 and 2007 respectively (Table 8.1).

In addition, the ratio of contributors to the employed population in urban and rural China in 2001 and 2007 differs a lot. The statistics of the urban pension system show that active contributors constituted 45.1% and 51.7% of employed people in 2001 and 2007 respectively, while the numbers in the rural pension system were 12.2% and 10.9% in 2001 and 2007. Hong Kong's data is based on the MPF scheme because it is the only contributory pension plan, and the numbers illustrate that 93.5% and 94.9% of employed people contributed to the system in 2001 and 2007. The statistics of Singapore demonstrate that the number of CPF active members constituted 80.2% and 85.7% of the employed population in 2001 and 2007, while the data in Taiwan were 82.9% and 85.5% during the same period of time. The UK's result is derived from Table A8.1 and illustrates that the number of contributors constituted 89.0% and 95.6% of the economically active population in 2001 and 2007 (Table 8.1).

8.1.4 System Dependency Ratio

As discussed in Chapter Seven this index is defined as "the ratio of contributors to pensioners" and the result stands for how many gainfully employed there are to support each pensioner.

China's performance is calculated from the number of contributors divided by the number of pensioners in 2001 and 2007 and shows that the ratio for the urban pension system decreased slightly from 3.2 to 3.1, while that of its rural counterpart fell dramatically from 54.5 to 13.3 during the same period of time. Hong Kong's system dependency ratio is computed from the number of CSSA and SSA's recipients divided by the number of taxpayers, namely the employed population, in 2001 (6.2) and 2007 (6.1). Singapore's numbers are determined from the number of active members divided by the number of non-active account holders aged above fifty-five in 2001 (3.6) and 2007 (2.7). The system dependency ratio of Taiwan is defined as the number

of LI participants divided by the number of beneficiaries of LI old age benefit in 2001 (5.9) and 2007 (5.9). For this purpose, the average labour participation rate between 1978 and 2008 (58.6%) and average rate of the number of LI insured people to that of the labour force between 1987 and 2008 (81.2%) is employed to exclude the elderly population who are not covered by the LI benefits. The systematic dependency ratios of the British pension system in 2001 and 2007 were 2.5 and 2.6 (Table 8.1).

8.1.5 Replacement Rate

As mentioned in Chapter Seven, the replacement rate is defined as the ratio of the amount of retirement payment to retirees' last drawn wage or average wage of a specific period of time before retirement. The replacement rate of Chinese urban and rural pension schemes is computed from the information stated in Table 6.6, 6.8, 6.9 and 6.10. It illustrates that the replacement rate of the urban pension scheme was 71.8% in 2001 but dropped to 43.1% in 2007. The statistics for the rural pension scheme are not available before 2005 thus the numbers of 2005 and 2007 are applied in this evaluation. These show that the replacement rate rose slightly from 21.5% to 24.8% between 2005 and 2007. Because the number of pensioners belonging to MPF scheme in Hong Kong is not available, the replacement rate is calculated from and modified by the payment level, average wage and eligibility rate of SSA and CSSA. This indicates that the replacement rate decreased slightly from 11.7% in 2001 to 10.5% in 2007. Singapore's replacement rate is calculated from the average account balance, average wage level and life expectancy in 2003 and 2007, which assumes people retire at fifty-seven years old on average as illustrated in the first part of Table 5.10. Here the replacement rate of the CPF scheme increased from 3.4% (2003) to 6.2% (2007). In Taiwan, because most retirement benefits are paid by the LI and Labour Standards (LS) schemes, the replacement rate is computed from the level of benefit and average wage level and adjusted by the eligibility rate of LI and LS retirement payments as shown in Table 3.4, 3.5, 3.9 and 3.10. It also has to be noted that Taiwan's replacement rate is calculated from the information of 2001 and 2006 because the data of 2007 is not available. With regard to all the factors mentioned above, the replacement rate of LI and LS old age benefits in 2001 and 2006 was 10% and 11%. The UK's data is derived from the OECD database and available in 2002 (37.1%) and 2006 (30.8%) (Table 8.1).

8.1.6 Administration Costs

As discussed in Chapter Seven, the thesis applies the following formulas to define administration costs in this analysis:

- Administration costs / Pension payouts

- Administration costs / Contributions

It is worth noting that urban China's numbers on these two indicators are the most debatable because the government does not provide official statistics on pension programmes' administration costs. It is true that the urban Chinese pension scheme is a decentralised system and the local and municipal governments are responsible for its administration rather than the central government, therefore the central government may be difficult to monitor its operation let alone keep the records straight. This evaluation, as noted in Chapter Six, attempts to estimate China's administration expenses on pension provisions from the difference between pension funds' annual expenditures and the net amount of pension payouts disbursed from the funds. In addition, because the information about the net amount of pension payments is not available from 2005, the rate of administration costs is assumed as 6.0% given that the decrease of the expenses had slowed down and stayed around 6.0%. It turns out that the rate of administration expenses dropped by one percent point between 2001 and 2007, while the ratio of the amount of costs to that of contributions decreased considerably from 8.1% to 4.6%. In rural China, the voluntary basic pension system provides statistics about administration expenditures in 2000 and 2002 only; therefore the evaluation of this chapter is based on this information. As shown in Table 8.1, according to the numbers provided by the authorities concerned, the administration costs of China's rural pension system constituted 10.8% and 7.7% of pension payouts in 2000 and 2002 individually. Besides, it indicates that expenses made up 5.0% and 3.1% of pension contributions in 2000 and 2001. As for Hong Kong, because the information about the government's administration expenses on social allowance systems is not available, the data of the MPF is applied in this evaluation. Besides, because the MPF Board started providing statistics on the amount of payouts from 2004, only the data of 2004 and 2007 will be employed in this evaluation, which illustrates that the ratio of administration costs to the amount of pension payments declined from 7.0% to 4.3% between 2004 and 2007, and the ratio of administration expenses to the total amount of contribution remained around 0.8% during the same period of time. The information obtained to examine Singapore's CPF scheme include all the benefits paid out from the CPF programmes such as the payments for death, unsound mind, permanent incapability and moving abroad because the administration expenses are not separated. It illustrates that the ratio of administration costs to benefit payouts went down slightly from 4.9% to 4.4% between 2001 and 2007, while the rate of expenses to the amount of contributions rose from 0.59% to 0.75% during this period of time. Taiwan's numbers are computed solely from the administration costs of the LI scheme in 2003 and 2007 due to the unavailability of information for 2001

and the lack of data from the LS and Labour Pension programmes. They indicate that the ratio of administration expenses to old age benefit payouts slightly increased from 1.99% to 2.01% from 2003 to 2007, and the ratio of costs to contributions went up from 2.01% to 2.46% over the same period of time. The ratio of administration costs to pension payouts of the British pension increased from 1.7% to 2.3% between 2001 and 2007, and the administration expenses to contributions went up from 1.5% to 1.8% during the same period of time (Table 8.1).

8.2 The Evaluation of the Pensions

In order to apply the radar chart approach and perform SMOP analysis, researchers need to select the principle for defining the benchmarking of each indicator in order to convert the raw data demonstrated in Table 8.1 into standardised scores on a one-point scale. The scores of each country in each field of criteria will then range between zero and one. In the following sections, the results of the data conversion are illustrated and the findings discussed.

8.2.1 The Conversion of the Raw Data

As mentioned above, the benchmarking principle has to be decided before the transformation of raw data can begin. The theoretical and institutional benchmarks do not fit here because, on the one hand, not all the indicators have theoretically maximum values. For instance, full coverage - namely 100% - may be the value pursued by each pension system but the system dependency ratio does not have an ideal value according to relevant literatures and theories. On the other hand, not every indicator has an institutional goal to be achieved. For example, pension systems may aim to accomplish as large a coverage rate, as high a replacement rate and as little administration costs as possible, whereas the arrangement of the pension scheme and indexation mechanism cannot be seen in these terms. Therefore, the best performer method is the most feasible in this research (Mosley and Mayer 1999: 7-10).

In order to operate SMOP analysis under the best performance criteria, it is first necessary to find out the best performer on each indicator (Table 8.2). Its performance will be the benchmark for converting the raw data (Table 8.1) into the standardised radar chart score which ranges from zero to one. Throughout the process of the calculation, the best performer's raw data are denominators for indicators where the higher the number the better the performance (e.g. replacement rate). On the contrary, the best performer's data will be the numerators for the indicators where the smaller the number denotes the greater the performance (e.g. the ratio of administration costs to pension payouts).

Table 8.2 Best Performer of Each Indicator		
Indicators	2001	2007
Arrangement of retirement payment scheme	China urban & UK	China urban & UK
Mechanism of indexation and the status of vested rights	China urban & rural and UK	China urban & rural and UK
Ratio of pensioners to total old age population (%)	Singapore	UK
Ratio of contributors to total employed population (%)	Hong Kong	UK
System Dependency Ratio	China rural	China rural
Replacement Rate (%)	China urban	China urban
Ratio of Administration Costs to Pension Payments (%)	UK	Taiwan
Ratio of Administration Costs to Pension Contributions (%)	Singapore	Singapore
Source: Derived from Table 8.1.		

The radar chart score that each pension scheme obtains for 2001 and 2007 are listed in the upper part of Table 8.3. The sum of radar chart scores and the percentage of the sum of radar chart scores to the full radar chart score are used for sensitivity analysis to determine the consistency of the results acquired from the radar chart approach and the SMOP analysis (Finch 2006: 335-7). As discussed in the methodology section earlier in this chapter, the SMOP score in this thesis will be an average value calculated from three theoretically possible arrangements of indicators in the radar charts. These three formulas are listed below:

$$SMOP_1 = ((I1 \cdot I2) + (I2 \cdot I3) + (I3 \cdot I4) + (I4 \cdot I5) + (I5 \cdot I6) + (I6 \cdot I7) + (I7 \cdot I8) + (I8 \cdot I1)) \cdot \sin(360^\circ / 8) / 2$$

$$SMOP_2 = ((I1 \cdot I3) + (I3 \cdot I5) + (I5 \cdot I7) + (I7 \cdot I2) + (I2 \cdot I4) + (I4 \cdot I6) + (I6 \cdot I8) + (I8 \cdot I1)) \cdot \sin(360^\circ / 8) / 2$$

$$SMOP_3 = ((I1 \cdot I8) + (I8 \cdot I2) + (I2 \cdot I7) + (I7 \cdot I3) + (I3 \cdot I6) + (I6 \cdot I4) + (I4 \cdot I5) + (I5 \cdot I1)) \cdot \sin(360^\circ / 8) / 2$$

The results of radar chart and SMOP scores are listed in Table 8.3.

Table 8.3 The Radar Chart and SMOP Scores of China, Hong Kong, Singapore, Taiwan and the UK's Pension Systems

Indicators	China (urban)		China (rural)		Hong Kong		Singapore		Taiwan		UK	
	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007
Arrangement of retirement payment scheme	1.00		0.20		0.70		0.40		0.60		1.00	
Mechanism of indexation and the status of vested rights	1.00		1.00		0.10		0.20		0.50		1.00	
Ratio of pensioners to total old age population	0.61	0.53	0.01	0.03	0.64	0.58	1.00	0.91	0.73	0.81	0.99	1.00
Ratio of contributors to total employed population	0.48	0.54	0.13	0.11	1.00	0.99	0.86	0.90	0.89	0.89	0.95	1.00
System dependency ratio	0.06	0.23	1.00	1.00	0.11	0.46	0.07	0.21	0.11	0.45	0.05	0.19
Replacement Rate	1.00	1.00	0.30	0.58	0.16	0.24	0.05	0.14	0.13	0.25	0.52	0.71
Ratio of administration costs to pension payments	0.25	0.33	0.16	0.26	0.25	0.47	0.36	0.46	0.87	1.00	1.00	0.88
Ratio of administration costs to contributions	0.07	0.16	0.12	0.24	0.75	0.86	1.00	1.00	0.29	0.30	0.40	0.41
Sum of radar chart score	4.47	4.80	2.92	3.43	3.72	4.41	3.93	4.21	4.12	4.80	5.90	6.19
% of full radar chart score*	0.56	0.60	0.37	0.43	0.47	0.55	0.49	0.53	0.52	0.60	0.74	0.77
Average SMOP score**	0.72	0.88	0.23	0.36	0.52	0.78	0.52	0.64	0.66	0.96	1.45	1.62
% of full SMOP score***	0.25	0.31	0.08	0.13	0.18	0.28	0.18	0.23	0.23	0.34	0.51	0.57
SMOP ₁	0.82	0.96	0.26	0.42	0.59	0.85	0.70	0.78	0.70	0.95	1.52	1.67
SMOP ₂	0.71	0.87	0.20	0.33	0.53	0.74	0.43	0.56	0.65	0.96	1.46	1.65
SMOP ₃	0.61	0.80	0.24	0.34	0.44	0.77	0.42	0.58	0.63	0.97	1.37	1.55

Notes: * Because the radar chart score of each indicator ranges between zero and one, the maximum full score is eight in this evaluation. Thus, the proportion of full radar chart score = sum of radar chart score / 8.

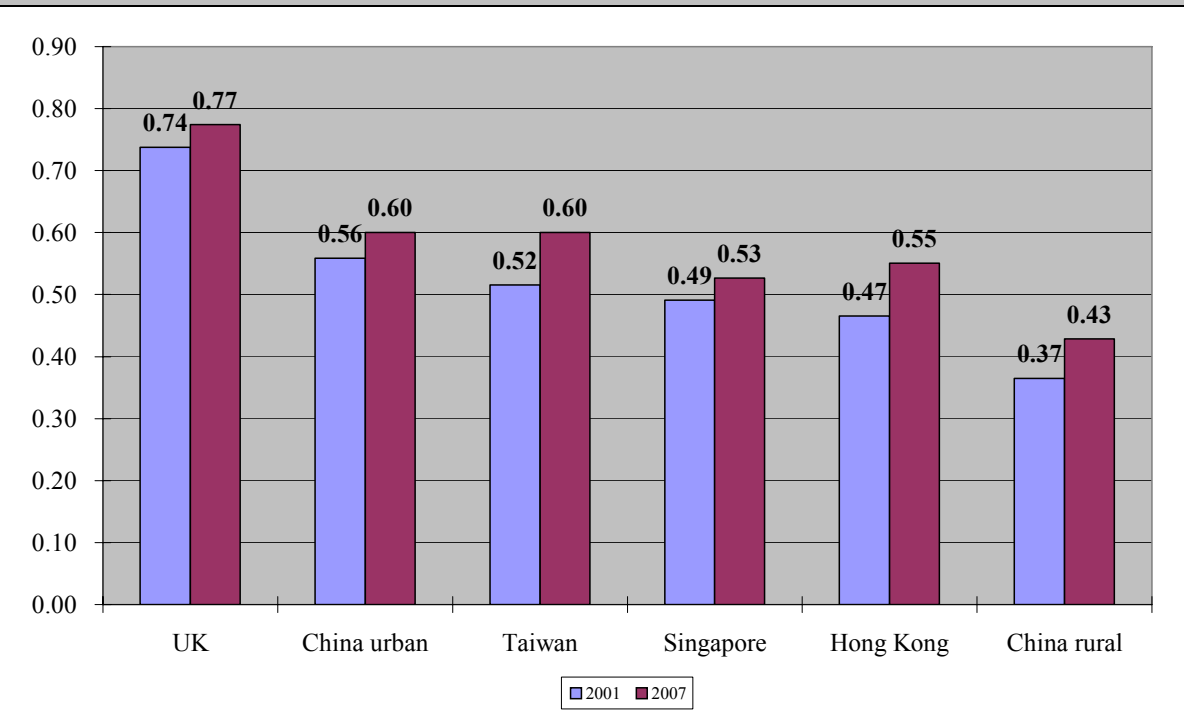
** The SMOP score is calculated from the average of three theoretically possible combinations of these eight indicators in the octagon (SMOP score 1, 2 and 3 listed below). The maximum SMOP score of this octagon is 2.8284 ($\sin 45^\circ = 0.7071$) which is computed from the formula stated above. All the SMOP scores are rounded up.

*** Proportion of full SMOP score = Average SMOP score / 2.8284. The numbers are rounded up.

Sources: The numbers are calculated from Table 8.1.

The sensitivity analysis concludes that the British system achieved more than 70% of the full radar chart score in 2001 (0.74) and 2007 (0.77) and performed the best among the six cases. According to the results, the ranking of the five selected Asian pension systems in 2001 was (first) Chinese urban, Taiwan, Singapore, Hong Kong and Chinese rural (last). The ranking altered between 2001 and 2007 by which time the Taiwanese pension scheme was performing at the same level as the Chinese urban pension system (0.60) and Hong Kong's average radar chart score (0.55) surpassed Singapore's (0.53), while China's rural pension plan remained at the bottom of this league table (Figure 8.1).

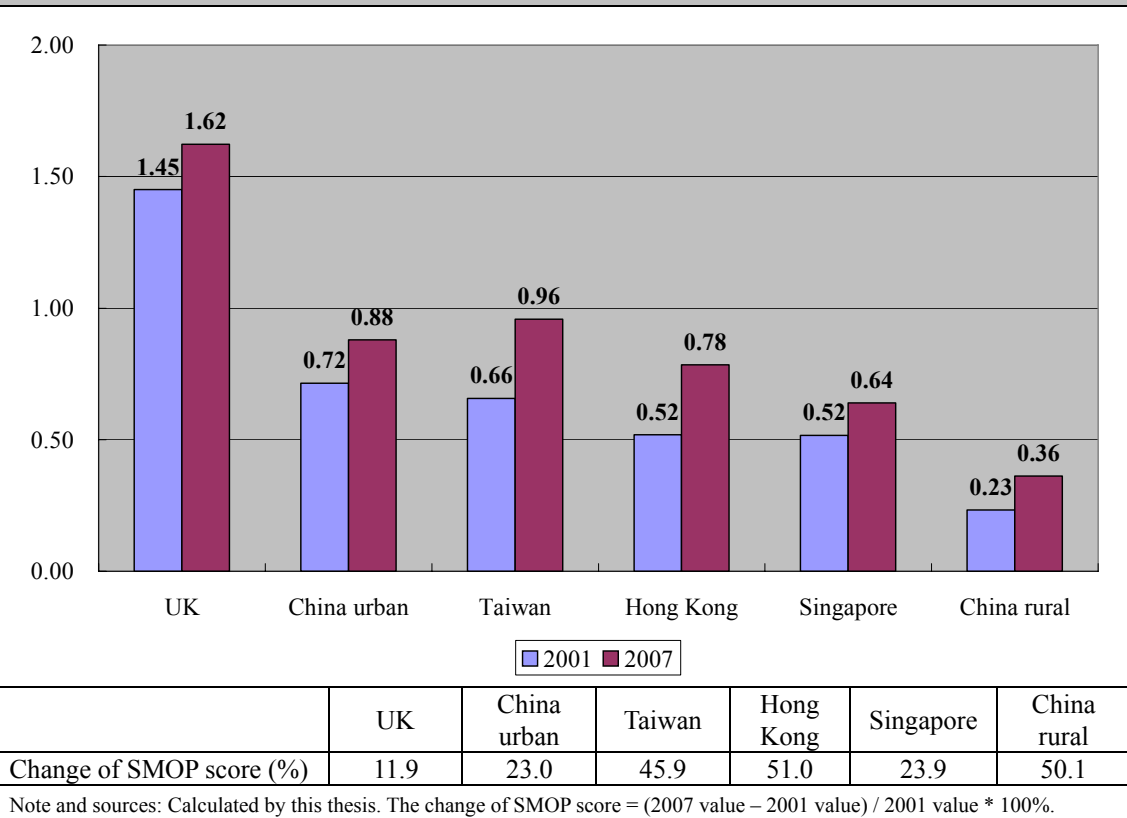
Figure 8.1 Sensitivity Analysis of Six Pension Systems



Source: Calculated by this thesis.

The ranking of SMOP scores (Figure 8.2) portrays a similar picture to the sensitivity analysis above. The UK pension system was again the best performer, scoring 1.45 in 2001 and 1.62 in 2007 while the five Asian pension systems obtained around half of the overall SMOP score. The Chinese urban pension scheme and Taiwanese retirement payment system also swapped places between 2001 and 2007 corresponding with the findings in Figure 8.1. Hong Kong and Singapore’s SMOP scores were at the same level (0.52) in 2001, but Hong Kong’s rose to 0.78 in 2007 and its performance became markedly better than Singapore’s (0.64). Besides, the Chinese rural pension scheme gained a mere half of Singapore’s score in 2001 (0.23) and 2007 (0.36).

Figure 8.2 SMOP Score and Its Changes in Six Pension Systems, 2001 and 2007



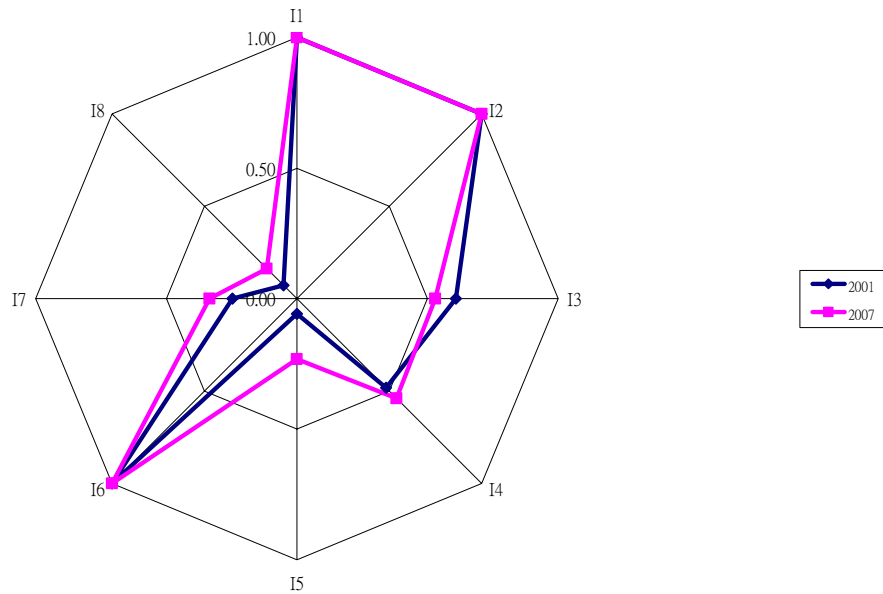
8.2.2 The Evaluation by Country

The country-specified radar charts will be shown and discussed in alphabetical order in the following section, and the year-specified radar charts illustrating the six pension systems in one graph will be displayed in the final section.

