

A Search for the Root Causes of the Underdevelopment of the Hong Kong Annuity Market

by Michael Yue Yat Hui and Wai-sum Chan*

1. Introduction

It has long been predicted that the human lifespan will increase with medical, technological and economic advancement. In fact, the life expectancy of a newborn baby has climbed a steep slope from 45 in 1900 to 80 in 2001 in many developed countries. Decreasing mortality has allowed people to stay in the workforce longer and to enjoy longer retirements. Life annuity, as an instrument that provides financial protection to those who live “too long”, is one of the few businesses that have been directly pulled up the slope by the lifespan cart.

Since it was invented, life annuity has been commonplace in the life insurance world. Even though its development has lagged behind that of other insurance products, its important role in offering people financial protection is undeniable. With the reform of retirement and pension systems sweeping the Western world in the past decade, life annuity markets have grown significantly. Asian countries, which are forecast to account for 62 per cent of the world’s population aged 60 and older in 2050 (United Nations, 2003), have recently realized the need to modify their retirement and pension systems. Hence, it will not be surprising to see a growing annuity market in Asia before long.

As one of the most developed Asian cities, Hong Kong must also respond to the need for increased retirement savings as its population ages. Although there was already a voluntary private-sector scheme governed by the Occupational Retirement Scheme Ordinance (“ORSO”), covering about 925,000 workers, in mid-2000, the Hong Kong government decided to establish the Mandatory Provident Fund (“MPF”), an employer-designated, private-sector-administered pension scheme that commenced operations on 1 December 2000, as a long-term response to the continued ageing of its population. In embarking on this, Hong Kong was generally expected, like its counterparts elsewhere in the world, including Australia, Brazil, Chile and the U.S., to unleash forces that would help to reshape its long underdeveloped life annuity landscape, which only had 60,681 life annuity contracts in force at the end of 2002.

Although it is indisputable that the implementation of the MPF will help to develop the undersized life annuity market in Hong Kong, we believe that there are also a myriad of long

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active economic, financial and cultural forces that hinder the process of lifting the annuity business. In this paper, we will look at both sides of the matter: how the MPF can significantly impact the life annuity business and how other factors have historically caused the underdevelopment of the market. To answer the first question, we start by reviewing the current local annuity market and the MPF scheme and then ask whether the scheme can provide a definite solution to the underdevelopment of the market. To gain insights on the other problem we will suggest several possible causes. While some of the causes suggested cannot be easily proved, some can be demonstrated by referring to the experiences of foreign countries. We will not attempt to suggest cures to the problem in this paper due to the structural complexities we have observed. However, we hope this research can provide multidimensional views on the issue of the underdevelopment of the local annuity market and offer hints for further research towards a comprehensive solution to the topic.

2. The current market situation in Hong Kong

The annuity business in Hong Kong has long played a minor part in the domestic insurance industry. A comparison between the 5,224,165 individual life insurance policies in force on 31 December 2002 and the 60,681 life annuity contracts in force on that date reflects the degree of underdevelopment of the market. If we look at the business from a total annual premium perspective, we find that the local annuity market size is just about 2.3 per cent of the individual life insurance market size in 2002. This small size is not surprising, compared to the private annuity market in other Asian countries like China, Thailand and Vietnam. However, as a well-developed financial centre in the region, or even the world, and as one of the most populous cities in the world with 6.7 million residents and a workforce of over 3.2 million, the size of this market is pitifully small.

In addition to its size, the market is extremely uncompetitive. Nearly all the life annuity policies in force in 2001 were issued by a few insurers in Hong Kong, which are also the major players in the life insurance field in the territory. This market situation is commonly seen when a product is in its infancy stage among the population and this has confirmed how underdeveloped Hong Kong's annuity market is. However, the situation is not as bad as it looks. If one focuses on the trend of the development of the market, one observes that the market has already grown significantly from 1,960 contracts in force in 1999, to 60,681 contracts in force in 2002, representing a three-year compound annual growth rate close to 200 per cent. The total premium received in the year has also increased from HK\$ 42.6 million in 1999 to HK\$ 1,127.8 million in 2002, equivalent to a growth of the individual life annuity market size from 0.1 per cent to 2.3 per cent of the life insurance markets. This positive trend, which is shown in Figures 1 and 2, as well as the implementation of MPF, is generally believed to support the future development of the market.