The Chinese urban pension system (Figure 8.3) performed the best among the selected Asian pension systems in 2001 and achieved the highest radar chart score in the arrangement of pension scheme (I1), indexation mechanism (I2) and replacement rate (I6) categories of the six pension systems in this evaluation. It also obtained moderate scores in the ratio of pensioners to elderly population (I3) and ratio of contributors to economically active population (I4). The weaknesses of China’s urban pension scheme were in system dependency ratio (I5) and two indicators of administration costs (I7 and I8). This shows that the advantage of the Chinese urban pension is the emphasis on a mandatory DB pension scheme, which provides a more than 40% replacement rate of benefit level, a means-tested social assistance programme to maintain elderly people’s incomes and adjusts payment levels according to changes in wage levels regularly. However, as illustrated in Table 8.1 and Figure 8.3, the system covers just half of the elderly (57.4% in 2001 and 49.9% in 2007) and economically active (45.1% in 2001 and 51.7% in 2007) in urban China despite the government enforcing regulations to boost contribution compliance from

the mid 1990s onwards. As a result, the urban pension scheme obtained around half of the radar chart score in these two indicators (I3 and I4). Moreover, the replacement rate of the urban pension scheme dropped from 71.8% (2001) to a lowly 43.1% (2007) as the Chinese government reduced the promised level of payment gradually from 1978 to mitigate the financial deficits of the pension system. Nevertheless, the replacement rate of the Chinese urban pension scheme is still the highest among the six systems. The system dependency ratio of the Chinese urban pension scheme which decreased from 3.2 gainfully employed to one pensioner in 2001 to 3.1 in 2007 was relatively lower than that of the rural Chinese pension system, Hong Kong and Taiwan's pension schemes and therefore obtained 0.06 and 0.23 of the radar chart score. It has to be noted that the high dependency ratio (54.5 in 2001 and 13.3 in 2007) of the Chinese rural pension scheme, which was due to the infancy of this system, caused other systems to obtain low scores in this aspect and bias the findings. In addition, the performance of the Chinese urban pension programme in the administration costs to the amount of pension payouts (I7) and contributions (I8) categories were low between 2001 and 2007 because, on the one hand, the decentralised administration system means the government must afford the expenses of the whole system around this vast country and makes room for local officials to take advantage of local pension funds. This is the reason why administration spending still constituted a relatively larger part of the pension benefits than other systems. On the other hand, although the Chinese urban pension system may become a mature system and contributions reduce accordingly, as discussed in Chapter Six, its main challenge will probably be its low compliance rate (Li and Zhong 2009).

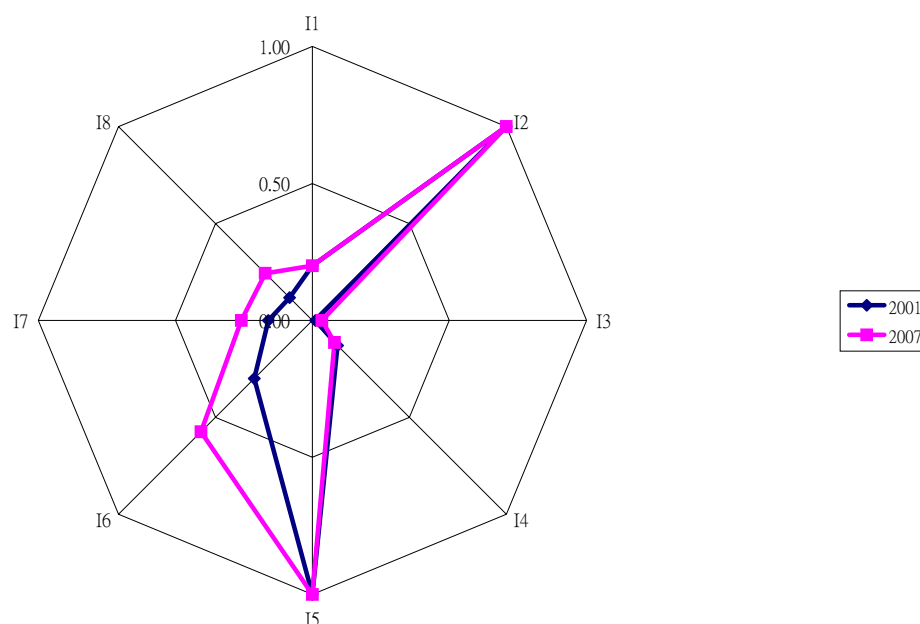
Figure 8.3 Radar Chart of China's Urban Pension System, 2001 and 2007



Note: I1: Arrangement of retirement payment scheme
 I2: Mechanism of indexation and status of vested rights
 I3: Ratio of Pensioners to total elderly population
 I4: Ratio of Contributors to total employed population
 I5: System Dependency Ratio
 I6: Replacement Rate
 I7: Ratio of Administration Costs to Pension Payments
 I8: Ratio of Administration Costs to Pension Contributions

The Chinese rural pension scheme (Figure 8.4) performed the worst among the six pension systems in this evaluation. This system's strengths were in its mechanism of payment adjustment system, level of vested pension rights (I2), system dependency ratio (I5) and replacement rate (I6) but it was weak in all the other dimensions. The rural pension system got the same score as its urban counterpart because the same benefit indexation system was applied to both pension schemes, even though the rural system is a voluntary pension plan, and its high level of system dependency ratio can be attribute to the fact that the system is still at the initial stage and the number of pensioners is far less than that of active contributors. The large increase in the radar chart score for replacement rate was due to the fall of the urban pension scheme's replacement rate from 71.8% to 43.1% between 2001 and 2007.

Figure 8.4 Radar Chart of China's Rural Pension System, 2001 and 2007

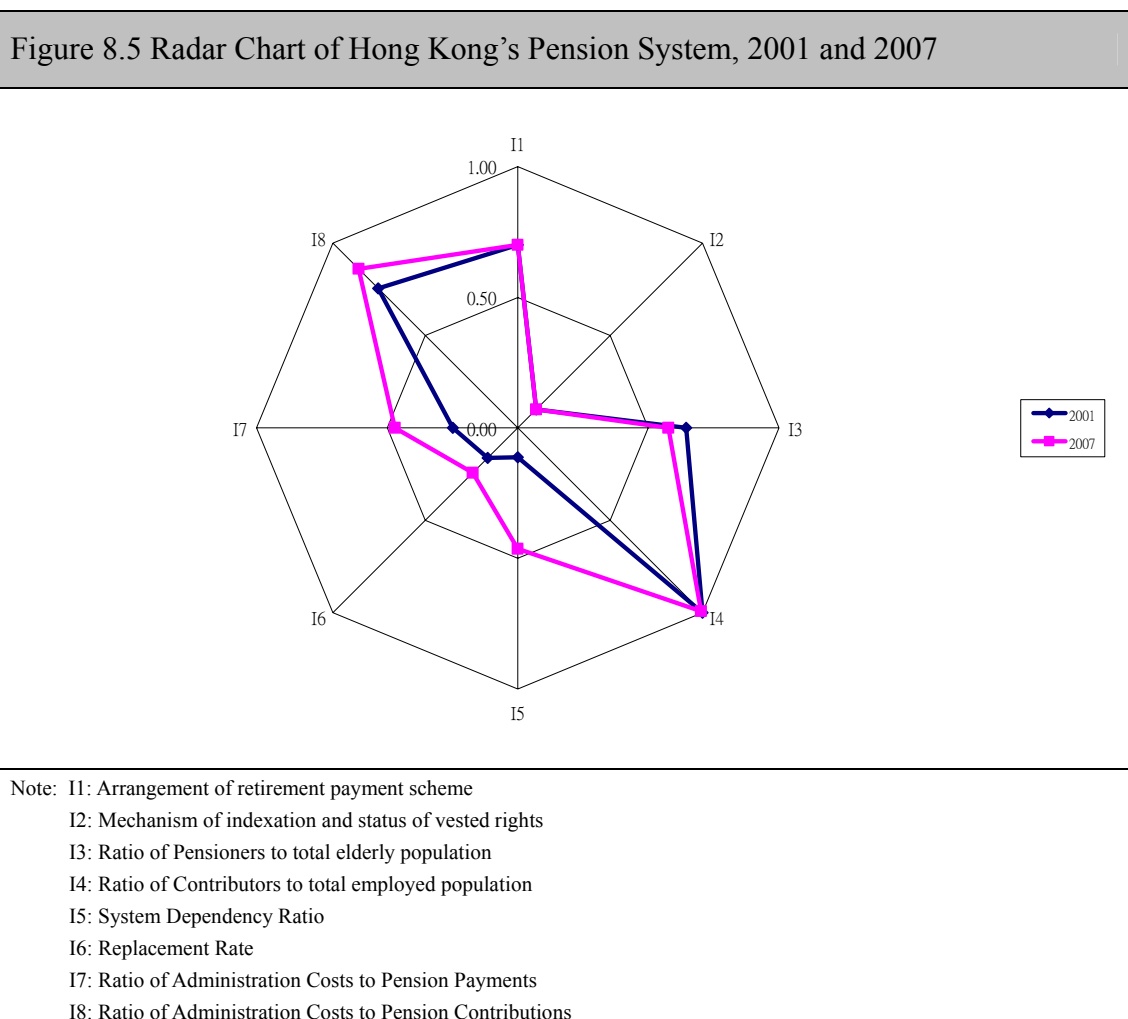


Note: I1: Arrangement of retirement payment scheme
 I2: Mechanism of indexation and status of vested rights
 I3: Ratio of Pensioners to total elderly population
 I4: Ratio of Contributors to total employed population
 I5: System Dependency Ratio
 I6: Replacement Rate
 I7: Ratio of Administration Costs to Pension Payments
 I8: Ratio of Administration Costs to Pension Contributions

The rural pension programme's weaknesses were in arrangement of pension scheme (I1), ratio of pensioners to old age population (I3), ratio of contributors to employed population (I4) and the ratios of administration expenditures to benefit payouts (I7) and pension contributions (I8). One of the most serious disadvantages of the rural pension system is that it is not a mandatory social security system due to the heterogeneity of income levels across the vast rural areas. The voluntary nature of the rural pension system means it cannot include the whole working population and many have to rely on the means-tested social assistance programme, though the take-up rate is low. Another problem caused by its voluntarism is low coverage of the ageing population and decreasing coverage of the working population. As the data illustrates, the coverage of the rural pension system among the rural elderly residents increased slightly from 1.1% to 3.2% between 2001 and 2007; while the ratio of participants to the total economically active population during the same period of time dropped from 12.2% to 10.9% as the number of joiners (60.0 million and 51.7 million people in 2001 and 2007) decreased faster than that of the economically active population (490.9 million and 476.4 million people in 2001 and 2007). This trend consequently

diminished the system dependency ratio from 54.5 contributors to one beneficiary to 13.3 to one recipient between 2001 and 2007. As for the administration expenses, the rural system performed the worst of all in the ratio of administration costs to pension payouts in both 2001 (10.8%) and 2007 (7.7%); while the level of administration costs to the amount of contributions was better than its urban counterpart only in 2001 (5.0%) and 2007 (3.1%).

Table 8.3 and Figure 8.2 show that Hong Kong's SMOP score increased by 51.0% between 2001 and 2007 and reached 0.78 of the overall SMOP score in 2007. The system receives full marks in the ratio of contributors to employed population (I4) and gets moderate radar chart scores in the arrangement of pension scheme (I1), the ratio of pensioners to elderly people (I3) and the ratio of administration costs to pension contributions (I8). In addition, Hong Kong's performance in indexation mechanism (I2), system dependency ratio (I5), replacement rate (I6) and administration costs to pension payouts (I7) were low. (Figure 8.5)



The arrangement of the pension programme in Hong Kong is closely related to its coverage between 2001 and 2007. The means-tested and universal social assistance

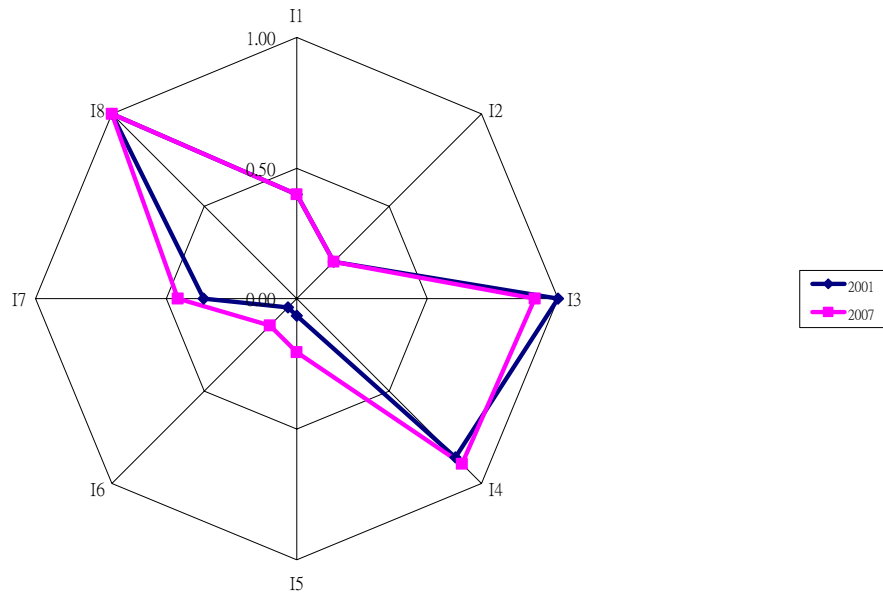
schemes constitute the main part of the retirement income security system in Hong Kong even though the Mandatory Provident Fund (MPF) scheme was introduced in 2000. The analysis shows quite clearly that the MPF scheme includes most of the economically active people in the system and this in turn results in a very high coverage rate of the employed population (93.5% and 94.9% in 2001 and 2007 individually); while the ratio of pensioners to elderly people, which was chiefly constituted by the beneficiaries of social assistance programmes, decreased from 60.8% to 54.3% during the specified timeframe due to the sense of stigmatisation discussed in Chapter Four. Moreover, the ratio of administration costs to the MPF payments and contributions are related to the short history of the scheme because the contributions of a pension system in the beginning usually significantly outnumber the amount of payments and the proportion of administration costs will reduce as the scale of pension payouts increase. The system dependency ratio of Hong Kong's pension system was relatively higher than China's urban pension system, Singapore's Central Provident Fund (CPF) scheme and the UK's pension programme but it performed worse than the Chinese rural pension system, therefore the radar chart score on this dimension was low. The increase of the score on system dependency ratio, as mentioned above, was caused by the decrease of the best performer's performance. Hong Kong received a low score in the indexation system and the status of pension rights protections categories because there is no mechanism for benefit adjustment in either the MPF or social assistance provisions and the government's financial obligations to the pension provisions as a whole are limited (e.g. setting the guaranteed investment return at just 0.01%). In addition, the low replacement rate of the retirement payment in Hong Kong reflects the government's position that income maintenance should be the responsibility of family members and that social assistance benefits for the ageing population should set at subsistence levels only.

Singapore's SMOP score increased from 0.52 to 0.64 between 2001 and 2007 and its performance was better than the Chinese rural pension system only. Among the eight indicators, as shown in Figure 8.6, the radar chart scores of system arrangement (I1) and indexation mechanism and status of vested rights (I2) stayed unchanged because, on the one hand, the CPF scheme remained the most important pension system in Singapore, the government simply added some other elements, such as savings for medical, educational, housing and financial services, on this system, instead of enriching the security of retirement income. On the other hand, in terms of the protection of pension rights, the government focused on the return rate and participants' property rights rather than pension rights, therefore the score of I2 was low. Besides, Singapore was the best performer in the ratio of pensioners to old age population (I3) and ratio of administration costs to pension contributions (I8)

categories. Singapore's good performance on I3 may be related to the methodology applied. As discussed above, this indicator is based on the number of active and inactive CPF members between 2001 and 2007 and the age of withdrawals (from fifty-five years old on) is considered. Because the employed population aged above fifty-five nearly doubled between 2001 and 2007 (from 135,300 to 256,700 people), it may have boosted the number of active members during this period of time. Singapore also obtained good scores on the ratio of contributors to employed population (I4), which illustrates that more than four-fifths of the economically active population is included in this system. However, this may have something to do with the fact that the CPF scheme is the only social security system implemented in Singapore. The efficiency of the CPF scheme (I8) was slightly aggravated between 2001 (0.6%) and 2007 (0.7%) due to the increase and decrease of costs and contributions individually, but the performance was still better than the other five systems. Whereas, the score of the ratio of administration costs to pension payments (I7) moved up from 0.36 to 0.46 between 2001 and 2007 due to the rate of administration expenses to the amount of pension payouts decreasing slightly by about 0.4%.

Singapore's raw data on system dependency ratio (I5) show the rate decreased from 3.5 active members to one older person to 2.7 between 2001 and 2007. This resulted from a reduction in the number of contributors and increase of retirees, nevertheless the number of active members aged above fifty-five years old augmented significantly between 2001 (105,732) and 2007 (202,946). Nevertheless, the fall of the best performer's status of system dependency ratio boosted the radar chart score from 0.07 to 0.21 of this index. The growth of the replacement rate score (I6), from 0.05 to 0.14, illustrates that the level of Singapore's pension payment as a proportion of previous wage level, although still low, increased between 2001 (3.3%) and 2007 (6.2%). It was in fact affected by the decline of the Chinese urban pension scheme on this dimension as discussed above.

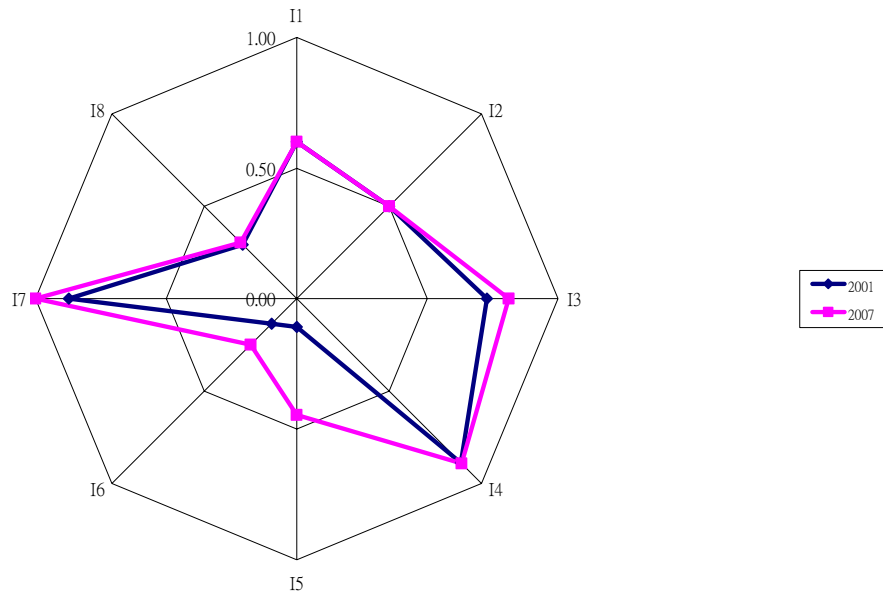
Figure 8.6 Radar Chart of Singaporean Pension System, 2001 and 2007



Note: I1: Arrangement of retirement payment scheme
 I2: Mechanism of indexation and status of vested rights
 I3: Ratio of Pensioners to total elderly population
 I4: Ratio of Contributors to total employed population
 I5: System Dependency Ratio
 I6: Replacement Rate
 I7: Ratio of Administration Costs to Pension Payments
 I8: Ratio of Administration Costs to Pension Contributions

Taiwan is ranked as the best performer of the five Asian pension systems in terms of SMOP score in 2007 (0.96) even though Taiwan only obtained the full radar chart score in one aspect. As demonstrated in Figure 8.7, Taiwan gained a high radar chart score in the ratio of administration costs to pension payments (I7) in 2001 and obtained a full score on this aspect in 2007. This was the result of a greater increase in pension payments than administration costs between 2001 and 2007. Despite the raw data in effect going up slightly from 2001 to 2007, expenses of administration remained relatively lower than the other systems (Table 8.1). The system dependency ratio (I5) of the Taiwanese pension scheme stayed around 5.90 between 2001 and 2007 but the radar chart score increased considerably because the best performer's level of dependency ratio dropped significantly as discussed above. Besides, Taiwan obtained a 0.5 score for the arrangement of its pension system (I1) in 2001 and 2007 (Table 8.1), and was awarded 0.60 of the radar chart score on this aspect; while fulfilling less than half of the goal (0.4) on the indexation system and the protection of pension rights (I2) and receiving 0.50 of the radar chart score.

Figure 8.7 Radar Chart of Taiwanese Pension System, 2001 and 2007

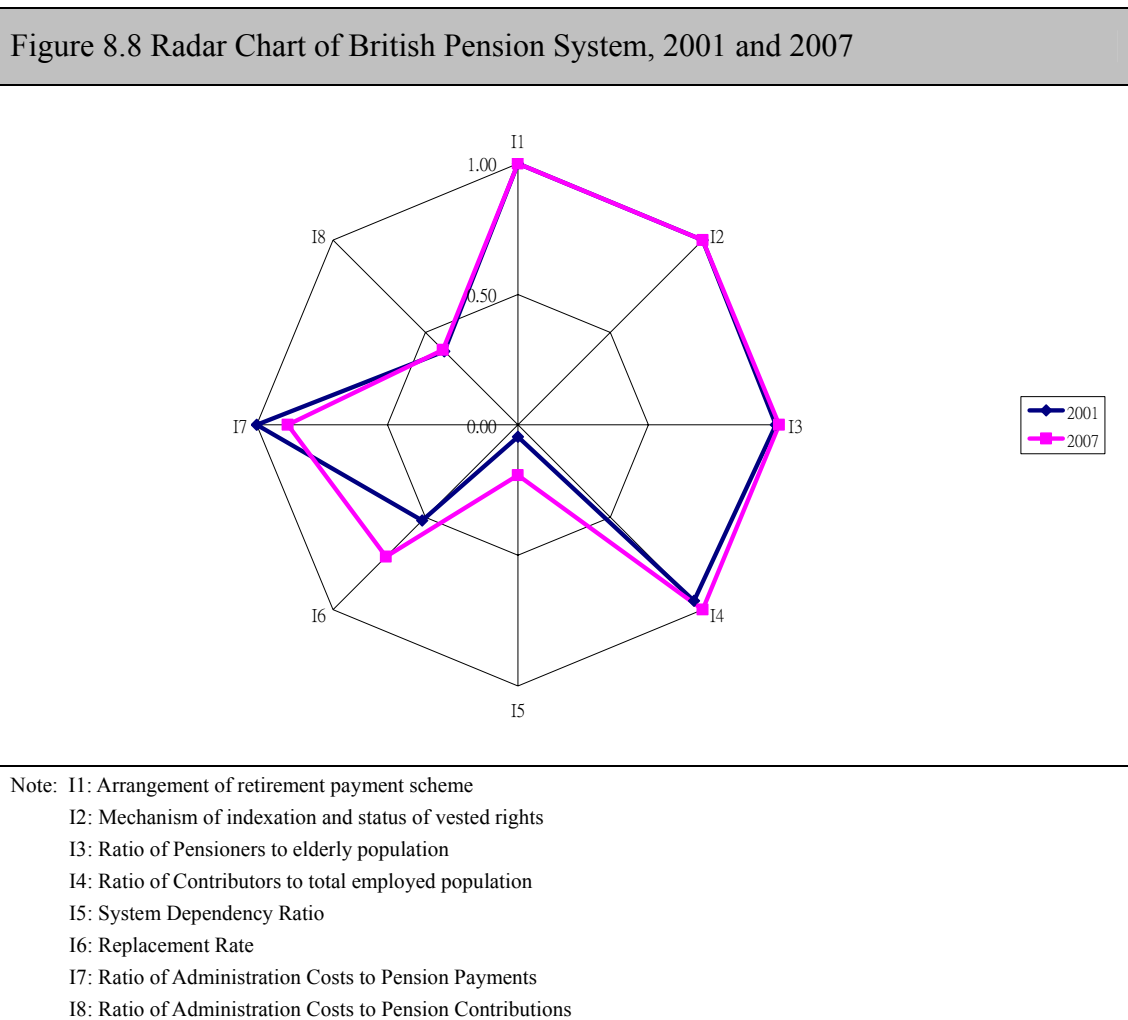


Note: I1: Arrangement of retirement payment scheme
 I2: Mechanism of indexation and status of vested rights
 I3: Ratio of Pensioners to total elderly population
 I4: Ratio of Contributors to total employed population
 I5: System Dependency Ratio
 I6: Replacement Rate
 I7: Ratio of Administration Costs to Pension Payments
 I8: Ratio of Administration Costs to Pension Contributions

The high performance on coverage rate (I3 and I4) and low level of administration costs to social security contributions (I8) to some extent denote that Taiwan's pension system became mature at this stage. It is true that although the number of pensioners and contributors of pension schemes constituted around four-fifths of the ageing and economically gainful population respectively in 2001 and 2007, Taiwan still had room to improve the coverage of the pension provisions. It is also true that, putting the indicators of I7 and I8 together, the payouts of the Taiwanese pension system surpassed contributions in both 2001 and 2007 and the financial deficits deepened during this period of time. This will cause financial instability in pension provisions and must be sorted out as quickly as possible. The replacement rate (I6) of pension schemes emphasising the lump-sum payment method is an issue to be debated. Taiwan's raw data illustrate that the level of the replacement rate was around one-tenth of the average wage in 2001 and 2007 and was awarded 0.13 and 0.25 of the radar chart score for the high performance and the great decrease in the replacement rate of the Chinese urban pension system.

The UK pension system, as mentioned above, is used as the control in this evaluation

and provides a standard by which to judge the performance of the five Asian pension systems. It is ranked as the best performer in this league from both the viewpoint of the radar chart and the SMOP scores, and its level of performance was significantly higher than all the selected Asian pension systems according to this set of evaluations as is displayed in Figure 8.2. It acquired full radar chart scores in the arrangement of pension system (I1), benefit level indexation and pension right protection (I2), coverage of elderly population (I3) and employed population (I4) and the ratio of administration costs to pension payouts categories in both 2001 and 2007, and was awarded a relatively high radar chart score for its replacement rate (I6). Figure 8.8 also shows the weaknesses of the British pension system, which were in the system dependency ratio and the ratio of administration costs to pension fund contributions (I8) categories in 2001 and 2007.



The British system obtained the same score for the arrangement of pension provisions and indexation system as the Chinese urban pension scheme because both are based on a basic DB pension scheme supported by a means-tested pension benefit in case the benefit falls below the poverty level. Despite the benefit adjustment mechanism

being slightly different from China's urban pension plan, the combination of price and wage indices may not be able to fully maintain UK retirees' purchasing power therefore it was awarded the same score as the urban pension scheme. The level of the coverage rate of the British system was similar to Singapore's CPF scheme and was significantly higher than the other pension systems, as a result of enforcement and the inclusion of each sector of employees. The low performance in the system dependency ratio category was due to the very high level of China's rural pension scheme in this field; while the improved performance in replacement rate resulted from the number for the Chinese urban pension system falling faster than the decrease of the UK. The British system's performance on the indices of administration expenses in this research show similarities with the Taiwanese data, namely the amount of pension payouts and contributions were close together. However, the UK data showed that these two numbers were still quite far apart instead of the payments outnumbering the contributions and the gap widening as is the case in Taiwan. This to some extent suggests that the financial problems of the Taiwanese pension system are more severe than those of the UK's.

Radar charts are feasible for understanding the advantages and disadvantages of a policy in one graph. Besides this, they are not only helpful for comparing the performance of specific or several dimensions of a policy in different systems, but also able to show the distance of the performance through its location on each axis. The radar chart in Figure 8.9 illustrates the strengths and weaknesses of each country's pension system. For example, it shows the Chinese rural pension system performed the best in the system dependency ratio (I5) category in 2001. It also illustrates the distance to the other systems to denote the status of each case in this category. In addition, Figure 8.9 shows that the British and Taiwanese systems were performing at similar levels according to the ratio of administration costs to pension payouts (I7) in 2001 and that in this respect the rest of the systems were operating less efficiently; meanwhile the ratio of administration costs to pension contributions tells a different story, that Singapore and Hong Kong's performance was much better than the UK and Taiwan and that the two Chinese pension systems performed the worst of all. Figure 8.9 therefore provides readers with a much better overview of the performance of each case on a specific variable than Table 8.2 does.

Figure 8.9 Comparison of Six Pension Systems, 2001

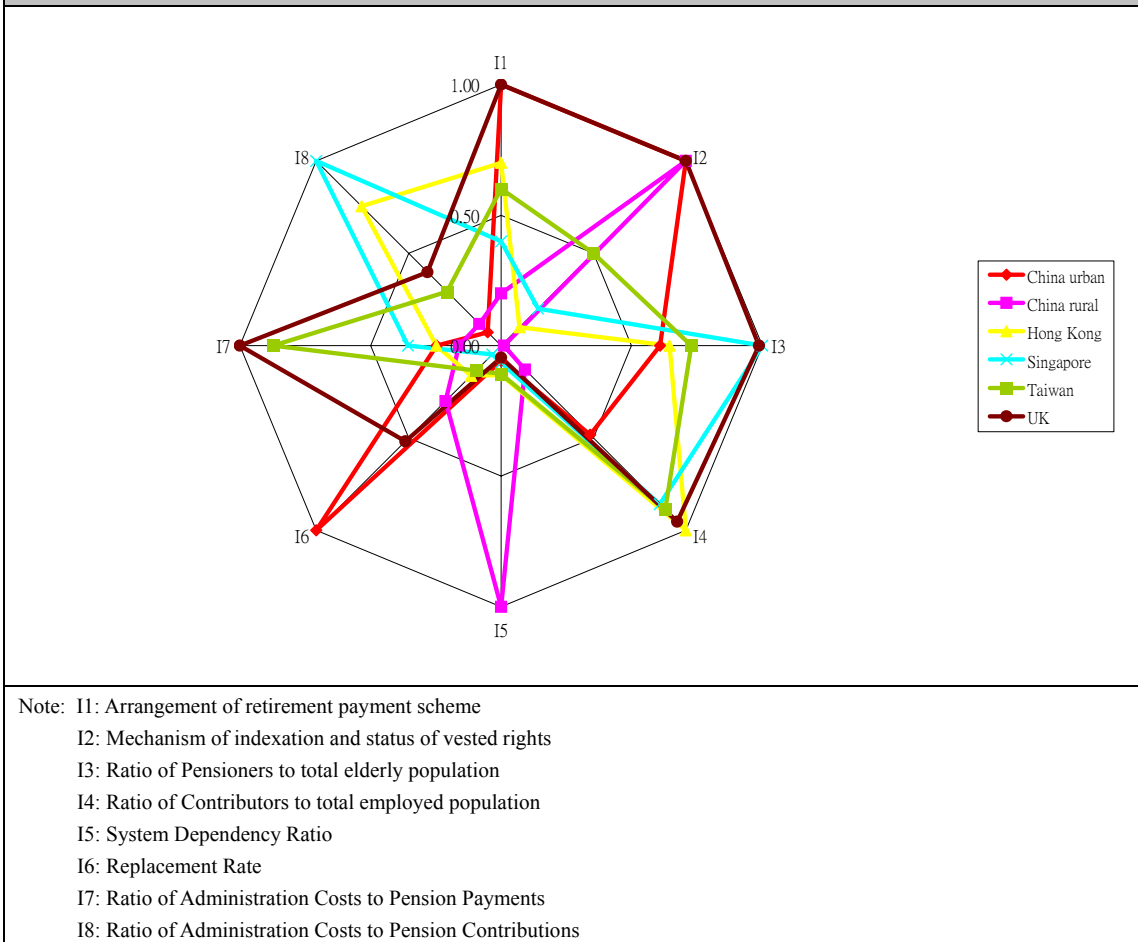
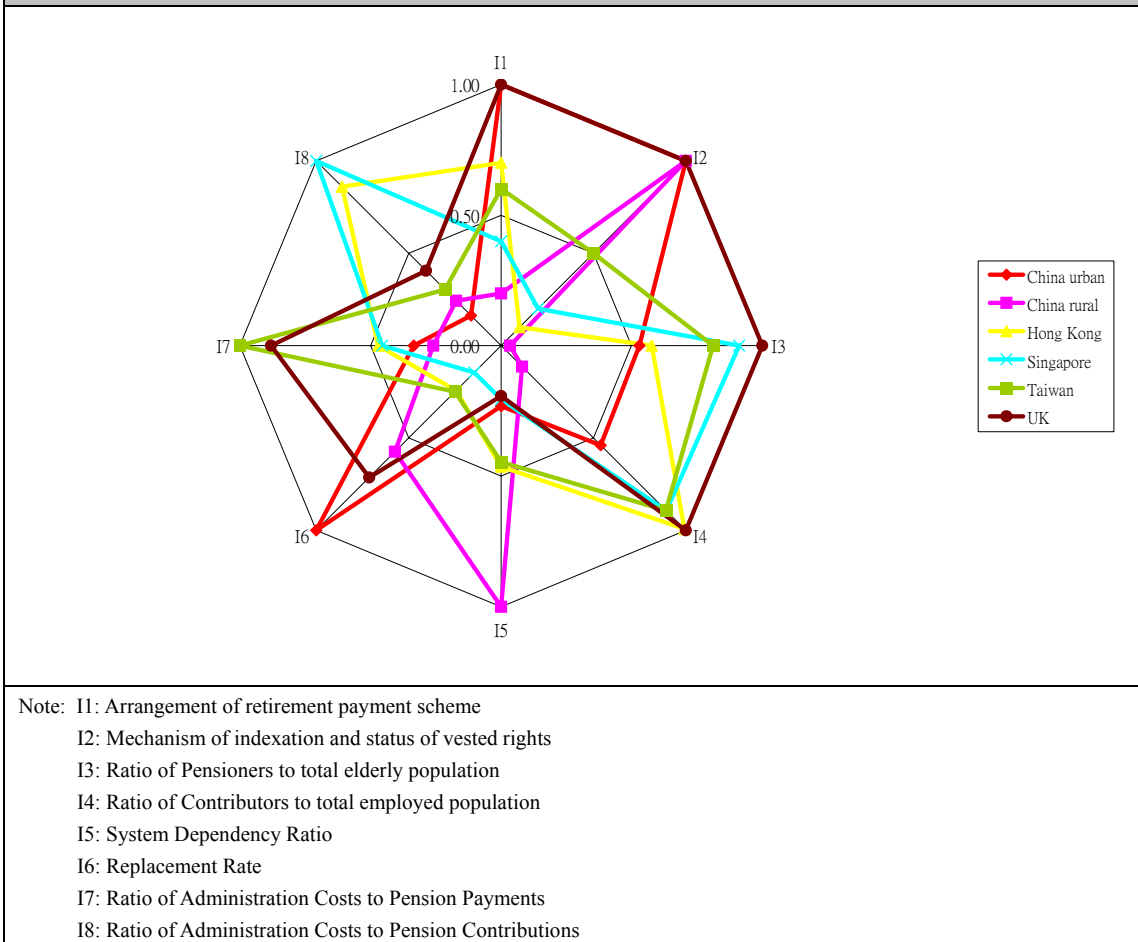


Figure 8.2 shows that while the SMOP score of all the systems increased between 2001 and 2007, the ranking of the best performer in each index sometimes changes. Radar charts are the best way of demonstrating these changes. Comparing Figure 8.9 and 8.10, for instance, the findings indicate that the British and Taiwanese pension systems led in the administration costs to pension payouts (I7) category in both 2001 and 2007 but the leader swapped during this period of time.

Figure 8.10 Comparison of Six Pension Systems, 2007



8.3 Conclusion

This chapter demonstrates the comparison and evaluation of the inputs of the Chinese Community pensions in 2001 and 2007 with radar chart and SMOP approaches. In terms of the methodology employed in this chapter, the SMOP approach is more sensitive than the radar chart approach which emphasises the difference of the performance between the cases obtaining the highest score and the rest. This can be gathered from the proportion of the scores the cases are awarded to full radar chart and full SMOP scores illustrated in Table 8.3, Figure 8.1 and Figure 8.2. It leads to the slightly different rankings derived from these two approaches in this chapter. Alternatively, the inconsistency may result from the method of calculating the average SMOP score with three different arrangements of indicators as mentioned in Chapter Seven. Moreover, the best performer method applied in this comparative research to some extent amplifies the influence of outliers and leads to low scores for other cases which can be observed in the high system dependency ratio of the rural Chinese pension provisions (I5) and the high replacement rate (I6) of the urban Chinese pension system.

From the radar chart and SMOP scores it can be concluded that the urban Chinese and Taiwanese pension systems performed better in policy inputs than the other three Chinese Community pensions and the performance of the rural Chinese pension provisions was the poorest in both 2001 and 2007, but the radar chart score of each indicator showed that there was not a clear pattern of these five pension systems. That is, heterogeneity amongst these pension systems exists. Besides, the rural China and Hong Kong's pension systems improved the most in terms of SMOP score. Some key findings of the policy inputs are concluded as follows:

- Arrangement of pension system: Rural China and Singapore's pension provisions obtained the lowest scores because the rural Chinese system mainly relied on the voluntary pension plan and Singapore solely emphasised the CPF system. Hong Kong and Taiwan's systems were awarded moderate scores on this indicator and urban China performed the best among them.
- Protection of pension rights: The status of pension right protection in Hong Kong and Singapore were the poorest and Taiwan acquired moderate score in this dimension. Although urban and rural China performed better in protection of pension rights, it was limited to participants particularly in rural areas.
- Coverage rate: Urban and rural China's pension systems did the worst among these five Asian pension provisions for both retirees and working population. Hong Kong's MPF scheme did cover over 90% of economically active people, but CSSA and SSA benefits were the only public pension provisions for already-retired population and merely covered around 60% of them. Singapore and Taiwan's pension systems effectively covered over 70% of ageing and working population and the coverage has kept growing.
- System dependency ratio: The rural Chinese system was the outlier in 2001 and 2007 due to the active contributors constituting a great proportion of policyholders. Beyond that, Hong Kong and Taiwan's system dependency ratio was around six and the level of the urban Chinese and Singaporean pension systems was around three. This means that Hong Kong and Taiwan's performance on this aspect was better than urban China and Singapore.
- Replacement rate: The urban Chinese system was the outlier in 2001 (71.8%) and still maintained the highest level (43.1%) in this league table in 2007. As for the other pension systems, the level was in general around 10%, while that of the rural Chinese pension provisions was less than one-fourth of previous earnings. It to some extent shows that the replacement rate of urban and rural China's

pension provisions was significantly higher than the other three Asian systems.

- Administration costs: These indicated that Taiwan's administration expenses to pension payouts may have reached the economies of scale stage and were much lower than the rest of the Chinese Community pensions. In terms of the costs to the amount of contributions, Hong Kong and Singapore performed better than the other Asian pension systems and urban and rural Chinese pensions did the poorest.

An evaluation of the influence of the outputs of pension systems on their respective societies will be carried out in Chapter Nine. The findings of the comparative evaluation in this chapter will be carried forward to Chapter Ten, where the policy implications and reform proposals will be discussed.

Appendix

Table A8.1 UK's Raw Data		
Item	2001	2007
Arrangement of retirement payment schemes *	2.5	2.5
Indexation mechanism and status of vested rights **	2.5	2.5
Population aged 16-59 (for women) and 64 (for men) (thousands) ***	36,406	37,904
Population aged above 59 (for women) and 64 (for men) (thousands) ***	10,845	11,562
Employed population aged above 16 (thousands) ****	27,664	29,086
Number of contributors of State Pension (thousands) *****	28,107	28,984
Number of contributors of mandatory public pensions (thousands) *****	21,576	26,717
Number of pensioners of State Pension (thousands) *****	10,100	10,887
Gross pension replacement rate of mandatory pension schemes (%) *****	37.1	30.8
Amount of State Pension administration costs (million £) *****	839	1,391
Amount of mandatory pension payments (million £) *****	48,479	61,000
Amount of State Pension contributions (million £) *****	56,718	75,549
GDP (million £) *****	1,031,458	1,270,835
Ratio of mandatory public and private pensions to GDP (%) *****	4.7	4.8
<p>Notes and Sources:</p> <p>* $0.83 = ((1 * 2) + 0.5)$</p> <p>** $0.83 = ((0.5 + 1 + 1) + (0.5 + 1 + 1) + (0.5 + 1 + 1)) / 3$</p> <p>*** The Labour Force Survey (LFS): Employment Levels by Age (SA), Office for National Statistics (ONS), http://www.statistics.gov.uk/statbase/xsdataset.asp?vlnk=1377&More=Y. [accessed on 10.03.10]</p> <p>**** The Population: age and sex, 1981 onwards: Population Trends 08.12.09, Office for National Statistics (ONS), http://www.statistics.gov.uk/statbase/ssdataset.asp?vlnk=9543&More=Y. [accessed on 10.03.10]</p> <p>***** Contributions and Qualifying Years People contributing: Time Series by Gender, http://83.244.183.180/NIRS/live/cq/ccdate/ccsex/a_people_r_ccdate_c_ccsex.html. [accessed on: 11.03.10]</p> <p>***** The Second Tier Provision People with provision during the year, http://83.244.183.180/NIRS/live/stpp/ccdate/coci/a_people_r_ccdate_c_coci.html. [accessed on: 11.03.10]</p> <p>***** The numbers are based on the statistics provided by the Department for Work and Pensions (2001: 4; 2007: 15). The data of 2001 stated that 0.9 million recipients out of 11.0 million lived overseas during that year, which constituted around 8.1% of the total beneficiaries of the State Pension scheme. Because the statistics of 2007 did not specify the number of receivers lived abroad, the evaluation assumed 8.1% of them were overseas and the number of recipients living in Britain turned out to be 10,887 (= 11,846.43 * (1 - 8.1%)).</p> <p>***** The numbers are based on the statistics of 2002 and 2006 derived from OECD (2005: 186; 2009: 275).</p> <p>***** Data derived from the National Insurance Fund Account, National Audit Office (2003: 9; 2009: 14).</p> <p>***** The numbers derived from the product of the ratio of mandatory public and private pensions to GDP and the amount of GDP listed below of this table.</p> <p>***** Data derived from Department for Work and Pensions (2009: 87). In order to calculate the expenditures on mandatory public and private pensions</p> <p>***** Data derived from OECD.StatExtracts at http://stats.oecd.org/index.aspx?r=315247. [accessed: 11.03.10] The data is available for 2001 and 2005 only.</p>		

Chapter Nine Comparison and Evaluation of the Outputs of the Chinese Community Pensions

The aim of this chapter is similar to Chapter Eight which intended to answer the last question raised by this thesis – how do these four pension provisions of the Chinese Community states compare to each other? This chapter is going to pursue this question by establishing a policy index of the “outputs” of pension provisions in China (divided into urban and rural systems), Hong Kong, Singapore and Taiwan with seven indicators using the radar chart and Surface Measure of Overall Performance (SMOP) approaches. As with Chapter Eight, the British pension system is taken as the control group of this series of evaluations to help compare and analyse the development of pension provisions in these Asian states.