3. MPF: the philosopher's stone?

The reason often given for the underdevelopment of Hong Kong's annuity market is the lack of a mandatory pension system. Many expect that the establishment of a mandatory pension system will boost the size and competition of the local annuity market, as retirees will invest the huge lump-sum benefit received at the maturation of their pension plan into annuity products in order to protect themselves from the risks of longevity. The MPF is widely believed to be such a philosopher's stone to Hong Kong's annuity market. In this

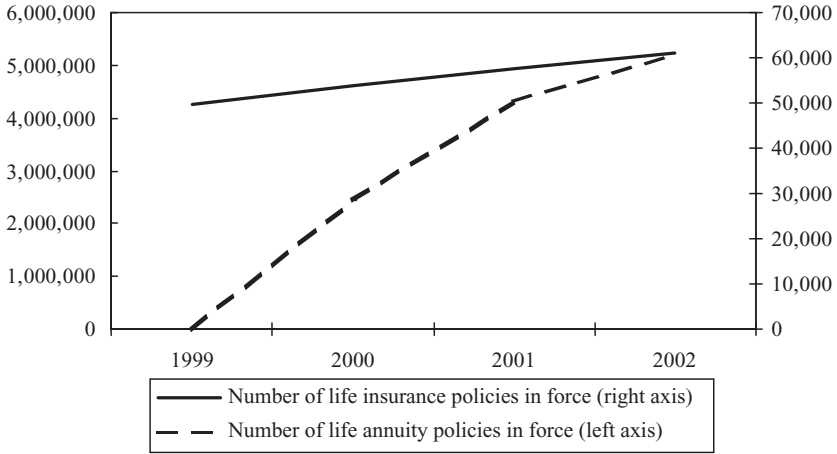


Figure 1: Annuity market vs. insurance market in Hong Kong — policies in force
 Source: Office of Commissioner of Insurance, HKSAR (2003).

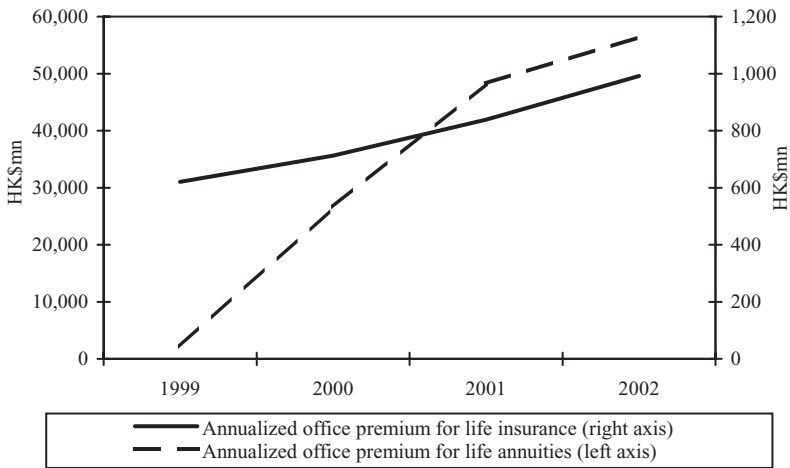


Figure 2: Annuity market vs. insurance market in Hong Kong — total premium received in the year
 Source: Office of Commissioner of Insurance, HKSAR (2003).

section, we will provide a brief review of the old ORSO system and the new MPF system, followed by an investigation into the effectiveness of the implementation of MPF in increasing the business by comparing it with pension systems in countries where annuity markets are relatively well developed.

3.1 *A brief review of ORSO and MPF*

The Occupational Retirement Schemes Ordinance commenced operation on 15 October 1993 to promote private-sector savings for retirement by regulating all the voluntary occupational retirement schemes operating in or from Hong Kong. At the end of 1999, the total asset size of the schemes was already HK\$ 137 billion, or 11.3 per cent of GDP in that year. In fact, the ORSO balance per participant is higher than the per capita balance for Singapore's mandatory Central Provident Fund ("CPF"). But its limited reach of only 27.7 per cent of Hong Kong's total workforce, or 925,737 employees, in December 1999 reduced its ability to provide for the general retirement needs of the whole population.

To widen the retirement saving net and strengthen the second pillar, the Mandatory Provident Fund Schemes Ordinance was enacted in 1995 and implemented on 1 December 2000. As a compulsory defined contributions retirement plan, most members of the workforce aged between 18 and 65 who have been employed for 60 days or more, are required to participate in the scheme and to make contributions. The accrued benefits are preserved until the official retirement age of 65 and are paid as a lump sum at the age of retirement. Before that, employees may transfer their accrued benefits from one scheme to another when they move to a new job. Employers with existing ORSO schemes taken out before the implementation of the new system are eligible to apply for exemption from the MPF scheme. There were 6,941 exemptions covering over 635,000 employees granted by the Mandatory Provident Fund Schemes Authority. However, those employers have to allow their employees to decide whether to stay in the old ORSO scheme or to join the new MPF one. Together with a part of the employees previously covered by ORSO, the MPF scheme enrolled over 2.6 million workers, which is about 2.8 times the workforce that was covered by the old scheme. This dramatic increase in the number of participants enrolled in retirement plans will broaden the potential client base of various life annuity products. However, we cannot conclude that this potential client base enlargement will be realized as a similar growth in the size of the annuity market.

3.2 *Comparisons with Singapore, Australia and the U.S.*

To ascertain whether the implementation of the MPF directly boosted the development of the annuity market, we look at situations in countries where similar schemes have been in place for a relatively long time, namely Singapore, Australia and the U.S. A comparison between key features of Hong Kong's MPF with Singapore's CPF, Australia's Superannuation and the U.S. 401(k) is provided in Table 1.

Given the similarities between the four schemes, if a country-wide pension scheme is a definite booster for the annuity market, it is reasonable to assert that, in view of the history of CPF, Superannuation and 401(k), the annuity markets in Singapore, Australia and the U.S. are all well developed. Furthermore, if we compare their features, the annuity market in Singapore ought to be the most developed among the four due to its high rate of contributions and its long history since 1992. The annuity market in the U.S. ought to appear to be the least developed among the three countries compared here, due to its voluntary nature and the ceilings placed on contributions. However, statistics on their respective annuity markets gives mixed and contrary conclusions for these three countries.

In fact, for Singapore, only 42,576 annuity contracts were in force in 2002 at a time when there were about 5.9 million life insurance policies in force (Monetary Authority of Singapore, 2003). In terms of the total premium received, the annuity market was just about

*Table 1:
Comparison between Hong Kong's MPF, Singapore's CPF, Australia's Superannuation and the U.S. 401(k)*

Features/Scheme	MPF	CPF	Superannuation	401(k)
Regulation	Mandatory Provident Fund Schemes Ordinance	Central Provident Fund Act	Superannuation Industry (Supervision) Act 1993; Superannuation Guarantee ("SG")	Section 401(k) of IRS Internal Revenue Code
Establishment	Established under trust	Established under CPF Board	Established under trust	Is a trust
Financial supervision	Privately managed and market-oriented	Wholly government managed	Privately managed and market oriented	Privately managed and market-oriented
Participation	Mandatory	Mandatory	Mandatory contribution by employers on behalf of employees	Voluntary
Type of arrangement	Defined contributions	Defined contributions	Both defined benefit and defined contributions; increasingly skewed towards defined contributions	Defined contributions
Mandatory contribution	Employer and employee both 5 per cent of relevant income; self-employed 5 per cent	Employees 20 per cent, employer 16 per cent	Mandatory employer contributions: 9 per cent (8 per cent before 2002)	Nil
Maximum contribution	Maximum amount set for mandatory contributions; free to make extra voluntary contributions	S\$ 1,200 for employees, S\$ 960 for employers	Employees and employers free to make additional voluntary contributions; maximum amount set for tax concessions	Maximum total pre-tax contribution is U.S.\$ 10,500