In the following sections, the definition of the indicators will first be illustrated, and the calculation of radar chart and Surface Measure of Overall Performance (SMOP) scores will then be demonstrated. The sensitivity analysis will be performed to verify the reliability of the SMOP score in this evaluation. The findings about the advantages and disadvantages of these pension systems will be concluded in the last part of this chapter. The appendices for the following assessment are attached at the end of this chapter.

9.1 Indicators for Evaluation

In this chapter, the seven output indicators discussed in Chapter Seven will be applied to evaluate the impacts that these selected pension systems have on their societies. The criteria are as follows:

- Poverty reduction;
- De-familisation;
- Gender inequality;
- The scale of redistributiveness;
- The scale of public social expenditures to GDP;
- The scale of private social expenditures to GDP; and
- Evasion of pension contributions.

Table 9.1 demonstrates the raw data of each index in each pension system as the basis

for computing radar chart and SMOP scores, which will be shown in Table 9.3. The statistics applied to calculate some indicators in Table 9.1 are listed in the Appendices section as indicated in the notes and sources of the tables.

Table 9.1 Raw Data for Evaluation of the Pension Schemes of China, Hong Kong, Singapore, Taiwan and UK's Pension Systems, 2001 and 2007

Indicators	China (urban)		China (rural)		Hong Kong		Singapore		Taiwan		UK	
	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007
Poverty reduction (%) *	0	0	-96.5	-91.5	-60.1	-51.2	-86.9	-78.0	-54.6	-33.4	0	0
De-familisation (%) **	38.8	29.5	86.2	53.2	62.9	61.2	64.0	44.7	47.1	46.5	1.1	1.2
Gender inequality ***	0.4	0.4	0	0	0.4	0.4	0.2	0.3	0.4	0.3	0.4	0.3
Redistributiveness (%) ****	58.0	52.3	0	73.2	85.4	67.7	0.4	0.3	8.4	16.5	8.3	10.6
Ratio of public spending to the scale of GDP (%) *****	2.7	2.4	0.0	0.1	1.1	1.3	1.2	0.9	1.6	1.4	4.7	4.8
Ratio of private spending to the scale of GDP (%) *****	0.2	0.4	0.0	0.0	1.5	1.3	3.3	4.8	2.0	1.8	4.8	4.2
Evasion of contribution (%) *****	52.5	46.5	-	-	37.7	30.2	4.7	19.8	18.5	19.4	15.5	17.2

Notes: UK's data are all based on Table A9.1 in the Appendices section. The numbers are rounded up.

* The calculation of China's poverty reduction in urban and rural areas is based on Table 6.11, 6.14, 6.17, 6.18 and 6.19. The numbers of urban regions are available for 2004 and 2007, while the ones for rural areas are for 2001 and 2007. The poverty and payment levels in rural areas are modified by the Consumer Price Index (CPI) (National Bureau of Statistics of China 2008: Table 8-1) and the eligibility rate of the Five-Protection programme in 2001 is assumed as 3.0% as in 2007. Hong Kong's information is available for 2005 and 2007 based on the evaluation demonstrated in Table 4.20. Singapore's assessment is available for 2003 and 2007 and has been shown in Table 5.25. Taiwan's data is based on the evaluation of Chapter Three of this thesis, available for 2001 and 2005, illustrated in Table 3.13.

** The numbers of China are derived from Table 6.2 and 6.3 for 2000 and 2005 respectively. Hong Kong's numbers are from Table 4.6 and are available for 2001 and 2005. Singapore's numbers on de-familisation in 1995 and 2005 are derived from Table 5.7. The information of Taiwan is demonstrated in Table 3.3 and the numbers for 2000 and 2005 are applied in this evaluation.

*** Please refer to Table A8.2 in the Appendix section.

**** Please refer to Table A8.3 in the Appendix section. The expenditures on urban and rural basic pension schemes are weighted according to the coverage rate of each of them in 2001 and 2007.

***** Please refer to the raw data listed in Table A8.4 in Appendix section for detail.

***** Please refer to the statistics illustrated in Table A8.5 in Appendix section for detail.

9.1.1 Poverty Reduction

This indicator compares the difference between the poverty level and the average amount of pension benefits thus the level of poverty threshold that is left unmet by pension provisions can be examined. This index is determined by the proportion of the poverty level not being made up by retirement income and it ranges between minus one and zero. For instance, if the retirement payment can cover half of the poverty threshold then the gap will be 50% and shown as -50.0. In addition, the evaluation recognises the gap as zero if the aggregate benefit level is higher than the poverty level and is regardless of the actual payment. Therefore, the closer the number is to zero then the better the performance and the results are concluded in Table 9.1.

The data for the Chinese urban pension scheme is available for 2004 and 2007 (Table 6.6 and 6.10) and shows the average monthly payments in 2004 and 2007 were 809.6

and 887.3 RMB respectively. After being weighted by its coverage of the whole ageing population, the average benefits in 2004 and 2007 were 413.7 and 442.8 RMB respectively, while the poverty levels during this period of time were 152 and 182 RMB per month. Therefore, the Chinese urban pension system is awarded zero for both 2004 and 2007 because the average pension level surpassed the poverty threshold. The information for China's rural Minimum Living Standard Scheme (MLSS) and Five-Protection system is available from 2007 because the rural MLSS was launched in 2007 and the data for the Five-Protection programme was not accessible before 2007. In order to acquire the payment level of the Five-Protection scheme and the poverty level in 2001, the CPI adjustment is applied here. In addition, the provision from the voluntary rural basic pension is considered in this evaluation but its voluntary character led to low average benefits. The data of 2001 and 2007 illustrate that 96.5% and 91.5% of the poverty threshold was not met by these two sources of income.¹ We should be cautious about the understanding of China's statistics on average benefit levels because the variance between individuals is great. Hong Kong's statistics on poverty reduction, according to Table 4.20, show that 60.1% and 51.2% of the Basic Living Protection Line was left uncovered by the provisions in 2005 and 2007 respectively. In Singapore, as stated in Table 5.25, 86.9% and 78.0% of the minimum household expenditure was unmet by the retirement payment from the Central Provident Fund (CPF) scheme in 2003 and 2007. In Taiwan, as illustrated by Table 3.13, 54.6% and 33.4% of the average expenditure on consumption goods was left unmet by the average payments from Labour Insurance (LI), Labour Standards (LS) and Living Allowance (LA) schemes in 2001 and 2005 respectively. The UK's poverty gap is determined by the average benefits from mandatory public pensions and the Minimum Income Guarantee (MIG)/Pension Credit (PC). The figures indicate that the poverty level in average can be met by the payments from mandatory pension provisions in 2001 and 2007 (Table A9.1).

9.1.2 De-familisation

De-familisation measures the extent to which the pension provisions lessen the household intra-generational transfers from economically active kin in these societies. As discussed in Chapter Seven, because the statistics about the level of intra-generational reciprocity are not available in all the selected countries and it is difficult

¹ Rural poverty threshold of 2007 = $70 * .769 + (163 * .30 + 119 * .70) * .231 = 84.4$ RMB/Month; average benefit level from rural MLSS and the Five-Protection system of 2007 = $26.3 * .057 + 98.3 * .03 = 7.1$ RMB/Month; poverty reduction of 2007 = $(7.1 - 84.4) / 84.4 = -91.5\%$. After the modification by CPI, the poverty level, average Five-Protection benefit level and the proportion of poverty reduction in 2001 were 72.8 RMB/Month, 2.5 RMB/Month (= $84.8 * .03$), and -96.5% respectively.

to quantify, this research will solely apply monetary income as the indicator. Therefore, this index applies the “constitution of adult children’s monetary transfers as a proportion of pensioners’ retirement income”, i.e. family solidarity, to compute the raw data in Table 9.1; while higher levels of family solidarity in a pension system’s performance denote lower levels of de-familisation. The method for transforming the data of family solidarity into the de-familisation index will be detailed in the analysis section of this chapter.

As the surveys illustrate, the levels of family transfers in urban China were 38.8% and 29.5% in 2000 and 2005, while those of rural counterparts were 86.2% and 53.2% during the same period of time. Family solidarity in Hong Kong dipped from 62.9% in 2001 to 61.2% in 2005 but still remained at a high level among this Asian society. The statistics of Singapore indicate that 64.0% of working adult children was engaged in informal cash transfers to their ageing parents in 1995, while the number reduced to 44.7% in 2005. Taiwan’s data shows that 47.1% and 46.5% of adult children provided financial supports to parents in 2000 and 2005. The UK data is derived from pensioners’ income components which classifies the income from economically active children as other income (Chapman, et al. 2009: 78; Davis, et al. 2003: 13). It illustrates that the monetary transfers from adult children constituted 1.1% and 1.2% of retirement income in 2001 and 2007 respectively (Table 9.1).

9.1.3 Gender Inequality

This index examines the gender inequality in the pension benefit level in 2001 and 2007, focusing on the factors that may influence people’s eligibility for pensions from contributory and non-contributory pension programmes. In the contributory part, the criteria are defined as “the ratio of the number of employed women to the number of employed male workers” and “the ratio of female employees’ wage level to men’s wage level” the reason being that contributory pension programmes are closely earnings-related and therefore need to scrutinise the inequality in the labour market. It should be noted that the number of people engaged in part- or full-time jobs will not be specified due to the unavailability of statistics. Also, it has to be mentioned that “the ratio of the number of employed women to the number of employed male workers” may be biased by the demographic structure of a country. That is, the structure of employed women and men may be related to the profile of female and male people in working age. However, there is not a clear association between these two sets of statistics. For instance, although the ratio of the female population of working age to that of their male counterparts in Hong Kong and Singapore in 2007 was 1.05 and 1.05 respectively (i.e. 1.05 women to one man) the ratio of employed women to employed men in Hong Kong and Singapore was 86.4% and 73.7% in the

same year². As for the non-contributory part, the “arrangement of non-contributory pension provision” and the “benefit level of tax-based social provisions” are taken into account. The details of the criteria are listed below:

- Gender-specified labour participation rate: equals the number of employed women divided by the number of employed men. Because this analysis focuses on the inferior position of female employees, the maximum of this index will be one despite the number of employed women outnumbering that of men, to express the inequality of men over women.
- Gender-specified wage level: equals the average amount of female salary over the average amount of men’s salary. The maximum value is assumed as one although it may be prone to the same issue mentioned above when women’s average salary level is higher than that of men’s.
- The arrangement of non-contributory pension provision is defined at three levels: universal basic pension provisions (1.0); means-tested (0.5); and unavailable (0.0).
- The eligibility of non-contributory pension provision is defined at two levels: need-based (1.0) and application-based (0.5). The final score of programme settings is defined as product of the scores of arrangement and eligibility.
- The benefit level is defined as the competence at reducing old age poverty, thus the amount of non-contributory provision is divided by the poverty threshold.

Taking all the criteria into consideration, the formula for this indicator is as follows:

$$\text{Gender inequality} = ((\text{employed women} / \text{employed men}) * (\text{women's wage level} / \text{men's wage level}) + (\text{arrangement of non-contributory pension provision}) * (\text{eligibility of non-contributory pension provision}) * \text{level of poverty reduction}) / 2$$

² The ratio of female working population to male working population in 2000 and 2005 in China were 0.94, namely 0.94 woman to one man, and 0.94, while the ratio of employed women to employed men in urban and rural areas in 2000 were 0.77 and 0.86 respectively and the numbers in 2005 were 0.77 and 0.88. The population profile in Hong Kong (1.03 and 1.05) and Singapore (1.04 and 1.05) in 2001 and 2007 indicates that the female population outnumbered that of men, which was higher than the ratio of employed women to employed men in each of them. Taiwan’s demographic statistics show that the ratios in 2001 and 2007 were 0.97 and 0.98, while the ratio of employed women to employed men were 0.69 and 0.75. The data are derived from the International Data Base (IDB) of the U.S. Census Bureau (<http://www.census.gov/ipc/www/idb/>) [accessed: 15.02.10] and the information applied for the calculation in Table 9.1.

The availability of China's data is an issue in this analysis. With regard to the accessibility of the information about gendered employment in urban areas, 2000 and 2005 are the years for which most statistics and surveys are available. It should be noted that the survey data of the gendered wage level in urban and rural regions is available from 1988 to 1997 as well as 2002 and 2003. The studies illustrate that the level fluctuated around 83% in 2000 then dropped from 82.8% to 78.0% between 2002 and 2003 (Braunstein and Brenner 2007: Table 3; Démurger, et al. 2007: Table 6 & 7; Du and Dong 2009: Table 2; Gustafsson and Li 2000: Table 3; Ng 2007: Table 1). In order to avoid the bias caused by sampling, the thesis assumes the ratio of female workers' average wage levels to that of male workers' in 2001 and 2005 as 80%, and the gender inequality of Chinese urban pension provisions is awarded 0.4 for both 2000 and 2005. As for the Chinese rural pension schemes, the statistics of 2001 and 2007 are employed in this evaluation and the ratio of women's wage levels to that of men's is assumed at 80% in 2007. Because there is no mandatory earnings-related pension plan in rural areas and the MLSS programme was only launched in 2007, the gender inequality in China's rural regions is zero and nearly zero in 2001 and 2007 respectively. Hong Kong's data are available in 2001 and 2007. It should be noted that Hong Kong is awarded 0.75 on the arrangement of non-contributory pension plan because universal (Higher Old Age of Social Security Allowance (SSA)) and means-tested (Normal Old Age of SSA and Comprehensive Social Security Assistance (CSSA)) social provisions are both important to the whole system; while the eligibility of SSA and CSSA acquires 0.5 because all the schemes are based on application. In addition, the poverty reduction of the CSSA and SSA schemes, according to Table 4.20, are 36.0% on average. It turns out that Hong Kong obtains a score of 0.4 from the perspective of gender inequality in both 2001 and 2007.

Singapore acquires 0.2 and 0.3 on this index. It is worth mentioning that the number of employed people of 2001 and 2007 applied to this evaluation excludes those who are not permanent residents of Singapore in the past twelve months. Also, Singapore obtains a zero score for the arrangement and eligibility of non-contributory retirement provisions because the availability of the Public Assistance (PA) benefits is very limited. Taiwan's data on gendered employment and wage level are available for 2001 and 2007. Taiwan's scores on this indicator are 0.3 and 0.4 for 2001 and 2007. It is worthwhile noting that the average level of poverty reduction of non-contributory retirement payment, 40.5%, is computed from the average poverty level and payment level displayed in Table 3.13 of this thesis. Besides, the regular salary level is employed in this evaluation because it is the basis for computing the level of contributions to the Labour Insurance (LI), Labour Standards (LS) and Labour Pension (LP) schemes. The scores for the arrangement and eligibility of non-

contributory retirement provisions of the Taiwanese pension system were 0.5 and 0.5 for 2001 and 2007 on the grounds that the application as well as asset and age tests are the requirements for entitlement. The British pension system acquired 0.4 and 0.3 in this index based on the data provided in Table A9.1. The result of the calculation is listed in Table 9.1 and the information from these four Asian countries is available in Table A9.2.

9.1.4 The Scale of Redistributiveness

This indicator evaluates the extent to which social expenditures (i.e. old age pensions and social assistance benefits) are redistributed from better-offs to their worse-off counterparts in these six pension systems. Because the value surveys for assessing redistributiveness or social solidarity are not available for some countries, as discussed in Chapter Seven, this research intends to take the expenditures on pension and social allowance benefits as the relevant factor. Examining the level of resources transferred from better-off to worse-off groups allows us to draw an approximate picture of the redistributiveness of the pension systems, and to measure the government's ideology of optimal redistributiveness in these five societies. The formula is as follows:

$$\text{Redistributiveness} = (\text{total payouts of non-contributory social provisions}) / (\text{total amount of public pension payments} + \text{non-contributory social provisions})$$

That is, the higher the value the larger the proportion of the resources that is redistributed. However, the findings may be biased for the under-development of mandatory earnings-related pension plans in some systems (e.g. rural China). The calculation is based on the data demonstrated in Table A9.1 and A9.3 of the Appendices section and the outcome is listed in Table 9.1.

China's urban basic pension programme is to some extent characterised as a redistributive pension scheme because the contribution is determined by personal wage levels but the benefit level is based on a specific proportion of the local average wage. For this purpose, the redistributiveness of urban basic pension plan has to be weighted by coverage rate (57.4% and 49.9% in 2001 and 2007 respectively, Table 6.9 of this thesis) because not all the elderly residents are entitled to the payments. The results show that, in 2001 and 2007, 58.0% and 52.3% of the total retirement benefits were pooled between the wealthy and poor population and the rest was earnings-related. The performance of China's rural pension scheme obtained zero and

73.2% on this index for 2001 and 2007 because the redistributiveness of the voluntary pension scheme was limited and the rural MLSS provision was only launched in 2007. Hong Kong's non-contributory benefits, i.e. CSSA and SSA, mean the whole system has been characterised by its redistributiveness since the early 1970s. Along with the introduction of the MPF scheme from 2000, Hong Kong's redistributive feature decreased markedly from 85.4% to 67.7% between 2003 and 2007. The Singaporean pension system, i.e. CPF scheme, is a personal savings scheme and is not redistributive-natured; while the number of recipients and spending on the Public Assistance (PA) scheme were relatively restricted. Thus, the payouts of the PA provisions constituted merely 0.4% and 0.3% of the total social expenditure in 2003 and 2007 respectively. The level of redistributiveness in Taiwan was 8.4% and 16.5% in 2002 and 2007 because LI, LS and LP schemes are chiefly earnings-related pension plans. The increase in redistributiveness was due to the introduction of LA programmes, the most important redistributive-natured scheme in Taiwan, from the early 2000s. Besides, it can be concluded that 8.3% and 10.6% of the resources were redistributed in the British pension system in 2001 and 2007 (Table 9.1).

9.1.5 The Scale of Pension Expenditures to GDP

This indicator investigates the amount of social expenditures from public and private sources separately to the scale of economy (i.e. GDP) as defined in Chapter Seven. The calculation is based on the data in Table A9.1 and A9.4 of the Appendices section.

Urban China's public pension expenditures constituted 2.7% and 2.4% of GDP in 2001 and 2007, and the payments from private sources made up 0.2% and 0.4% of GDP in the same years. In rural China, the public pension expenditures composed nearly zero percentage of the economy in 2001 (0.005%) and 2007 (0.06%). As for the benefits from private insurance policies, Hu (2005: 146) observes that 45% of the private insurance policyholders were in Shanghai and Shenzhen and the rest were mostly distributed in urban and coastal areas, therefore the private insurance markets in rural and inland regions were underdeveloped and insignificant. For this reason, the research deems that the amount of private insurance benefits in rural areas was zero in 2001 and 2007. Hong Kong's public social spending constituted 1.1% and 1.3% of GDP in 2003 and 2007 respectively; while the number for private expenditures made up 1.5% and 1.3% during the same period of time. The level of Singapore's public expenditures to GDP, including the payouts from the CPF and PA schemes, slightly declined from 1.2% to 0.9% between 2003 and 2007, but private social spending during the same period of time went up markedly from 3.3% to 4.8%. The numbers for both public and private expenditures on social provisions in Taiwan dropped between 2002 and 2007. They illustrate that the public social expenditures constituted

1.6% and 1.4% of GDP in 2002 and 2007, and the benefits paid by private insurance policies declined slightly by around 0.2 percentage points from 2.0% to 1.8% during the same period of time. The UK's data is derived from the OECD database and shows that public spending on social provisions constituted 4.7% and 4.8% of GDP in 2000 and 2005. Although private social expenditure retrenched from 4.8% of GDP to 4.2% between 2000 and 2005, it still constituted a relatively large proportion of the economy due to the market for additional occupational and personal pension plans covering more than half (54%) of the employed population in the UK (Callan, et al. 2009: 5) (Table 9.1).

9.1.6 Evasion of Pension Contributions

This index examines the proportion of pension contributions evasions in the system. The lower the percentage represents the better the performance.

According to the data illustrated in Table A9.1 and A9.5 in the Appendices section, the levels of contribution evasion in the Chinese urban pension system in 2001 and 2007 were 52.2% and 46.5%. The Chinese rural pension scheme obtained a zero score from this perspective because it was not a compulsory system. The numbers for Hong Kong were 37.7% and 30.2% respectively in 2001 and 2007, while Singapore's level of non-compliance was 4.7% and 19.8% during the same period of time. Taiwan's evasion level increased slightly from 18.5% to 19.4% between 2001 and 2007, and the non-compliance rate of the British system in the same period of time was estimated at between 15.5% and 17.2% (Table 9.1). It is noteworthy that the UK's contribution rate is set as 15.8%, the figure arrived at by Lee's (2009: 80) research. Besides, Singapore's data is calculated from the age-specified data published by the CPF Board thus the result may not be accurate.

9.2 The Evaluation of the Pensions

This section will start with the conversion of the raw data into radar chart and Surface Measure of Overall Performance (SMOP) scores and the operation of sensitivity tests, followed by the demonstration of the results in radar charts.

9.2.1 The SMOP Analysis

The best performer approach is the methodology adopted in this chapter because the other two methods, theoretical and institutional benchmarks, are not suitable in this evaluation (Mosley and Mayer 1999: 7-10). It is true that, for instance, redistributiveness and the scale of public and private social expenditures may not fit the theoretical method because there is no optimal scale according to relevant research.

It is also true that there are no institutional goals to achieve specified by the governments.

As mentioned in Chapter Eight, the best performer(s) of each index have to be picked out before calculating radar chart and SMOP scores. Table 9.2 illustrates the best performer of each indicator in 2001 and 2007, and the best performer changes in all the dimensions except “poverty reduction”, “de-familisation” and the “ratio of public spending to the scale of GDP” during this period of time. Besides, the raw data on “poverty reduction”, “de-familisation” and “evasion of contribution” have to be converted reversely because both indices recognise the smaller the value the better the performance. Therefore, in the radar charts, the higher score represents a “lesser proportion of poverty level not covered by public pension provisions”, “higher levels of de-familisation” and “lower levels of contribution evasion” in this assessment. Furthermore, a greater score on “gender inequality” stands for a higher level of “gender equality” but it is not necessary to reverse the conversion of the scores because a higher value in the raw data means a greater level of equality. As a result, the higher the radar chart and SMOP scores the better the operation of each indicator and overall performance. Moreover, it was found that the Taiwanese pension system was the only system that did not obtain a full score in any of these dimensions.

Table 9.2 Best Performer of Each Criterion		
Indicators	2001	2007
Poverty reduction	China urban & UK	China urban & UK
De-familisation	UK	UK
Gender inequality	UK	Hong Kong
Redistributiveness	Hong Kong	China rural
Ratio of public spending to the scale of GDP	UK	UK
Ratio of private spending to the scale of GDP	UK	Singapore
Evasion of contribution	Singapore	UK

Source: Concluded from Table 9.1.

After the raw data has been standardised as a radar chart score and ranges between zero and one, the computation of SMOP score can be done through the formula. In order to avoid the bias that results from the different arrangements of the indicators in this heptagon, as discussed in Chapter Seven, the SMOP score is acquired from the average amount of three theoretically probable combinations of the indicators. The corresponding formulas are listed below:

$$SMOP_1 = ((I1*I2) + (I2*I3) + (I3*I4) + (I4*I5) + (I5*I6) + (I6*I7) + (I7*I1)) * \sin(360^\circ / 7) / 2$$

$$SMOP_2 = ((I2*I4) + (I4*I1) + (I1*I7) + (I7*I6) + (I6*I3) + (I3*I5) + (I5*I2)) * \sin(360^\circ / 7) / 2$$

$$SMOP_3 = ((I4*I7) + (I7*I2) + (I2*I3) + (I3*I6) + (I6*I1) + (I1*I5) + (I5*I4)) * \sin(360^\circ / 7) / 2$$

The full SMOP score of this heptagon is 2.7424³. The results of radar chart score are in Table 9.3.

Indicators	China (urban)		China (rural)		Hong Kong		Singapore		Taiwan		UK	
	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007	2001	2007
Poverty reduction	1.00	1.00	0.03	0.08	0.40	0.49	0.13	0.22	0.45	0.66	1.00	1.00
De-familisation	0.03	0.04	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.03	1.00	1.00
Gender inequality	0.98	0.96	0.00	0.05	0.89	1.00	0.62	0.68	0.81	0.92	1.00	0.87
Redistributiveness	0.68	0.71	0.00	1.00	1.00	0.92	0.00	0.00	0.10	0.23	0.10	0.15
Ratio of public spending to the scale of GDP	0.57	0.49	0.00	0.01	0.24	0.26	0.25	0.20	0.35	0.30	1.00	1.00
Ratio of private spending to the scale of GDP	0.04	0.09	0.00	0.00	0.30	0.28	0.68	1.00	0.42	0.38	1.00	0.88
Evasion of contribution	0.09	0.37	0.00	0.00	0.13	0.57	1.00	0.87	0.25	0.88	0.30	1.00
Sum of radar chart score	3.38	3.67	0.05	1.17	2.98	3.54	2.70	3.00	2.40	3.39	5.40	5.90
% of full radar chart score*	0.48	0.52	0.01	0.17	0.43	0.51	0.39	0.43	0.34	0.48	0.77	0.84
Average SMOP score**	0.49	0.60	0.00	0.03	0.42	0.59	0.39	0.54	0.28	0.54	1.57	1.90
% of full SMOP score***	0.18	0.22	0.00	0.01	0.15	0.21	0.14	0.20	0.10	0.20	0.57	0.69
SMOP ₁	0.48	0.52	0.00	0.03	0.52	0.67	0.39	0.50	0.20	0.53	1.49	1.92
SMOP ₂	0.55	0.68	0.00	0.04	0.39	0.57	0.55	0.74	0.35	0.67	1.49	1.89
SMOP ₃	0.44	0.52	0.00	0.01	0.34	0.53	0.23	0.39	0.30	0.43	1.74	1.89

Notes: * Because the radar chart score of each indicator ranges between zero and one, the maximum full score is seven in this evaluation. Thus, the proportion of full radar chart score = sum of radar chart score / 7.
 ** The SMOP score is calculated from the average of three theoretically possible combinations of these seven indicators in the heptagon (SMOP score 1, 2 and 3 listed below). The maximum SMOP score of this heptagon is 2.7472 which is computed from the formula stated above. All the SMOP scores are rounded up.
 *** The proportion of full SMOP score = average SMOP score / 2.7472. The numbers are rounded up.

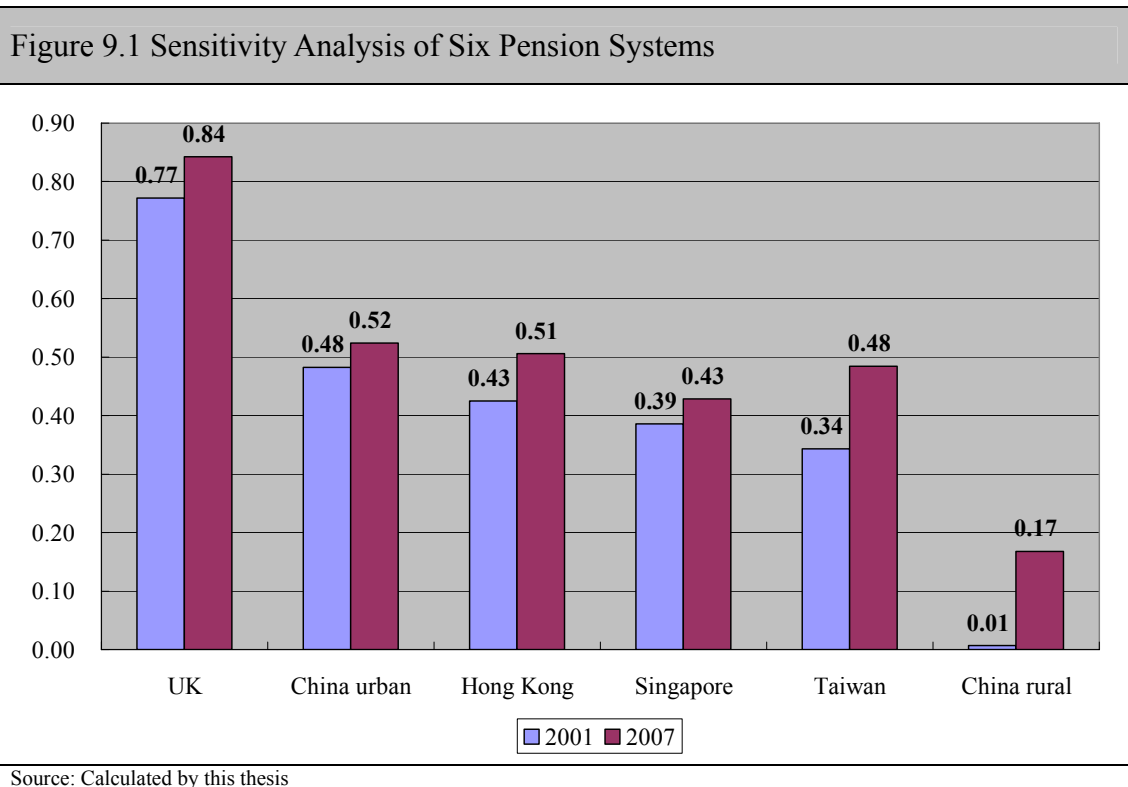
Sources: The numbers are calculated from Table 9.1.

As mentioned above, because the arrangement of the indicators in the radar chart will affect the SMOP score obtained by this research, sensitivity analysis has to be performed in order to check if the findings obtained by the sum of radar chart score correspond to the SMOP approach (Finch 2006: 335-7). The sensitivity analysis is done by comparing the proportion of full radar chart score and the average SMOP score that each case receives, and the results are demonstrated in Table 9.3, Figure 9.1 and 9.2.

Figure 9.1 depicts the rank according to the proportion of full radar chart score (Table

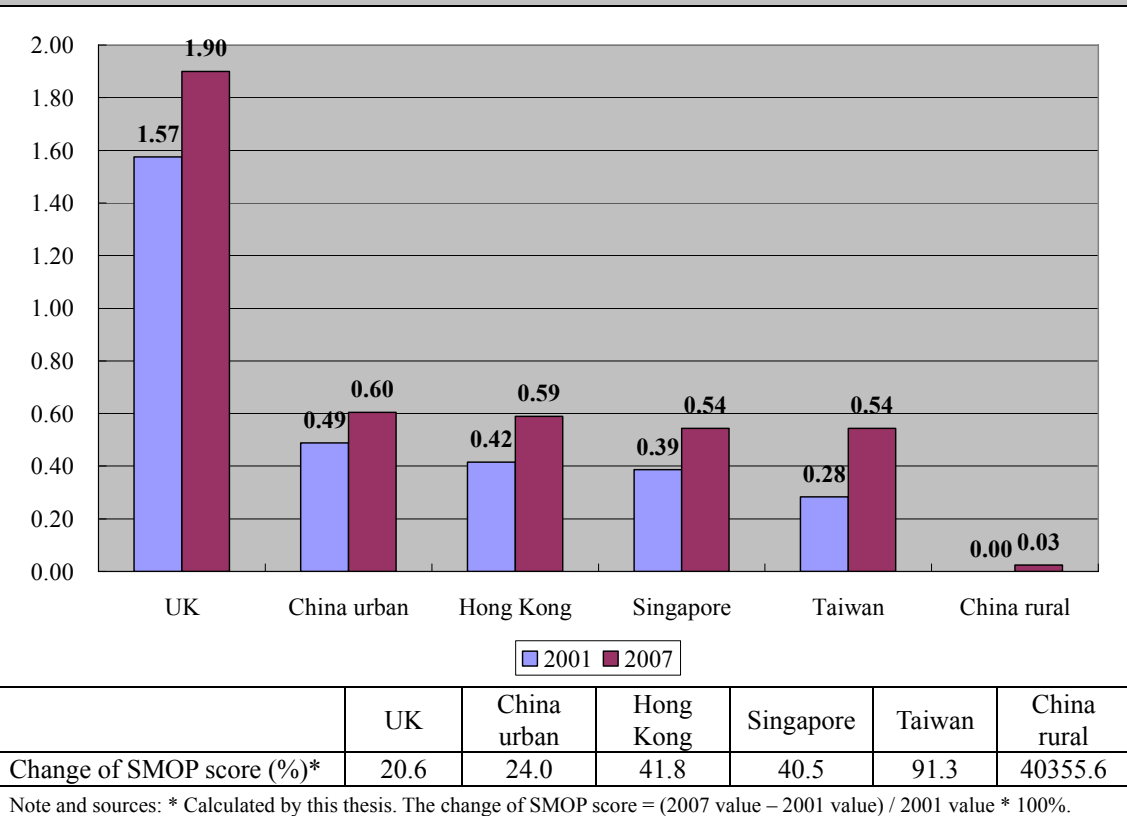
³ The maximum SMOP score of this heptagon = (1+1+1+1+1+1+1) * 0.7849 / 2 = 2.7424. In addition, $\sin(360^\circ / 7) = 0.7849$.

9.3). It shows that the British system was the best performer in 2001 and 2007 obtaining 77% and 84%, and the Chinese rural pension system performed the worst of all receiving 1% and 17% of the full score. It also indicates that, although Taiwan was ranked as the second worst performer in 2001, it improved markedly and swapped the position with Singapore in 2007. Although Singapore became the second worst performer in this league in 2007, its level of radar chart score was double that of China's rural pension system.



The results of the SMOP scores in Figure 9.2 depict a similar story to Figure 9.1. In 2001, the rank of performance was the UK, Chinese urban scheme, Hong Kong, Singapore, Taiwan and China's rural system in order. It indicates that the Chinese rural scheme's score lagged far behind the other five pension systems and obtained a nearly zero score of overall performance. The performance of these six pension systems improved markedly between 2001 and 2007 but the rank stayed about the same in this league. The figure shows that the performance of Chinese urban, Hong Kong, Singapore and Taiwan's pension systems became closer between 2001 and 2007, and Singapore and Taiwan's SMOP scores were at the same level. In addition, the performance of these six pensions improved by at least 20% during this period of time.

Figure 9.2 SMOP Score and Its Changes in Six Pension Systems, 2001 and 2007



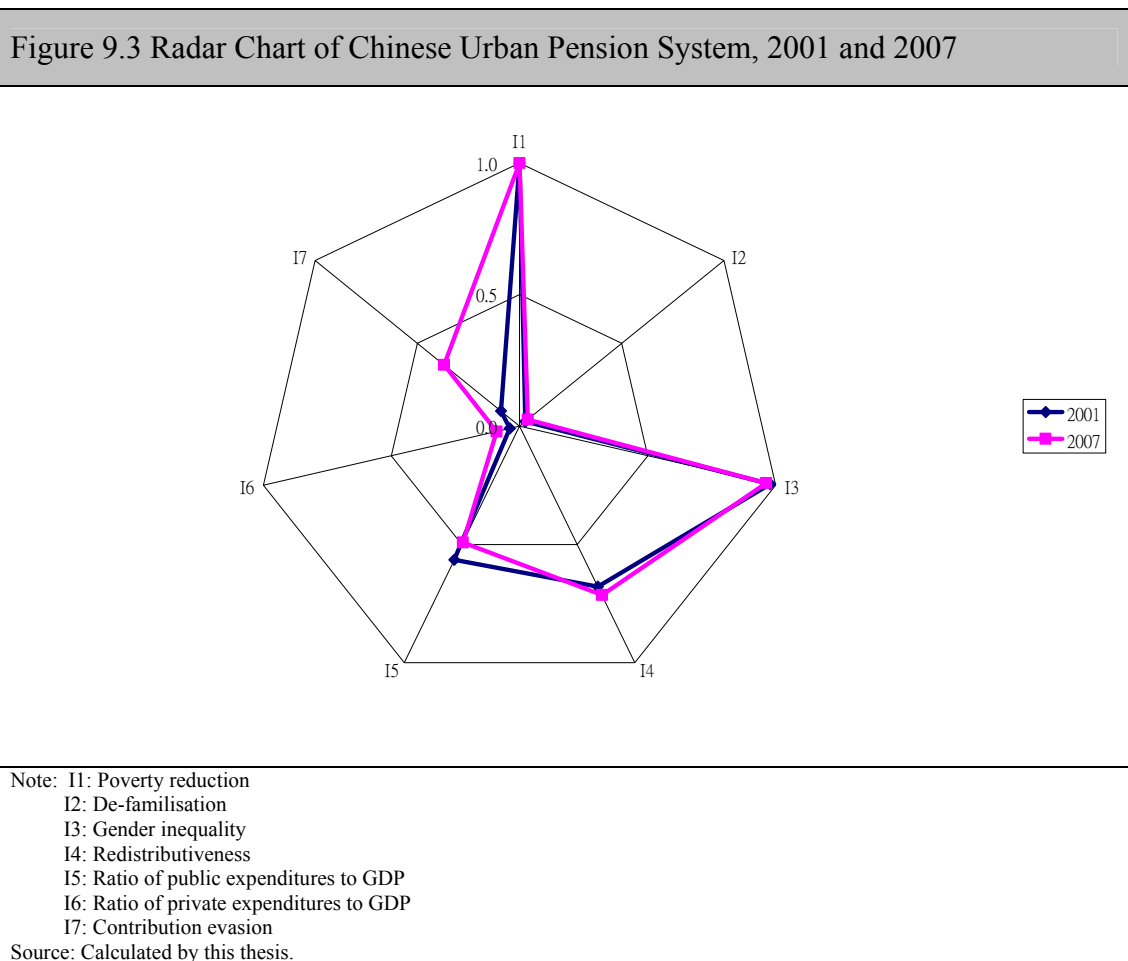
It is noteworthy that, from the perspective of radar chart score, although the best performer obtained more than 70% of the full score, the level of each pension system was close except for rural China (Figure 9.1). In addition, in terms of SMOP score, the best performer, the UK, in this league was awarded 57% and 69% of the full SMOP score in 2001 and 2007 (Table 9.3). As for the other five pension systems, although the rankings illustrated by radar chart and SMOP scores were the same, the proportion of full radar chart score for each case was higher than the proportion of full SMOP score. This denotes that the result of SMOP score was more sensitive than that of radar chart score.

9.2.2 The Evaluation by Country

The country-specified evaluation of the radar chart findings is a better way to see the development of social security system and its influence on the society as a whole. In the following section, these six pension systems will be discussed in alphabetical sequence.

Figure 9.3 demonstrates the performance of China’s urban pension system in 2001 and 2007 in seven selected indices. It shows that the Chinese urban pension scheme obtained full radar chart scores in poverty reduction (I1) and gender inequality (I3) and received moderate grades in redistributiveness (I4) and public social expenditures

(I5) in 2001 and 2007. Among these seven indicators, the level of de-familisation (I2), private social spending (I6) and the evasion of social security responsibility (I7) were the weakest parts of the urban system.

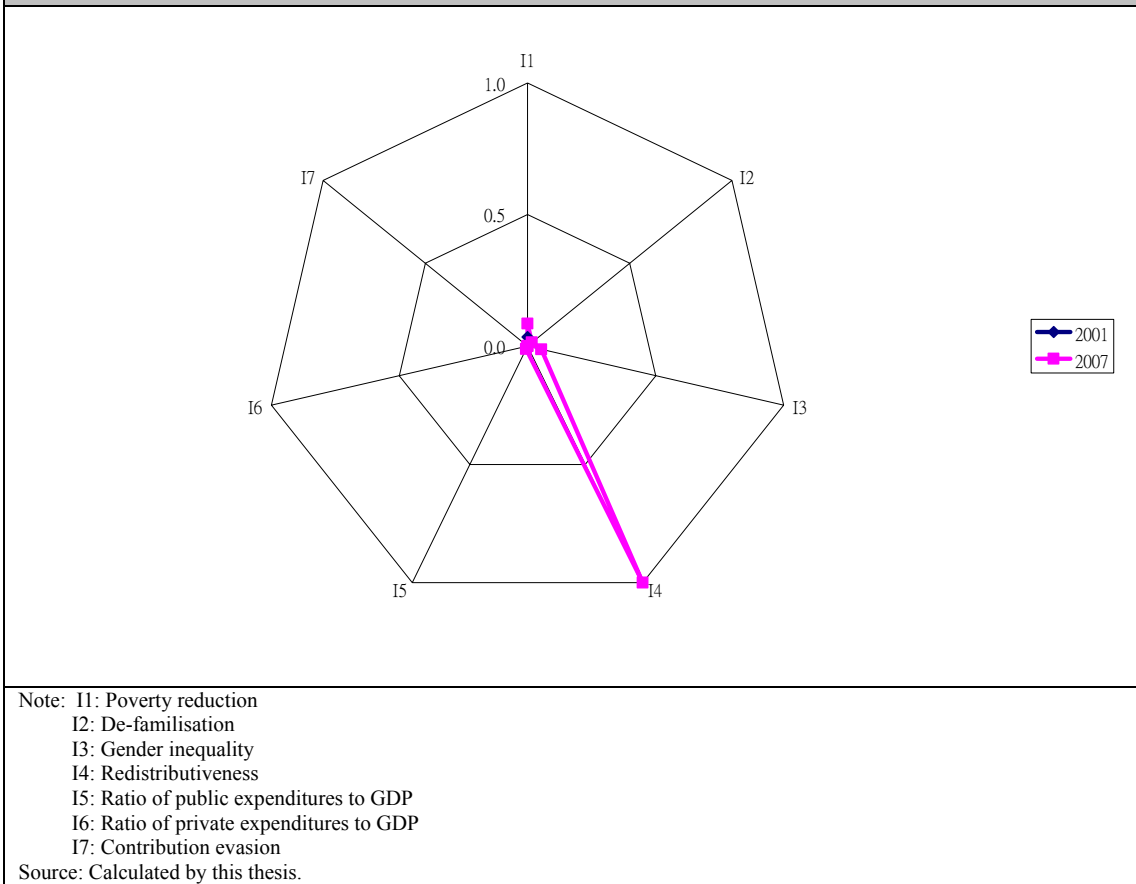


Nonetheless the level of poverty reduction (I1) of the contributory and non-contributory pension provisions as a whole in urban China was the best in this league table in 2001 and 2007, the relatively low coverage of the ageing population, illustrated in Chapter Eight, imbalanced people's retirement provisions and status of income security. This issue will be further discussed in the next section. Gender inequality (I3) was another index which China's urban pension system acquired full radar chart score from. This illustrates that its better performance in the contributory pension programme category was due to the relatively higher level of the ratio of employed women to employed men and the narrower wage gap; while the advantage of the arrangement of the non-contributory scheme was due to its greater ability to reduce the poverty level. However, as discussed in Chapter Six, the take-up rate of the social assistance scheme is the problem which is not considered in this index. The redistributiveness (I4) of the Chinese urban pension system increased slightly between 2001 and 2007 as a result of a decrease in the best performer's status. The urban pension system's raw data showed that its redistributiveness went down from 0.58 to

0.52 due to the increase of the expenditures on contributory schemes and the limited size of spending on the Minimum Living Standard Scheme (MLSS) (Table 9.1). The decrease of the radar chart score on the level of public social expenditure (I5) resulted from the rocketing of China's economy scale, which more than doubled between 2001 and 2007 but the spending did not go up correspondingly (Table A9.4). The income transfers from economically active children (I2) in urban China have decreased since 1970s as discussed in Chapter Six, but the level still lagged far behind the British system. The low radar chart scores on the scale of private social spending (I6) and the level of pension contribution evasion (I7) in urban China illustrate that the private insurance market and the government's efforts to improve compliance with social security obligations were waiting to be developed and achieved.