(continued overleaf)

Table 1:
Continued

Features/Scheme	MPF	CPF	Superannuation	401(k)
Tax benefits for employees	Mandatory contributions are tax deductible	Mandatory contributions are tax deductible; contributions into special account are tax-free	Employee voluntary contributions are taxed under certain circumstances	All contributions are tax-deferred until withdrawal
Tax benefits for employers	Mandatory contributions are tax deductible; capped for voluntary contributions	Mandatory contributions are tax deductible; capped for voluntary contributions	Mandatory contributions are taxed; voluntary contributions are taxed under certain circumstances	Contributions are tax deductible
Vesting	Mandatory contributions are immediately and fully vested	Mandatory contributions are immediately and fully vested	Vesting scales apply to a limited number of older schemes; almost all newer schemes provide fully vested	Contributions are generally vested
Portability	Accrued benefits are transferable to new MPF schemes when switching jobs	Accrued benefits are transferable to new CPF schemes when switching jobs	Accrued benefits are transferable to new superannuation schemes when switching jobs	Accrued benefits can be rolled over to new 401(k) plans when switching jobs
Investment choice by employee	Within choices provided by scheme trustee	Within choices provided by CPF Investment Scheme	Most schemes provide for investment choice by the employee	Within choices provided by employer
Benefits retention/preservation	Until official retirement age of 65	Until age 55	Until age 55, rising to 60 for those born after 30 June 1964; to a maximum retirement age of 65	Until age of 59.5
Early withdrawal of benefits	Generally not allowed	Generally not allowed	Generally not allowed	Subject to 10 per cent penalty

6.3 per cent of the size of the life insurance business in 2002. That is higher than the 2.3 per cent in Hong Kong during the period, but this modest difference can hardly justify Singapore's much higher total monthly mandatory contribution rate of 36 per cent.¹ In fact, this percentage of 6.3 is far smaller than the ones in Australia and the U.S. Moreover, the three-year compound annual growth rate of number of annuity contacts in Singapore is relatively low at 33 per cent, compared to Hong Kong's at 200 per cent. This signals that Singapore's market, though modestly sized, is relatively mature already. All this repudiates the assertion that a mandatory pension scheme is a definite booster to the annuity market.

Furthermore, if we shift our focus to Australia and the U.S., we observe a very different picture of the annuity market. In Australia, life annuity premiums make up about 20 per cent of the total premiums received by life insurance companies in 2002 (Australian Prudential Regulation Authority, 2002). The life annuity business in the U.S. has been so developed that it generated over U.S.\$ 269 billion in revenue in 2002, which can be translated into 53 per cent of the total premiums received by the life insurance industry in the year (American Council of Life Insurers, 2003). This again runs counter to our previous assumption of the role of pension schemes to the life annuity market.

Some may continue to accept the assertion that a pension scheme can certainly raise up the annuity business, arguing that the contradictory result is due to the difference in capital balances and the penetration rate of the saving scheme. This argument breaks down when we compare the penetration and capital wealth of Hong Kong's old ORSO scheme with the other three schemes in Table 2.

Table 2:
Comparison of ORSO, CPF, Superannuation and 401(k) schemes

During 2000	ORSO	CPF	Superannuation	401(k)
Total assets (U.S.\$ million)	18,045	52,152	282,523	1,723,000
Number of accounts (million)	0.9	2.8	20.5	36.0
Working population (million)	3.3	1.9	9.1	134.4
Penetration rate (%)	27.7	148.5	226.9	26.8
Average assets per account (U.S.\$ thousand)	19.5	18.6	13.8	47.9

Source: Ramos *et al.* (2000).

The penetration rate of ORSO was much lower than that of CPF and was higher than that of 401(k) during 2000. The average assets per account were also higher for ORSO than for Superannuation. If penetration rate is the determinant of the size of the annuity market, why then was the annuity market in Hong Kong so underdeveloped when compared to the U.S., and why does it not significantly differ from Singapore? If the account balance is the measure taken, why then is the annuity market in Hong Kong much smaller than Australia's? These questions show that the argument concerning the penetration rate and the average

¹ 20 per cent from employees and 16 per cent from employers.

account balance cannot support the assertion that a mandatory provident fund scheme definitely boosts the annuity industry. In fact, the solution to the problem may be external to the pension system in the country.

However, even with such a disappointing conclusion, the importance of a comprehensive retirement saving scheme to the development of the annuity market is undeniable. The scheme, be it voluntary or mandatory, can help individuals to accumulate a huge amount of assets at the age of retirement and purchasing a life annuity is one of the many options available on withdrawal of the lump sum benefit. Whether a retiree spends the benefit on an annuity or elsewhere is the crux of the problem. The implementation of MPF may be a remedy to the underdeveloped annuity market in Hong Kong, but it is by no means the sole and certain cure to the problem. To obtain an insight into the problem, other possible causes besides the lack of a mandatory retirement saving system must be investigated.

4. The root causes of the problem

To investigate the root causes of the underdevelopment of Hong Kong's annuity market, we have examined the problem from different perspectives, namely, the investors, the provider side and the external environment. A number of possible causes will be suggested in this section as a result of these investigations. Some of these suggestions are consistent with the findings in foreign countries. Understanding the experiences of these foreign countries will therefore help us to gain a more comprehensive view of the problem in Hong Kong, allowing an outline of a set of possible solutions to be formulated.

4.1 The investors

As far as the investors are concerned, we believe the causes are mostly intrinsic and psychological rather than financial and technical, as we discovered among insurers. We consider myopia and the reluctance to hand over lifelong savings to an unfamiliar party to be the two strongest psychological forces working against the purchase of annuity contracts in Hong Kong. These two factors seem trivial and obvious but they are hard to prove. By myopia, we mean that it is often difficult for individuals to assess their longevity risk and face up to the monetary demands on a retiree while they are still actively participating in the workforce and receiving a steady stream of remuneration. Some may argue that this phenomenon exists not only in Hong Kong but also other countries whose annuity markets are well developed and it would be inaccurate to treat them as major reasons for this underdevelopment in Hong Kong.² However, we hasten to add that the short-sightedness of an individual can be corrected through external means, like parental guidance and school education.

One noticeable characteristic of Hong Kong's education system is the extreme inadequacy of general studies. General studies is not a compulsory subject at any level of formal education. Even though a handful of schools appreciate the importance of general studies and voluntarily place it on their curriculum, the subject of personal financing has

² James and Vittas (1999) point out that these two factors, along with several others, contribute to the poor development of annuity markets in a variety of high- and middle-income countries. Here we emphasize that these two factors are more pronounced in Hong Kong than in other countries, resulting in a more backward annuity market.

seldom, if ever, been one of the topics addressed. There was also hardly any government promotion to raise awareness of the importance of saving for retirement before the proposal for the MPF was passed in the Legislative Council in 1995. Thus, it is not unreasonable to expect that myopia seriously discourages the people of Hong Kong from purchasing life annuity products. We also observe that financial literacy education is much more prevalent in many Western developed countries. Personal finance is very often a core topic and students learn formally about the habit of saving and its purpose since their early adolescence.³ The awareness of saving for retirement is further boosted by active multimedia promotion, sponsored by non-profit organizations and even for-profit corporations, a scene not witnessed in Hong Kong. Moreover, the popularity of annuity products in those countries also helps people to learn about the existence and use of annuity products through various means of marketing and their own parents' experience. Thus, it is not surprising that short-sightedness among workers is more pronounced in Hong Kong than in those countries where the annuity markets are in good shape.