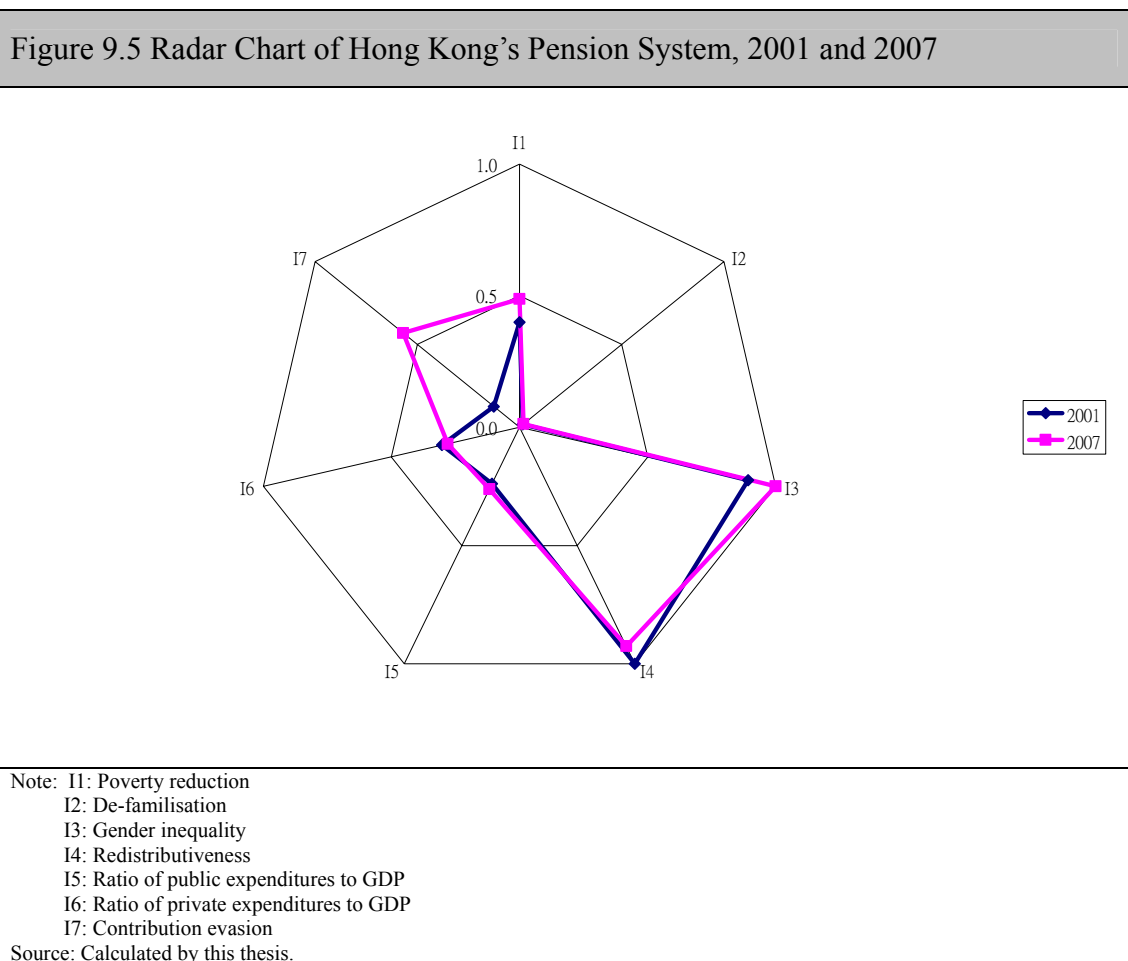
The heptagon in Figure 9.4 depicts the performance of China's rural pension system in 2001 and 2007. It illustrates that among the seven indicators the rural pension scheme received full score in redistributiveness (I4, in 2007 only) but obtained a very low score, nearly nought, in the other fields in 2001 and 2007. The high score in redistributiveness was due to the introduction of the MLSS provision in 2007, which boosted the redistributiveness from zero in 2001 to a full radar chart score in 2007 (Table 9.3). The low level of de-familisation (I2) to some extent resulted from the lack of a mandatory contributory pension policy, universal social allowance provisions in rural regions or private sources of retirement income, which was shown by its low radar chart scores in gender inequality (I3) and level of public and private sources of social expenditures to GDP (I5 and I6). Despite a means-tested social assistance scheme established in 2007 that provided retirement income to general rural residents, the index for poverty reduction (I1) indicates that the benefit level covered less than 10% of the poverty level on average. It is worthwhile noting that the high proportion of social expenditures transferred from wealthy to poor (I4) was caused by the meagre level of spending on the voluntary basic pension scheme as well as the low aggregate amount of payouts from MLSS and Five-Protection benefits (less than half of its urban counterparts according to the statistics in Table A9.3).

Figure 9.4 Radar Chart of Chinese Rural Pension System, 2001 and 2007



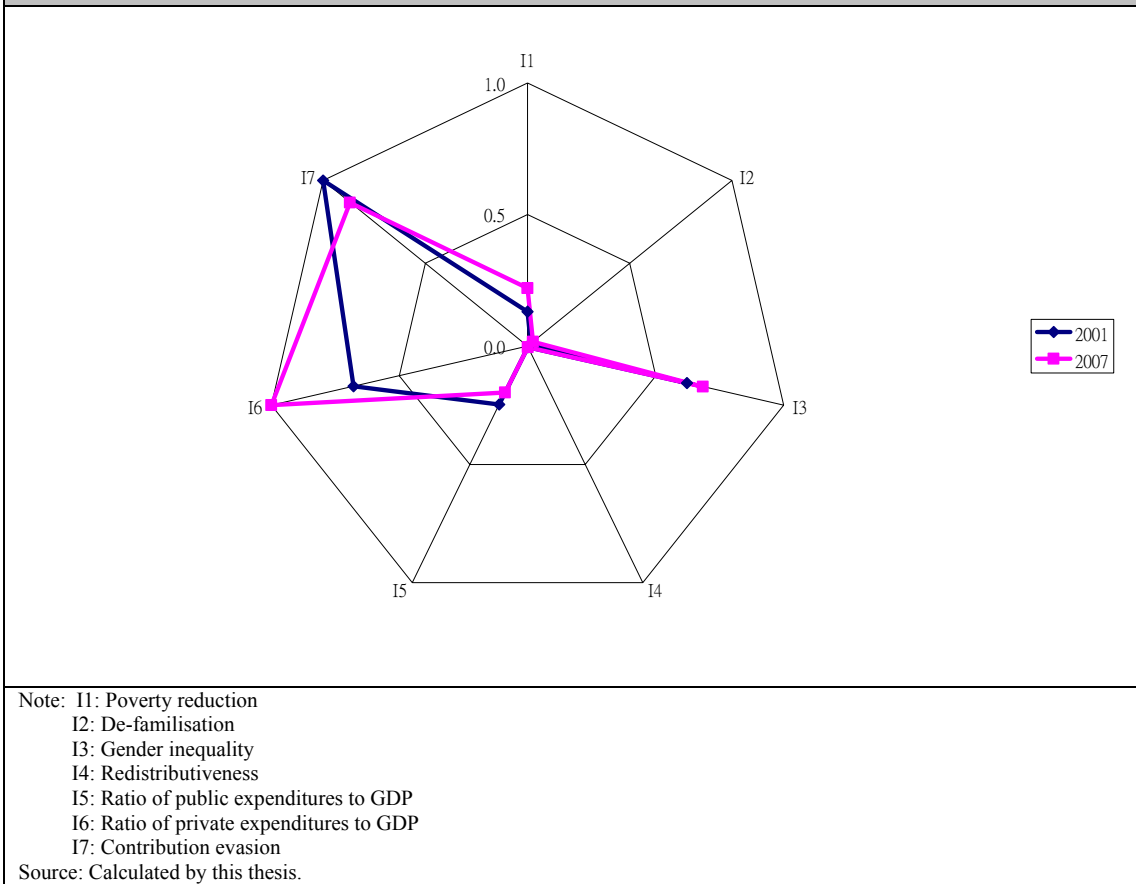
Hong Kong’s radar chart (Figure 9.5) illustrates that the pension system in here performed better on gender inequality (I3) and the level of redistributiveness (I4) and received moderate radar chart scores in the other fields of this evaluation. The high performance on gender inequality of Hong Kong resulted from the increase of the proportion of employed women to that of men between 2001 and 2007 even though the wage gap stayed at around one-fourth throughout this period of time and the social assistance programmes did not help the non-working female population out of poverty efficiently. As for the level of redistributiveness, because Hong Kong is heavily reliant on social assistance programmes to meet deserving people’s needs and the contributory pension scheme, i.e. Mandatory Provident Fund (MPF), was introduced in 2000, the whole system is still more redistributive in nature and will decrease as the MPF payouts go up. Hong Kong acquired a moderate radar chart score in the compliance of social security responsibility (I7) category in 2007 because Singapore’s level dropped from 4.7% to 19.8% between 2001 and 2007. In fact, Hong Kong’s level in the evasion of MPF contributions category was more than 30% in both 2001 and 2007 (Table 9.1). As Mok (2000: 47 and 49) argues, in Hong Kong, most of the evasion of MPF contribution comes from low-income earners because, while the proportion may be the same, the contribution constitutes a large part of their income

in nominal term. The moderate level of poverty reduction (I1) of Hong Kong's social assistance provisions indicates that people still count on the informal transfers from economically active children as noted by the index of de-familisation (I2) in which Hong Kong received poor radar chart score. Namely, the poor ability reduction capability of the pension system led to greater reliance on the family support system. The scale of public and private sources of social expenditures (I5 and I6) of Hong Kong shows spending on pension provisions was relatively smaller than the best performer. Moreover, private insurance policies were less important in Hong Kong than in other pension systems except China as an official report denoted (Census and Statistics Department 2002: 63-83).



Although the average SMOP score of Singapore was ranked fourth together with Taiwan in 2007, it was more than ten times that of rural China's pension system in the same year. According to the heptagon in Figure 9.6, Singapore was awarded high or full scores in private social expenditures (I6) and compliance of social security obligations (I7), and obtained moderate scores in gender equality (I3). The poverty reduction of public pension provisions (I1), de-familisation (I2), redistributiveness (I4) and public sources of social spending (I5) were the weakest parts among this set of indices.

Figure 9.6 Radar Chart of Singaporean Pension System, 2001 and 2007

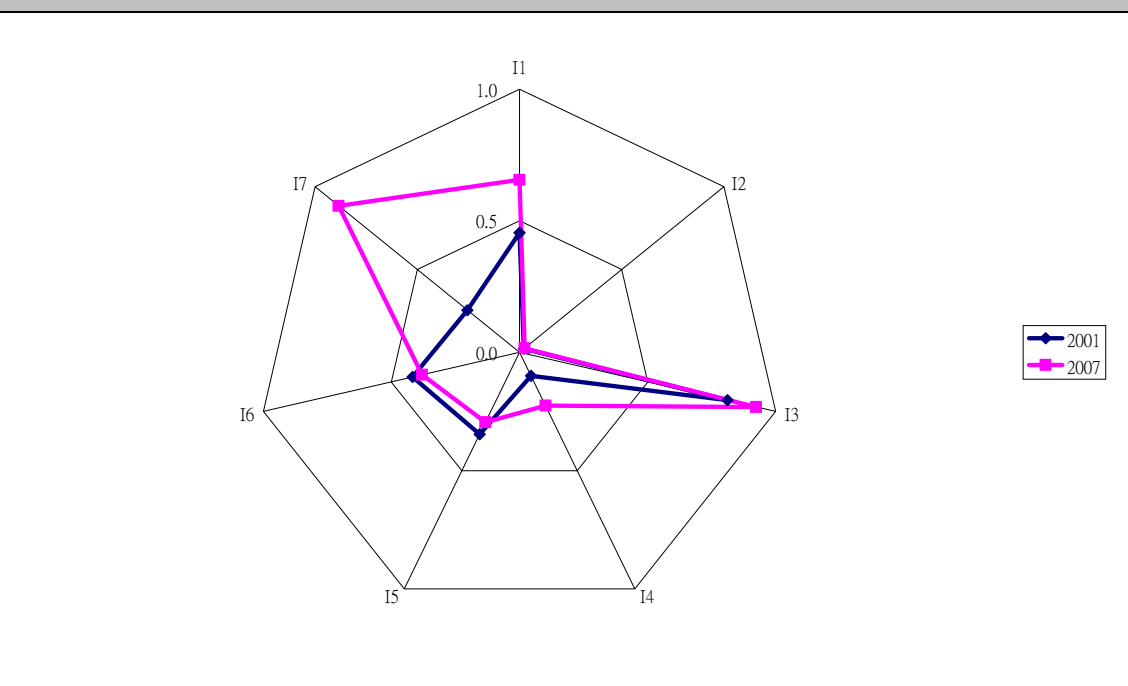


As the findings show, the low evasion rate of CPF (Central Provident Fund) contributions was Singapore’s main advantage in both 2001 and 2007 despite its level reducing considerably from 4.7% to 19.8% (Table 9.1). However, according to official statistics, the rate of default employers in Singapore was 0.7% and 0.5% during this period of time (CPF Board 2001: 43; 2007: 19). The high social expenditures from private insurance policies was not a really advantage of the CPF system because it simply investigated if private insurance was an important source of retirement income as Castles (1994) observed. The results correspond to Castles’s work and find that private social spending was 2.8 to 5.1 times to that of public sources (i.e. CPF and Public Assistance (PA) schemes) in 2003 and 2007 (Table A9.4). As for the low score (0.20 in 2007) in public social expenditures (I5) this implies that people may have purchased private insurance policies with the CPF savings during their working years, resulting in the incommensurable scale of expenditures. Besides, the scant level of public pension benefits in turn can explain the public pension’s low level of poverty reduction in both 2001 and 2007 (I1). Singapore’s equality between female and male employees (I3) was worse than most cases and may influence women’s contributions to the CPF scheme and consequently decrease their retirement income; while the PA benefits hardly balanced the disparity because of limited eligibility. The level of de-

familisation (I2) in Singapore increased markedly as the level of family transfers fell from 64.0% to 44.7% between 2001 and 2007, but the achievement of the best performer (UK) kept Singapore's radar chart score low on this aspect. The redistributiveness of the Singaporean pension system (I4) was another weakest part of Singapore. The CPF system was never a scheme that emphasised the pooling of resources because it is purely earnings-related and the payouts are based on one's account balance. The PA scheme is the only redistributive-natured programme in Singapore but its low level of payments delivers very little resources from rich to poor and resulted in low redistributive transfers in 2001 and 2007.

Taiwan's overall SMOP score improved considerably between 2001 and 2007 due to its obtaining a high radar chart scores in poverty reduction (I1), gender inequality (I3) and contribution evasion (I7) in 2007, but the indices in de-familisation (I2), redistributiveness (I4) and public and private social expenditures to GDP (I5 and I6) remained in the lower grades. Among these seven indicators, Taiwan was the only state that did not receive full radar chart score from any of them (Figure 9.7).

Figure 9.7 Radar Chart of Taiwanese Pension System, 2001 and 2007



Note: I1: Poverty reduction
 I2: De-familisation
 I3: Gender inequality
 I4: Redistributiveness
 I5: Ratio of public expenditures to GDP
 I6: Ratio of private expenditures to GDP
 I7: Contribution evasion
 Source: Calculated by this thesis.

Taiwan improved markedly in poverty reduction (I1) because social allowance provisions for senior citizens gradually phased in from 2002 and the coverage of LI

and LS schemes expanded along with the amendments since its onset. The level of social security compliance (I7) augmented due to Singapore's great decrease from 4.7% to 19.8% of contribution evasion between 2001 and 2007. In fact, the statistics show that the proportion of contribution evaded in Taiwan increased around one percentage point from 2001 to 2007. The redistributive character (I4) of Taiwan's pension provisions improved markedly between 2002 and 2007. Table A9.3 illustrated that the total payouts of contributory pension schemes stayed at a similar level between 2002 and 2007 while the amount of non-contributory social allowance benefits doubled in the same period of time and helped boost the ratio of redistributiveness from 8.4% to 16.5%. The low radar chart score of de-familisation (I2) in Taiwan was mostly caused by the high level of the British data. In fact, the importance of cash transfers from adult children in Taiwan was 47.1% and 46.5% in 2000 and 2005 respectively which was low among the Chinese Community pensions in this league table (Table 9.1). The performance of gender equality (I3) in Taiwan improved slightly between 2001 and 2007 due to the better labour market situation, i.e. the higher ratio of employed female workers to male workers and the ratio of women to men's regular salary; while the conditions of non-contributory benefits stayed unchanged during this period of time. The indices of public and private sources of social expenditures (I5 and I6) in Taiwan depict an interesting picture in that the payouts from private insurance policies outnumbered those from public compulsory pension programmes despite the contributory pension provisions in Taiwan maturing. This may result from the fact that the replacement rate on average of the lump-sum payment scheme was not able to maintain a reasonable level of living, as is case in Singapore.

The British system gained high radar chart scores in poverty reduction (I1), de-familisation (I2), gender inequality (I3), the scale of expenditures from public and private sources (I5 and I6) and pension contribution evasion (I7), while it was awarded low scores in redistributiveness (I4) (Figure 9.8).

It is noteworthy that the high performance on de-familisation (I2) merely indicates British families may share less monetary resources between family members, but not that there is less reciprocity among them. That is, the broad coverage of pension provisions and the sufficiency of benefit level help reduce people's dependency on the household's social security function, but inter-generational reciprocity in the delivery of services, such as long-term nursing for old age members and childcare for older parent's grandchildren, between each other may stay strong (Bengtson and Oyama 2007: 5; Walker 1996: 27-8; Walker and Martimo 2003: 55). Besides, the low level of redistributiveness (I4) may simply indicate the UK's pension system emphasises earnings-related pension programmes. The findings also indicate that the high level of

private social expenditures (I6) may top up the mandatory pension benefits and further secure retirees' income level nonetheless the benefits from mandatory pension schemes in average surpass the poverty level in 2001 and 2007. The decline in the UK's performance on gender inequality (I3) was due to the decrease in the wage gap from 80% to 70% as well as the lower level of poverty reduction achieved by the non-contributory pension programme according to the statistics listed in Table A9.1. The boost of the radar chart score in the compliance of pension contributions (I7) resulted from the drop of Singapore's performance between 2001 and 2007, but the UK's level was close to that of Singapore and Taiwan which ranged between 15% and 20% of unredeemed contributions (Table 9.1).