Besides myopia, we believe people's intrinsic unwillingness to give away their lifelong savings in one go, which is the mechanism of most annuity deals, is more pronounced in Hong Kong. This may partly be attributed to the traditional Chinese culture prevailing in the territory. It is at odds with the tradition for members of a traditional Chinese family not to retain their long-accumulated wealth for their children or other family members. To hand over the wealth to an unfamiliar party outside the family, like an insurance company, may be regarded as an act of betrayal or distrust of the family in some cases.⁴ Even if we put aside the concerns of Chinese culture, this increased unwillingness can be justified by a myriad of other ways in which retirees are invited to invest their savings. The hyperactive property market in Hong Kong since the mid-1980s has significantly distracted workers and retirees from looking for other long-term investment vehicles. The longest bull market in history has further diluted the capital balance of most individuals in Hong Kong.⁵ The result is an "asset-rich, cash-poor" population. In fact, the attractiveness and prevalence of investing in real estate and equities among people at retirement age is readily seen in the frequent newspaper reports of elderly people suffering as a result of the decline of the property market and the burst of the internet bubble in recent years. We calculate that these extra attractive investment options, together with the attributes of traditional Chinese culture, have been the source of unwillingness that has partly contributed to the underdeveloped annuity market.

In addition to these two major psychological factors that are especially pronounced in Hong Kong, another possible cause in the demand side may be the public's lack of trust in

³ Institute for Socio-Financial Studies (2001) found, in a survey to study the state of financial literacy education in the U.S., that 90 per cent of financial literacy education programmes in the United States cover the topic of saving and investing, and more than half of all programmes specifically cover retirement planning.

⁴ Residential property prices in Hong Kong have been rocketing upwards, upstaging London, Tokyo and New York. Even with the Asian financial crisis in late 1997, the average annual appreciation rate for residential property prices in Hong Kong was over 13 per cent for the period 1984–1998. The average price of a 1,000 square foot apartment in Hong Kong is currently around HK\$ 5,700,000 (around £500,000). However, a reverse mortgage market does not exist in Hong Kong. Chinese culture, as mentioned above, might contribute to this aberrant phenomenon.

⁵ Compared with the growth in appreciation of property prices, in the same period the average wage increase in Hong Kong was less than 9 per cent per annum.

insurance companies.⁶ In Hong Kong, participating policies together with their linked products composed less than 13 per cent of the whole life insurance market in 1997 before the Asian financial crisis. The number increased slightly to 16 per cent after a temporary recovery of the stock markets in the region in 2000. Even so, the proportion of linked and participating products, the value of which is highly dependent on the sound management practices and operations of insurance companies, is still far lower than that in some other parts of the world, including the U.S. and U.K.⁷ We believe this reflects a general distrust of insurance companies, or the principal-agent problem. If the public already lacks confidence in insurance companies when dealing with life insurance policies that normally involve only several hundred U.S. dollars per month, they are unlikely to feel confident in handing over their life savings to them. In fact, if we refer back to the annuity products, linked or participating annuities are rare even in countries like the U.S., where the annuity market is well developed. Nonetheless, in Singapore, participating annuities are very popular within the small annuity market. James and Vittas (1999) suggest that the basic reason is that the largest issuer of participating annuities in Singapore is run by the trade unions to which many workers are affiliated, and this consequently wins workers' and retirees' trust.

Thus far, we have identified three possible causes from the demand side of the underdevelopment of the annuity market in Hong Kong. Two of them are believed to be particularly pronounced in Hong Kong and the other is substantial but may also be shared by other countries to a similar extent. We now investigate the providers.

4.2 *The providers*

On the supply side, we believe the crux lies in the difficulties that insurance companies face in designing and pricing annuity products. One of these difficulties may come from the lack of an annuitant mortality table in Hong Kong, which is the problem usually faced by countries with little annuity business. In Hong Kong, cohort life and mortality tables have been available for a long time. But the data are usually population-wide and provide little insight into the mortality of the group of annuitants at large, whose mortality rates may be lower than the average population due to adverse selection. The lack of this parameter makes the pricing and funding of annuity products extremely difficult and inaccurate.

In fact, several countries that have underdeveloped annuity markets share the same problem. These countries spread across the globe and include Singapore, Switzerland and Israel. Companies in these countries make use of different proxies and adjustments to price annuity products. For example, in Singapore insurers use the U.K. data collected from 1967 to 1970 with mortality improvements projected to 1990 and a further two-year setback to account for future mortality improvements (James and Vittas, 1999). In Switzerland the most recent set of cohort tables was published in 1998 and companies tend to estimate the annuitant mortality with a very crude adjustment factor applied to the table (James and Vittas, 1999). In Israel, there is not even an accurate or official population mortality table, let alone an annuitant mortality table. The slim annuity market in Israel has been supported

⁶ Without giving an illustration, James and Vittas (1999) mention this as one of many factors leading to the poor development of annuity markets in a variety of the high- and middle-income countries they studied.