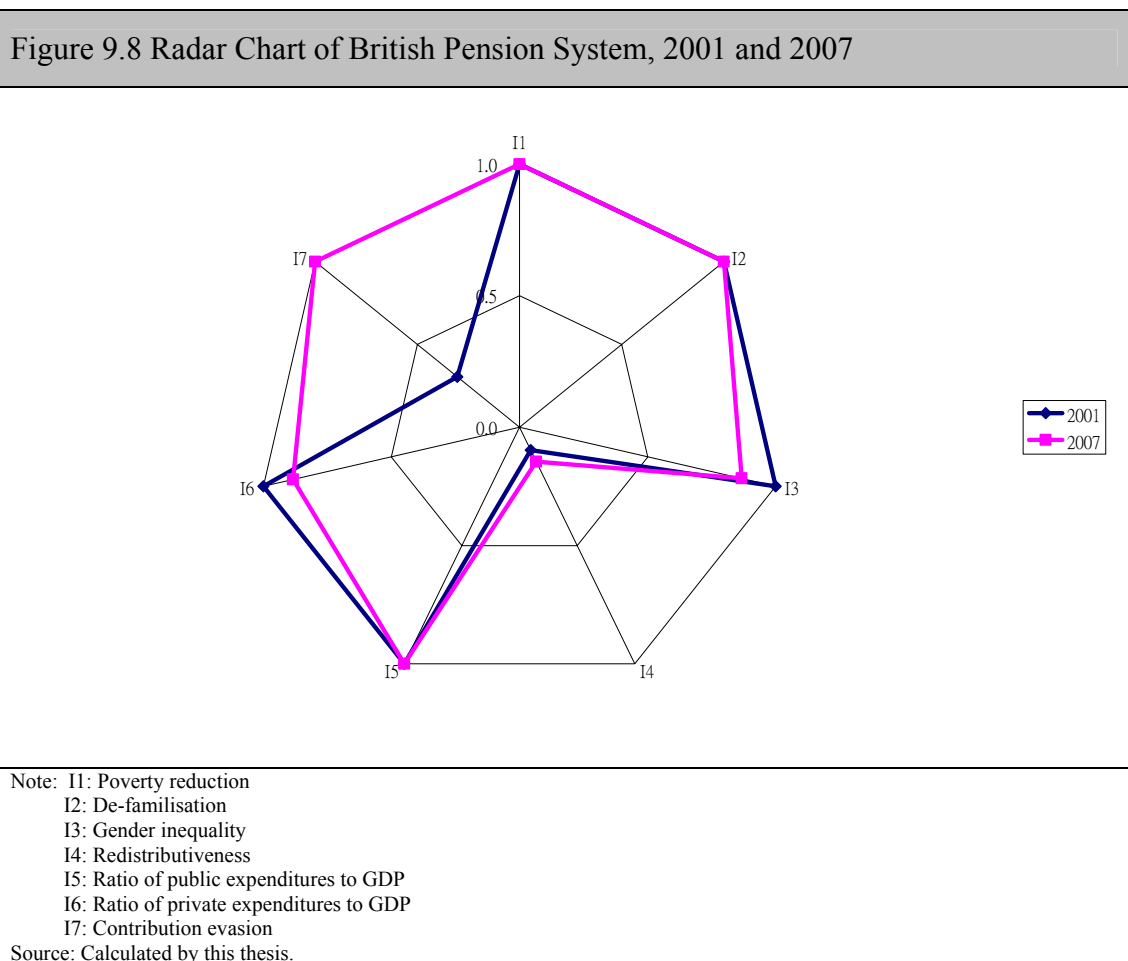
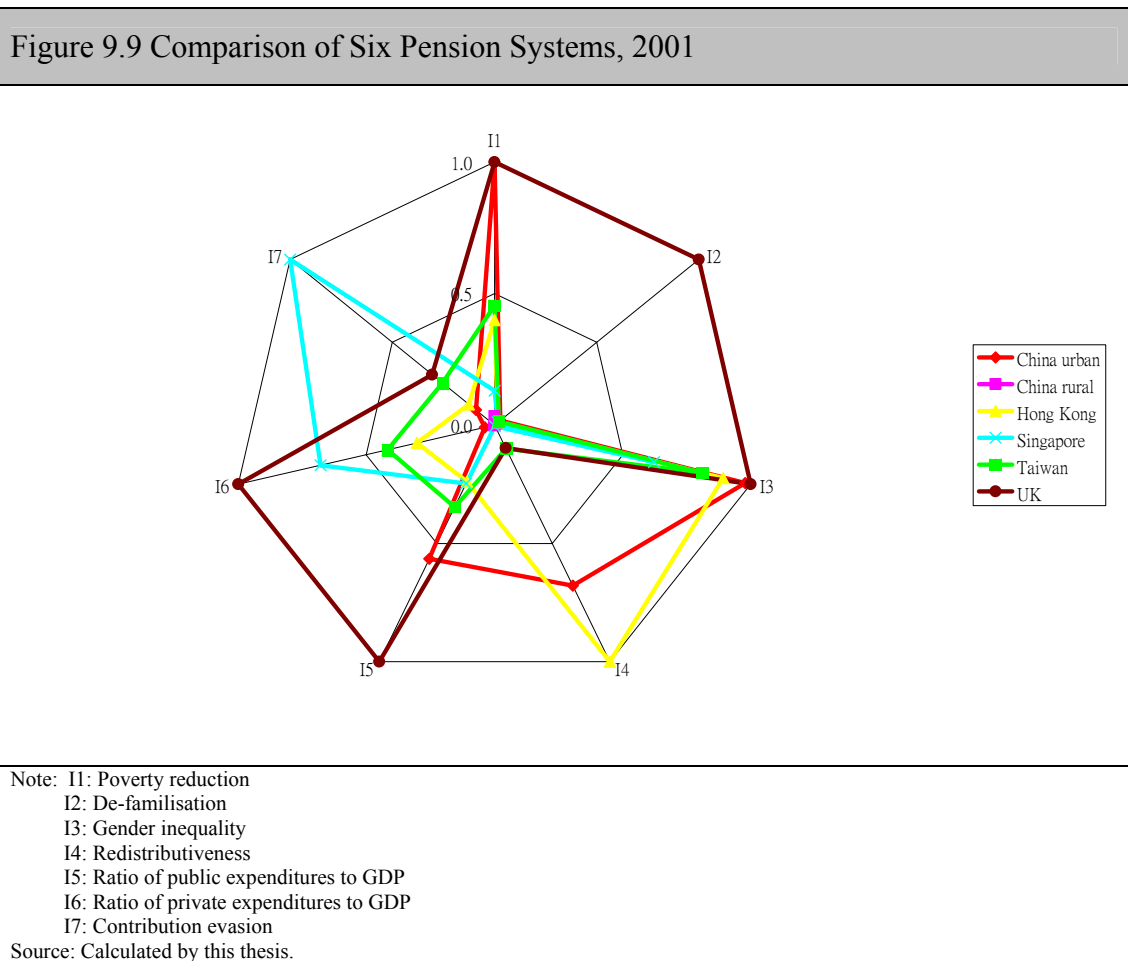


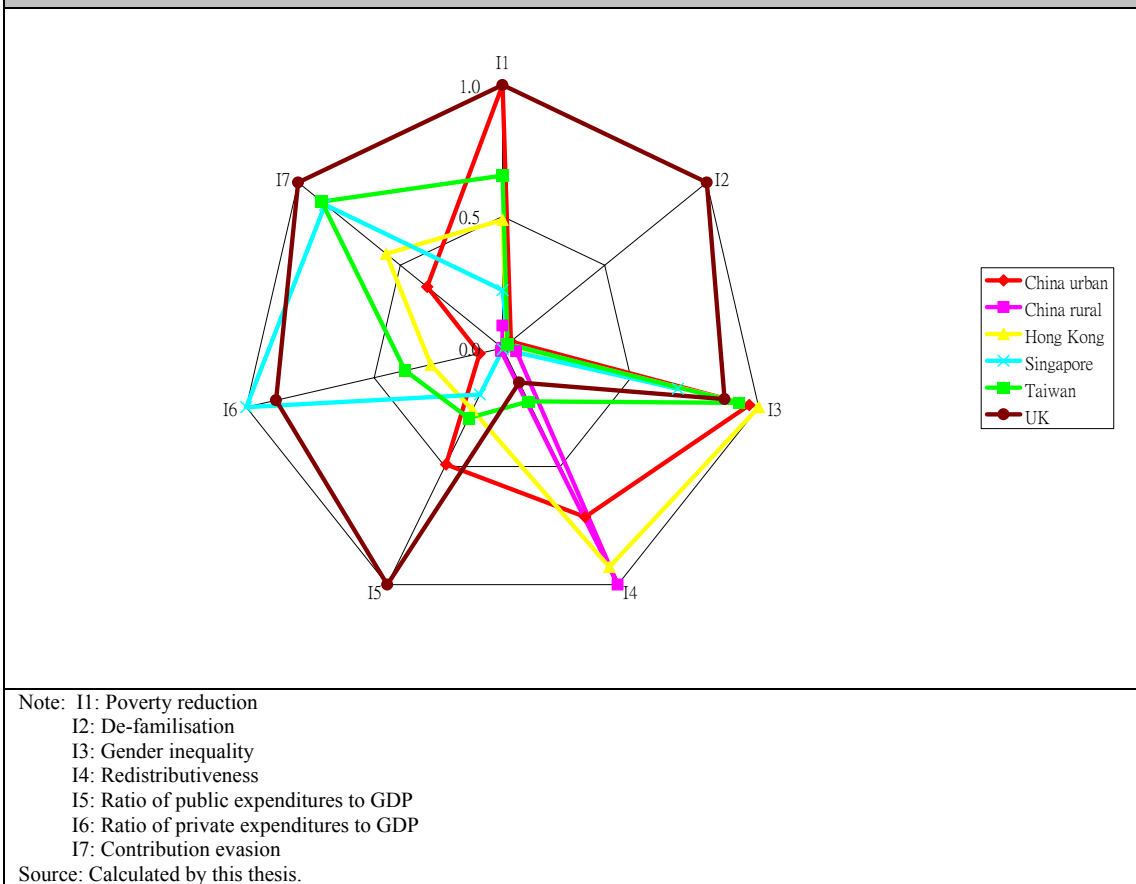
Figure 9.9 illustrates that these five pension systems of the Chinese Community states do not have a clear pattern between them in 2001. For instance, Hong Kong and Chinese urban pensions received high radar chart scores in redistributiveness (I4), but the rest of the systems obtained low scores in this area. Besides, similarly, the Chinese urban pension provisions acquired a high score in poverty reduction (I1), but the other Chinese Community pensions performed poorly on this aspect of policy output. Nevertheless, it is found that Chinese Community states all obtained low scores in de-familisation (I2) because of the insufficiency of their pension provisions in general. It

is also found that, compared to the UK's pension system, the public and private expenditures on pension payouts were lower among these four Asian countries.



In 2007, comparing with the performance in 2001 and despite the increase in the overall score of each system, generally speaking, most of the cases merely improved in the dimensions they were already good in (Figure 9.10). For example, Hong Kong received relatively high scores in gender equality and redistributiveness in this evaluation in 2001, and the performance of these two indicators was further augmented or kept at a similar level in 2007; while the weak parts remained unchanged or improved due to the decline in the others' performances. It is the same story in the other five pension systems.

Figure 9.10 Comparison of Six Pension Systems, 2007



9.3 Conclusion

The policy outputs of the Chinese Community pensions are evaluated with radar chart and SMOP approaches in this chapter. As observed in Chapter Eight, the sensitivity of the SMOP method may be greater than that of the radar chart approach. It is significant that the overall best performer (69% of full SMOP score) obtained a much higher score with the SMOP approach than the other cases (ranged around 20%, except 1% of the rural Chinese pension system) in 2007. Beyond that, the league tables of the performance of pension policy outputs derived from both approaches were basically the same. Both results indicate that the overall outputs of these five Asian pension systems were at a similar level. Besides, it is worthwhile noting that the outlier issue exists in this research, but it signifies the low level of de-familisation (I2) and insufficiency of pension provisions among the Chinese Community states. Singapore's level of social security evasion in 2001 was to some extent an outlier which lowered other cases' scores in 2001, but the level dropped greatly in 2007.

Some similarities of the policy outputs of the Chinese Community pension systems were found: low de-familisation, moderate or low levels of poverty reduction, similar level of gender equity, and moderate or low levels of public pension expenditure.

Meanwhile the performance in the other three dimensions was different. In addition, the performance of policy outputs of all these Asian pension systems improved markedly between 2001 and 2007. Among them, although the rural Chinese pension scheme boosted the most, its radar chart and SMOP scores still lagged far behind the other systems. The results of the comparative research can be concluded as follows:

- Poverty reduction: Hong Kong and Taiwan obtained moderate levels of poverty reduction through pension provisions among the Chinese Community states while rural China and Singapore performed the poorest in this league table. Although the raw data illustrated that the benefit level of pension provisions in urban China effectively reduced the poverty level, some relevant studies indicated that the deviation of payment level was great among pensioners (Boermel 2006: 21-2; Davis 1993: 183-4; Li and Zhong 2009: 828-9; Raymo and Xie 2000).
- De-familisation: All the Chinese Community pensions were poor on this aspect.
- Gender equity: The analysis showed that urban China, Singapore and Taiwan's pension provisions gained high scores on this dimension, Hong Kong obtained a moderate score, and the rural Chinese pension system performed the worst in this league table. However, with regard to the raw data, the performance of these pension systems was hampered due to the gendered wage level as well as the low level of pension rights for the non-working female population.
- Redistributiveness: On the one hand, Singapore and Taiwan's low score on this indicator implies that these two pension systems emphasised earnings-related pension programmes instead of tax-based social assistance schemes. On the other hand, the high level of redistributiveness in Hong Kong and rural China denotes that these pension schemes relied heavily on tax-financed social assistance provisions. The findings of the urban Chinese pension system illustrate that not only the social-insurance-based pension system stressed on redistributiveness, but also some social assistance programmes were employed to complete the coverage of pension provisions.
- Public pension payouts: The urban Chinese pension system obtained a moderate score from this index, while the other schemes performed poorly. This denotes that the scale of public pension expenditure in the Chinese Community states was significantly lower than that of the UK.
- Private pension payouts: The results indicate that the private insurance for retirement payments was on average highly (Singapore) and well developed

(Taiwan and Hong Kong) in three Chinese Community states. However, insurance-based private sources of retirement income were almost undeveloped in urban and rural China.

- Evasion of social security responsibility: Singapore and Taiwan performed better on the compliance of social security responsibility than the other Chinese Community pensions, while Hong Kong and urban China did worse and obtained moderate-low scores.

The findings of this chapter will be carried forward to Chapter Ten, where the implications for further pension reform in the Chinese Community states will be considered.

Appendices

Table A9.1 UK's Raw Data		
Item	2001	2007
The Minimum Income Guarantee (MIG)/Pension Credit (PC) level *	92.15	119.05
Average pensioners' gross income (£) **	190	258
Average mandatory pension income (£) **	119	151
Average income from dependent children (£) **	2	3
Employed women (16-59 years old) (thousands) ***	12,147	12,655
Employed men (16-64 years old) (thousands) ***	14,755	15,488
Average women's full-time hourly wage level (£) ****	9.79	10.42
Average men's full-time hourly wage level (£) ****	12.24	14.95
Arrangement of non-contributory pension *****	0.5	0.5
Eligibility of non-contributory pension *****	0.5	0.5
Expenditures on mandatory pension schemes (millions £) *****	48,479	61,000
Average weekly pay of MIG/PC (£) *****	49.02	51.13
Caseload of MIG/PC (thousands) *****	1,720.0	2,734.5
Expenditures on MIG/PC (millions £) *****	4,384.4	7,270.5
Ratio of mandatory public and private pensions to GDP (%) *****	4.7	4.8
Ratio of voluntary private pensions to GDP (%) *****	4.8	4.2
Average weekly wage level (£) *****	373.8	453.3
People in employment (thousands) *****	21,858	24,487
Amount of State Pension contributions (millions £) *****	56,718	75,549
Notes and Sources:		
* The level of the Minimum Income Guarantee (MIG)/Pension Credit (PC) is derived from the Department for Work and Pensions (2009: Table 5.8).		
** Data derived from Pensioners' Income Series (Chapman, et al. 2009: Table 2.1; Davis, et al. 2003: Table 1).		
*** The Labour Force Survey (LFS): Employment Levels by Age (SA), Office for National Statistics (ONS), http://www.statistics.gov.uk/statbase/xsdataset.asp?vlnk=1377&More=Y . [accessed on 10.03.10]		
**** Data derived from Office for National Statistics (2008: 6).		
***** These two indices are based on the nature and eligibility of the Pension Credit (PC) scheme which is a means-tested (0.5) application-based (0.5) programme.		
***** The numbers derived from the product of the ratio of mandatory public and private pensions to GDP and the amount of GDP listed below of this table.		
***** Data derived from Income Support Average Weekly Amount of Benefit: 60 and Over, Department for Work and Pensions http://83.244.183.180/100pc/is/ccdate/ccmig/ccclient/a_cawklyamt_r_ccdate_c_ccmig_p_ccclient_60_and_over.html , Income Support Caseload: 60 and Over, Department for Work and Pensions http://83.244.183.180/100pc/is/ccdate/ccmig/ccclient/a_carate_r_ccdate_c_ccmig_p_ccclient_60_and_over.html , and Department for Work and Pensions (2008: 16-7). The expenditures on MIG/PC equals to: (average weekly pay) * 52 * caseload. All the numbers are rounded up.		
***** Data derived from OECD StatExtracts at http://stats.oecd.org/index.aspx?r=315247 . [accessed: 11.03.10] The data is available in 2001 and 2005 only.		
***** Annual Survey of Hours and Earnings (ASHE), Office for National Statistics (ONS), http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=13101 . [accessed on 20.03.10]		
***** Data derived from the National Insurance Fund Account, National Audit Office (2003: 9; 2009: 14).		

Table A9.2 Raw Data for Assessing the Gender Inequality in China, Hong Kong, Singapore and Taiwan

Variables	China*		Hong Kong		Singapore		Taiwan	
	2000	2005	2001	2007	2001	2007	2001	2007
Employed women (million)	9.4 (20.9)	1.7 (2.6)	1.4	1.6	0.6	0.8	3.8	4.4
Employed men (million)	12.3 (24.3)	2.2 (2.9)	1.8	1.9	0.9	1.0	5.6	5.9
Female wage / male wage	0.83	0.80	0.75	0.75	0.72**	0.73**	0.78	0.82
Non-contributory arrangement	0.5	0.5	0.75	0.75	0	0	0.5	0.5
Eligibility of non-contributory	0.5	0.5	0.5	0.5	0	0	0.5	0.5
Poverty reduction of non-contributory	0.55	0.55	0.36	0.36	0	0	0.40	0.40

Notes and Sources:

* The numbers for rural areas are in brackets. The population figure for 2005 is based on the census of 1% populace.

** Women's wage level / men's wage level = 2,588 / 3,606 in 2001; the number of 2007 equals 3,148 / 4,335.

China's data are derived from the censuses of National Bureau of Statistics in 2000 and 2005 and surveys done by Braunstein and Brenner (2007: Table 3), Démurger et al. (2007: Table 6 & 7), Du and Dong (2009: Table 2), Gustafsson and Li (2000: Table 3) and Ng (2007: Table 1), and the years of statistics applied in this evaluation are 2000 and 2005. The evaluation of Hong Kong applies the data in 2001 and 2007 derived from the Census and Statistics Department (2008: Table 4.1 & 5.1) and the numbers calculated from Table 4.20. This evaluation of Singapore focuses on the information in 2001 and 2007 that are available from the Ministry of Community Department, Youth and Sports (http://app.mcys.gov.sg/web/Women_Economy_17.asp) [accessed: 15.02.10] and Ministry of Manpower (2008: Table 8; 2009: Table 24). Taiwan's data are available for 2001 and 2007 and derived from the Council of Labour Affairs (2009a: Table 5-1 & 5-2), Directorate-General of Budget, Accounting and Statistics (DGBAS) (www.dgbas.gov.tw) [15.02.2010] and Table 3.13 of this thesis.

Table A9.3 Raw Data for Assessing Redistributiveness in China, Hong Kong, Singapore and Taiwan

Variables	China (urban)		China (rural)		Hong Kong		Singapore		Taiwan	
	2001	2007	2001	2007	2003	2007	2003	2007	2002	2007
Total payouts of public pension schemes (million)	287,000	560,700	520.2	4,000	2,026	6,579	1,871	2,404	154,933	153,195
Total payouts of non-contributory social provisions (million)	4,200	27,700	0	10,900	11,879	13,767	7	8	14,264	30,382

Notes and Sources: All numbers are in the national currency of each country and are rounded up. China's data for 2001 and 2007 are derived from the Ministry of Human Resource and Social Security (2002: Table 10-38) and Table 6.8, 6.10 and 6.13. It is worth noting that the statistics of rural MLSS are available from 2007 and those of the Five-Protection scheme accessible from 2008, therefore the number for 2001 does not include rural MLSS and none of the data contains the expenditure on the Five-Protection benefits in 2001 and 2007. Hong Kong's statistics are available in 2001 and 2007 and derived from Table 4.13 and 4.14 of this thesis and Mandatory Provident Fund Authority (2004: 82; 2008: 124). It should be noted that the expenditure on CSSA includes recipients aged above sixty, and the spending on public pension schemes is based on the payouts from the MPF scheme. Due to the data about MPF retirement payment only being available from 2003 Hong Kong's numbers cover the statistics in 2003 and 2007. Singapore's data are derived from Table 5.25 of this thesis, CPF Board (2003: Annex G; 2007: Annex G) and Singapore Department of Statistics (2008: Table 22.4) in 2003 and 2007. The amount given for the public pension schemes of Singapore focuses on the payments withdrew by participants aged above fifty-five, and the payout of non-contributory social provisions decided by Taiwan's statistics are derived from Council of Labour Affairs of Taiwan (2009b) and Bureau of Labour Insurance (2008: Table 111 and 114). Because the old age benefit of LS scheme in 2007 is unavailable, it is replaced with the number for 2006. In addition, due to the social allowances for senior citizens and old age aboriginals being launched from 2002, the numbers of total payouts of public pension schemes and total payments of non-contributory social provisions applied in this evaluation are for 2002 and 2007.

Table A9.4 Raw Data for Assessing the Public and Private Social Expenditure in China, Hong Kong, Singapore and Taiwan

Variables	China		Hong Kong		Singapore		Taiwan	
	2001	2007	2003	2007	2003	2007	2002	2007
Payments of private insurance	20,280	106,445	17,976	21,513	5,294	12,246	233,871	791,399
Total public pension expenditure	287,000 (520)	560,700 (4,000)	2,026	6,579	1,871	2,404	121,096	153,195
Total social assistance expenditure on old age	4,200 (0)	27,700 (10,900)	11,879	13,767	7	8	14,264	30,382
Insured amount of in force policies	-	-	1,984,867	2,417,249	315,450	491,389	24,185,804	36,027,048
GDP	10,965,520	24,952,990	1,234,761	1,616,215	162,288	243,169	10,411,639	12,910,511
Ratio of private to public expenditure (%)	7.0	18.0	129.3	105.7	281.9	507.6	123.3	127.4

Notes and Sources: All numbers are in millions of the national currency of each country and rounded up. China's data about private insurance are from China Insurance Regulatory Commission (CIRC) (www.circ.gov.cn) [accessed: 22.02.10], and the statistics on social insurance and assistance schemes and GDP are from the Ministry of Human Resources and Social Security (2002) and the National Bureau of Statistics of China (2008). Hong Kong's statistics on private insurance markets are based on the information provided by the Office of the Commissioner of Insurance (OCI) (2003; 2007). Singapore's statistics on private insurance market and GDP are based on the data provided by the Monetary Authority of Singapore (MAS) (2003; 2007) and Singapore Department of Statistics (2008: Table 5.1) respectively. Because Singapore's data on the PA scheme is available from 2003 only, the evaluation of Singapore will focus on the statistics of 2003 and 2007. The payouts of private insurance policies in Taiwan are derived from Table 3.14 of this thesis, the amount of in force insurance policies is available from the Taiwan Insurance Institute's (TII) database (www.tii.org.tw), and the statistics of GDP are from the Directorate-General of Budget, Accounting and Statistics (DGBAS) of Taiwan (www.dgbas.gov.tw) [accessed: 22.02.10]. It has to be mentioned that the data applied for the evaluation of Taiwan contains the numbers from 2002 and 2007 because the LA programmes were launched in 2002.

Table A9.5 Raw Data for Assessing the Evasion of Pension Contributions in China, Hong Kong, Singapore and Taiwan

Variables	China urban		Hong Kong		Singapore		Taiwan	
	2001	2007	2003	2007	2001	2007	2001	2007
Total pension contribution (million)	248,896	783,420	23,764	32,413	15,829	17,686	123,661	132,214
Total receivable contribution (million)	-	-	-	-	16,613	22,047	151,780	164,026
Employed population (million)	239	294	2.2	2.6	-	-	-	-
Average monthly wage (dollar)	906	2,078	14,108	14,765	-	-	-	-
Contribution rate (%)	20	20	10	10	depends	depends	-	-

Notes and Sources: All the numbers are rounded up, and the amounts are based on the national currency of each country. The computation of China's evasion rate is based on the Yearbook of 2002 and 2008 (National Bureau of Statistics of China 2002; 2008), while Hong Kong's evasion rate is calculated from the statistics derived from the Mandatory Provident Fund Authority (2002; 2008). The calculation of Singapore's numbers is based on the information provided by the CPF Board (2001; 2007) and the Ministry of Community Development, Youth and Sports (www.mcys.gov.sg). The numbers of Taiwan were computed by the Council of Labour Affairs (2009b: Table 6-6).

Chapter Ten Concluding Discussion

In order to answer the five questions raised in Chapter One, a literature review chapter, four case studies and two comparative evaluations have been employed in this thesis. In this chapter, two sections are organised to answer these five main questions.

The answers for the first three questions will be discussed in the first section of this chapter, which sought to investigate the essence of the Chinese Community pensions by reviewing ancient China's welfare and political ideologies, the practices of Confucian benevolence and typologies of Eastern welfare regimes in Chapter Two. Western and Eastern welfare ideologies were contrasted in order to discuss the similarities and differences between them, and to extrapolate the core value of these four Asian states. The studies of the development of Chinese Community pensions between Chapter Three and Six provide a closer look at how, and to what extent, the core value of the Chinese Community influences the policy-making of pension provisions and transforms along with the changes of economic, social and political contexts. The literatures and development of pension policy reviewed highlighted "paternalism" as the core value of the Chinese Community's pension systems.

The second section of this chapter will elaborate on the comparison of these four Chinese Community pensions systems and the implications for pension reform, to respond to the fourth and fifth questions of the thesis. The discussion of this section is derived from the evaluation of pension provisions along with the case studies between Chapter Three and Six as well as the comparative studies between in Chapter Eight and Nine. The findings suggest that pension provisions in these four Chinese Community states are not able to reduce the risk of old age poverty, the family support system may wither as the fertility rate and dependency rate are projected to deteriorate in the following decades, and that the inputs and outputs of these five pension systems are poor and lag behind the British counterpart. The original contribution of this thesis is to apply the radar chart and Surface Measure of Overall Performance (SMOP) approaches in the comparison of pension systems. This enables effective comparison into the Chinese Community pensions and fits the standardised qualitative and quantitative information into radar charts to show the advantages and disadvantages of each pension scheme in several dimensions at the same time. The scores obtained from the radar chart and SMOP approaches are the basis for establishing the league tables of the Chinese Community pensions. Nevertheless, the capacity of these multi-faceted comparative methods is restricted by the availability of statistics. As a result, some aspects are evaluated with second best information. The validity and reliability of the

analyses may be reduced and bias the findings of this comparative research. It is found that the best performer approach may cover up the fact if all the cases perform poorly on some indicators, but this has to some extent has been solved by applying the British pension system as the control of this evaluation. Moreover, the radar chart and SMOP scores may not be able to distinguish the level of performance especially when each system has its own advantages that may not be possessed by others. This problem can be solved by reading the radar charts to comprehend the advantages and disadvantages of each scheme.

Lastly, some concluding remarks will be made in the final section of this chapter.

10.1 Towards Market Fundamentalism and New Paternalism?

The findings about the similarities and dissimilarities between Eastern and Western welfare ideologies in Chapter Two helped highlight the core value of the Chinese Community. In terms of the dissimilarities, for one thing, the purposes of these two kinds of welfare ideologies are different because the Eastern political doctrines offer advice about the art of ruling for autocrats and welfare provision is merely an instrument for obtaining people's support and maintain the legitimacy of the ruling dynasty. While the welfare ideologies of the West were gradually proposed after the development of nation states, the age of Enlightenment, the rise of capitalism and the Industrial Revolution for the sake of improving civil and human rights. As a result, unlike the West, the political ideologies emphasised on the rule of the son of Heaven in ancient China instead of bringing forth citizenship and welfare rights, political institutions and democracy. Confucianism had been the central political and welfare values from ancient China to the contemporary Chinese Community states and the essence – paternalism – had barely changed. For another thing, in ancient China, the Granary Policy and public and private poor relief programmes were the tools to secure the legitimacy of the ruling dynasty and to ease the grassroots discontent and riots caused by disasters and famines (Perdue 1982: 747). This did not change a lot even when democratic institutions were established. That is, due to the lack of public pension provisions, in the mid-1990s of Taiwan for example, social allowance schemes (i.e. benevolent policies) are used to gain support (i.e. votes) from people, while the loss of an election (i.e. Kuomintang) is equal to being overthrown by another dynasty (i.e. Democratic Progressive Party) (Lin 2007). Generally speaking, paternalism was the cause and underdevelopment of pension rights was the effect.

The kinship- and family-centred characteristics further influenced the welfare ideologies in the East and made the differences between East and West. The Confucian style of wealth redistribution and distribution carried out the Granary Policy. It was used to morally order people contributing grain on wealth basis then gradually became a formal scheme to regulate people's contribution rates to a risk-pooling system. Besides, public benevolent activities and organisations were performed based on the belief that the rulers should fully take care of people's needs. As a result, the ideas of self-reliance and the family-centred social security system were still rooted in people's minds and government assistance was seen as the last resort. However, the Granary Policy and public poor relief provisions did not help develop the definition and measurement of people's needs into statutory rules because, as Chow (1987: 39) puts it, "they have made social welfare look more like a legal transaction than an expression of compassion." It to some extent illustrates how paternalism leads to underdevelopment of pension rights and stigmatisation of social assistance provisions in the East. Furthermore, it indicates that even countries that share the same cultural contexts, as Gough (2000: 20) argues, may shape their own welfare regimes to fit the societies' needs. The most importantly, during the development of economy, the logic of policy selection, paternalism, did not change significantly. Instead, self-reliance and self-responsibility, the values praised both by Confucianism and capitalism, further integrated these two isms and helped justify the reason why pension rights and redistributiveness were so limited (Kuo 2009).

The paternalism aroused by capitalism, on the one hand, is to a degree from economists' predilections about market fundamentalism i.e. antidotes to the equality doctrines, harmony of interests, laissez-faire, the free trade doctrine and the equilibrium concept (Myrdal 1957: 135-46). Stiglitz (2002: 221) further argues that this market fundamentalism has been imposed by international organisations e.g. the privatisation of pension system promoted by the World Bank and overridden all other views. On the other hand, capitalism's paternalistic nature is shown through the appeal of the improvement of human capital and individual employability and the flexibility that facilitates a competitive open economy. This further solidifies the interest and status of elite groups and cements voting majorities to reinforce legitimacy (Standing 2002: 172). Integrating Confucianism with capitalism has been an easy task because paternalism had already rooted in the political and familial institutions, and education has been one of the most important values for social status mobility for two thousand years. It is also true that productivism or capitalism may have been the only way for these societies to survive and prosper in this competitive world after the Second World War.

The case studies of the thesis found that the common feature shared by these states is

the government-centred or top-down political ideology. That is, the states, composed by ruling and capitalist elites, decide what benevolences can be implemented in order to pacify the electorate, encourage economic development and working incentives and not endanger the status quo. Chapter Three demonstrated that the Taiwanese social insurance system was for stabilising and justifying Kuomintang government's legitimacy and assisting economic development. On the one hand, the pension rights were stratified according to people's working status and the governmental employees normally enjoyed much wealthier retirement payments. On the other hand, in order to boost economic development, employers played the roles as heads of households to offer "faithful" members' social security benefits. In the meantime, the family support system was emphasised through the definition of destitution, which was based on the pooled resources in a household. Although the pension rights were improved along with the amendments of pension schemes, the patriarchal values remained and were reinforced by the introduction of a centralised provident fund system, the Labour Pension scheme, in 2004. Besides, the newly-established contributory scheme, the National Pension system, in 2008 to some extent enhanced the reliance on breadwinners because those target groups, mainly non-working population, may not be able to pay the premiums by themselves. The National Pension system also indicated the government's paternalistic ideology which tended to avoid tax-based social provisions due to the self-responsibility notions, thus contributory schemes replaced the Social Allowance programmes.

Chapter Four illustrated how Confucian paternalism was maintained in the *kaifong* organisations that provided benefits to kin and family members in Hong Kong. Moreover, business elites and the local gentry organised donation-based benevolent activities and provisions, and played the role of political leaders. Members of these business elites in *kaifong* associations were gradually assigned official positions by the Colonial government to administrate and arbitrate local affairs, thus legitimising government rule. In the process, the patriarchal ideology common to both Confucianism and capitalism was further integrated with and dominated social policy-making from the late 1880s; welfare was not their priority. The family- and donation-based welfare provisions were easily accepted and maintained by Hong Kongers because they resonated with Confucian paternalism from the late Ming China. More recently, business elites have resisted the introduction of a social insurance scheme since the 1960s. The blockage of Patten's pension insurance programme proposal in the early 1990s was another victory for paternalism, which eventually led to a centrally-managed and privately-run provident fund system, the Mandatory Provident Fund (MPF), in 1995. Confucian paternalism was further enforced after 1997 not only

by business elites but also ruling officials (Vickers 2001).

Chapter Five showed that the Singaporean case to some extent resembles Hong Kong's. Chinese kinship organisations prospered during the Colonial period and rendered welfare provisions to their members, whilst some donation-based provisions were managed by community leaders elected from business elites and local gentry. Singapore's tradition of donation-based activities, similar to Hong Kong, prospered during the Post-War era. Paternalism in Singapore became the leading ideology of the powerful government, the People's Action Party, through the enforcement of the Central Provident Fund (CPF) scheme and family support system from 1960s. The establishment of the Housing Development Board (HDB) in the late 1960s showed that, on the one hand, the flats provided by the HDB could bring family members together and, ideally, improve reproduction and family income transfers. On the other hand, cheap public housing reduced visible poverty and gained support from the public. Namely, the state's capitalist ideology further integrated with the CPF scheme then it was capable of funding everything necessary for economic development with a great share of the society's resources. Although the government was aware of the insufficiency of retirement payments since the 1980s, it simply reminded the family members fulfilling social security responsibilities. Moreover, the Maintenance of Parents Act, which made explicit the government's emphasis on the family support system, was passed in 1993 to reiterate and enhance the state's stand on self-reliance when it comes to retirement income security.

Chapter Six indicated that, in China, the paternalism of pension provisions was enhanced by implementing the employer-sponsored Labour Insurance scheme, centralising the management of pension funds introducing an individual account system in urban China. In this logic, business owners resembled fathers in households and cancelled workers' seniorities if they shifted jobs as a punishment. Aside from worker's retirement payment schemes, the poor were not covered by any of the pension schemes in urban areas and had to rely on family support or social assistance programmes, but the beneficiaries were under the neighbourhood's surveillance which stigmatised these schemes. As for the pension provisions in rural China, some social assistance programmes and a voluntary pension plan were available but covered merely about one-tenth of retirees. As a result, households were still the main social security provider, and those who did not receive enough income from adult children and/or other sources had to extend their working years to meet their living costs.

The findings also indicate that paternalism underpinned the provident-fund-like strategy in the Chinese Community, which sought to maximise the state's control over

financial markets and societal resources. China, Singapore and Taiwan were the cases that introduced individual account components and the funds were handled by a governmental organisation. Although Hong Kong's MPF scheme was a privately-run system, this strategy was achieved through the consensus between capitalists and the government instead of the public. In addition, notwithstanding all the four states implemented some sort of social assistance schemes to maintain subsistence levels of living for those who have no other means of income, these provisions do not necessarily aim at fully removing elderly poverty. That is, these countries still favour family as the main social security provider and expect families to make up any shortfall in retirees' incomes, or treat the lack of provisions as an incentive to earn. The optimal level of distribution and redistribution of resources in these societies is determined by the social preference claimed by Confucian paternalism (Ross 1991: 488).

10.2 Implications for Future Reforms

The evaluation of Taiwan's pension system denoted that the family support system may not be sustainable in the long-run because the level of total fertility rate (TFR) remains low. In addition, the Social Allowance programmes and pension provisions' replacement rate was low. Thus, the average pensioner in Taiwan is forced to seek other sources of income to counteract old-age poverty. The comparative studies performed in Chapter Eight illustrated that the shortcomings of Taiwan's pension inputs were the lack of benefit adjustment mechanism, low level of vested rights, system dependency ratio and replacement rate. Chapter Nine indicated that Taiwan's pension outputs were disadvantageous in redistributiveness because most provisions were earnings-related instead of based on redistribution and performed fairly on poverty reduction, family income transfers and public and private social expenditures. Accordingly, the Taiwanese government has responded to these problems by replacing the lump-sum payment method with periodical benefits and defining benefit levels by the replacement rate. However, the further debates will be whether there is finance for a 1.55% replacement rate for every year of contribution. In fact, the financial issue can be solved by integrating the provident-fund-like Labour Pension system, 6% of employees' wage, into the Labour Insurance scheme then the contribution rate will be 13.5% immediately (7.5% of employees' wage from Labour Insurance contributions). This proposition not only can secure the benefit level of the Labour Pension system benefit, but also can ensure the financial sustainability. But in this case, the new system may have to consider a mechanism for translating accumulated assets into the replacement rate. Besides, the problems also result from the government's misunderstanding of the aims of social insurance schemes and unwillingness to continue the tax-financed social

allowance programmes, which has been proved by the introduction of the National Pension system in 2008. In this case, a needs-based universal basic pension plan is feasible for maintaining this type of people's retirement income, particularly the non-working population, independent from breadwinners and other economically gainful members.

The assessment of Hong Kong's pension provisions denoted that the family support system and Social Security Allowance (SSA) programmes were the most important sources of income for elderly people in Hong Kong, but the low fertility rate and replacement rate of social assistance programmes endangered elderly Hong Kongers' retirement income security. This research further concluded that Hong Kong's pension provisions were unable to remove old age poverty and relied on other sources to make up the gap. Besides, the comparative studies in Chapter Eight indicated that the weaknesses of Hong Kong's pension inputs were replacement rate, system dependency ratio, and indexation mechanism and vested pension rights. Meanwhile Chapter Nine demonstrated that Hong Kong was disadvantageous in low level of poverty reduction, low scale of public and private social expenditures to GDP and high evasion of social security obligations. For this sake, to set up a social insurance scheme may be a better solution to the abovementioned problems. If it is not feasible to reform the Mandatory Provident Fund (MPF) system in the near future, then some defects of the MPF have to be solved. For one thing, because the MPF scheme is a fully privatised pension programme, the pension payment may not be the same for two persons who start working on the same day and have the same income and portfolios of investments during their active years but where one retires some months later than the other in the same year due to high inflation, a decrease of the market interest rate and fluctuation of the return rate (Orszag and Stiglitz 1999). A needs-based basic pension scheme is feasible not only for maintaining retirees' income at a prescribed level, but also for protecting non-working people from falling below the poverty line in retirement. For another thing, the government could negotiate with the private financial institutes for policyholders to provide collective-based annuity pension plan(s) in order to lower the annuity costs because, for private financial institutes, the cost of annuity goes up along with the greater risks of an individual expected to be. That is, as Cavanaugh (1996: 104) puts it, "risk is more easily borne if it is widely distributed". Plus, the government could issue inflation-proof bonds to financial institutes for maintaining retirees' purchasing power because the state may be the only competent supplier (Barr 2002).

The Singaporean case showed that family transfers were the most important source of retirement income. However, the importance of the family support system declined greatly between 1995 and 2005, and the low fertility rate implied it may not be

sustainable in the long-run. Moreover, the benefits from Central Provident Fund (CPF) composed 3.5% of retirement income in 2005 which corresponded to the low replacement rate of CPF retirement benefit concluded in the evaluation. The Singaporean government had sensed the inadequacy of pension provisions and introduced periodical CPF payment programmes entitled to those who saved above a certain level, but the benefit level merely maintained poverty level and not every participant was eligible to the payment. Singapore's pension system, analysed in Chapter Eight, suffered from its lack of indexation mechanism and protection of pension rights and had a poor system dependency ratio and low replacement rate. Besides, Chapter Nine illustrated that the pension outputs in poverty reduction, redistributiveness and level of public social expenditures were poor. Accordingly, it is found that the pension system in Singapore is contradictory and in disorder. The contradiction results from the fact that the government has noticed the vulnerability of the family support system, but still resorts to self-reliance which may not be sustainable. The disorder is due to, on the one hand, the government treating the CPF scheme as a poverty reduction programme nevertheless not everyone is entitled to the periodical payment; on the other, the public assistance provisions, which should function as a poverty reduction scheme, merely allow two to three thousand elderly beneficiaries on average annually. Therefore, the proposal for Singapore is similar to Hong Kong. That is, to establish a needs-based universal basic pension scheme to provide a basic level of living in retirement and let the CPF payments follow the market rules, or stay with the same plan, to offer a certain level of periodical payments to top up the basic pension scheme. In other words, knowing that their basic standards of living are securely vested would in fact enlarge the degree of freedom available to the citizens of the city state (Chee 1994: 83-4 particularly; Kreiswirth 1998).

China's pension provisions in urban and rural areas differed significantly. The analysis illustrated that pension payments and family support system were the most important sources of income in urban regions, while family transfer and employment earnings composed nearly 90% of old age income in rural areas. Nevertheless, the low level of fertility rate suggested that, particularly in urban areas, the family support system may not be maintainable in the long-run. This may be solved by extending the basic pension scheme and enhancing the Minimum Living Standard Scheme (MLSS) in urban areas; while the coverage of contributory pension schemes and take-up rate of MLSS provisions were low in rural regions and may become a severe problem if no further reforms are carried out. As a result, on *average*, urban pension provisions could fully reduce old age poverty but its function of poverty reduction was poor in rural areas. Besides, the comparative studies in Chapter Eight indicated the disadvantages of urban

China's pension scheme were in system dependency ratio and finance, while that of rural China's system were in the low rate of beneficiary to elderly population as well as the finance. The findings on pension outputs (Chapter Nine) demonstrated that the urban system was weak in evasion of social security obligations and private sources of income, while the rural system was disadvantageous in all the aspects except family solidarity. Considering the abovementioned findings, even though the Minimum Living Standard Scheme (MLSS) has been implemented in urban and rural areas and the labour pension scheme in urban areas has been extended to private sectors, the mal-administration of the systems and incompliance with pension contributions are long-standing problems. Thus, improving the administrative system is the first thing to be done. Alternatively, the provincial level of the social security fund may be suitable for the Chinese case because of the longstanding territorial differences that exist across the country (Gilboy and Heginbotham 2004; Huntington 1991, particularly pp. 46-58; Wang 1998) and it least allows central government to upgrade the mechanism and computing programmes for monitoring the use of the pension fund to avoid corruption. Beyond that, the labour pension system in rural regions can remain a voluntary programme but the government may have to provide universal basic pension benefits for the general population for removing old age poverty. Shen and Williamson (2006) and Yang et al's (2009) researches point out that, in this way, all rural residents aged over sixty-five would be guaranteed the official level of minimum living standard at a cost of a mere 0.2% of GDP. While in the urban areas, the universal basic pension scheme is also necessary for sustaining the living standards of the non-working population and, ideally, the benefit level should be adjusted along with the level of labour pension benefits. In this way, the recipients of labour pension payments will not be over-protected and resources can be allocated more efficiently, but the issue is the degree of redistributiveness. Namely, what is the cut-off point for entitlement to a basic pension? In addition, the universal basic pension scheme should be based on needs rather than application, which will help reduce the stigmatisation of the idea of social assistance and strengthen elderly people's income security.

10.3 Final Remarks

It has to be noted that the above proposals can merely point out the directions for future pension reforms because, in effect, the amendments are usually achieved through compromises between social forces over the financial methods of the reformed pension system, the equity between contributors and recipients as well as the problems and burdens that may be caused (Hill 2007: 16-7). For this sake, if the Chinese Community pensions are not further modified, then the overall performances of Hong Kong and

Taiwan may be the best and China as a whole will be at the bottom of this league table. In the meantime, more importantly, the advantages and disadvantages of these pension provisions will last, and the predominant characteristic of the systems, i.e. paternalism, may further deteriorate their ability to reduce old-age poverty.

The analysis shows that these governments have used the social security system as a means of constructing classes not only for consolidating their rule, but also for differentiating the benefits people enjoy and the aims they strive for. The governments and societies therefore have allowed different levels of redistributiveness and defined the deserving in different ways to compensate for the inequities between classes through social assistance schemes (Kwon 2005: 481-2; Midgley 1995: 4). However, the capitalist and productivist ideologies, backed by both the states and business elites, further take the class inequalities as work incentives for propelling the countries towards prosperity and justifying the inequities (Albert 1993). The pursuit of higher educational status, one of the Confucian values, becomes an opportunity for social mobility to honour one's family in the labour market. As full-employment is unsustainable and people are reluctant to reproduce the next generation because it puts household capital accumulation in peril, the governments still concentrate on the family's role in providing social security rather than implementing social policies that would mitigate families' burdens. This may enhance financial stress within households whose resources are insufficient to meet their needs (Kuo 1997: 18-20; Lee 1995: 673-4). Then the question will be how to prolong the kinship tradition and improve filial piety? Will the answer be the coercing of reciprocity and pooling of financial resources that these Chinese Community states persist with? Or, will it be relieving people's burdens by reinforcing the social security provisions? As argued throughout this thesis, the goals of a social security system do not inevitably conflict with that of the family support system or economic development for that matter. In fact, the family and economic systems will be stronger and more equal with the help of an expanded social security institution.

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