⁷ Table 1 of "Unit-linked Insurance — A General Report" by Munich Re Group (2002), available at www.munichre.com/pdf/unit_linked_insurance_e.pdf.

technically by data collected from private pension funds (James and Song, 2001). If we compare the situation with the U.K. and U.S., where the annuity markets are among the most developed in the world, we can find that annuitant mortality tables have long been available in these countries.⁸ We therefore accept the link between the availability of annuitant mortality information and the development of the annuity market.

However, it would be premature to draw the conclusion that the lack of annuitant mortality information leads directly to an underdeveloped market. In fact, it is partial because of the small size of the annuity market that an annuitant mortality table cannot be produced accurately, as is the case of Israel. Thus, the question becomes a classic chicken-and-egg problem: whether the underdeveloped annuity market precludes the collection of sufficient annuitant mortality information, or whether the lack of information leads to an underdeveloped market. The answer depends on whether the market has enough historical information and expertise to allow the emergence of such a table and deserves further research.

Even though the answer to this question in Hong Kong needs yet be identified, we can be certain about two facts; namely, that the lack of information hinders the development of an annuity market and insurers have to estimate the information themselves. Given that the insurance market is far from saturated at the moment, insurance companies have little reason to rush to compete with each other in the annuity market. Thus, in estimating annuitant mortality and pricing annuity products, they prefer to play safe and err on the higher side. This possible overestimate and overpricing may not be observable by the general public. But, together with the abundance of other more profitable investment choices, annuity products may become unacceptably expensive and unattractive in the eyes of many investors.

Another cause of the insurers' inability to design attractive annuity policies is the severe imbalance in the financial markets in Hong Kong. Hong Kong's stock market has always been more active and advanced than its debt market. While the abundant foreign reserves held by the government have dampened its incentive to issue treasury bills, corporate debts are usually restricted to commercial papers and other short-term money market items that are inaccessible to the general public. The long-term bonds publicly issued by statutory bodies, like Mass Transit Railway Corporation ("MTRC") and the Airport Authority, are rare exceptions. With such an underdeveloped debt market,⁹ annuity underwriters may substantially underinvest the huge amount they usually receive for annuity policies in long-term, low-risk vehicles. Insurers may therefore suffer from the possible mismatch of their assets and liabilities and huge reinvestment risks for long-term annuity products. This risk is either compensated for by charging the annuitants additional expenses, or is eliminated by investing in foreign fixed income instruments, which also incur extra costs and uncompensated risks. This problem is not unique to Hong Kong. The development of the annuity market in Malaysia, in which the government manages the nationwide

⁸ Annuitant mortality tables in the U.S. are available from as early as 1899 (see the Table Manager website maintained by the Society of Actuaries at www.soa.org/tablemgr/tablemgr.html).

⁹ The outstanding Hong Kong dollar debt reached H.K.\$ 494 billion (U.S.\$ 63.3 billion) at the end of 2001. Despite its rapid growth, the Hong Kong debt market remains very small relative to the stock market and bank deposits. The size of Hong Kong dollar time deposits in the banking system, which gives some indication on the amount the public is prepared to put in assets that produce a stable return, exceeds H.K.\$ 1.8 trillion (U.S.\$ 230.77 billion).

Employees Provident Fund (“EPF”) worth over RM 176 billion in 2001 (Jaafar, 2001), is also hampered by the absence of an active and liquid fixed income market.¹⁰

The third cause contributing to the difficulties of annuity product design is the narrow range of indexed instruments in Hong Kong’s financial markets that prohibits the design of indexed annuity products. Obviously, indexed annuity products such as inflation-adjusted annuities require insurers to invest in similarly indexed securities. However, there has never been an official inflation-adjusted, whether on price or wage, long-term investment vehicle in the Hong Kong market and there is hardly any proxy for such a purpose. Due to non-competitiveness in the annuity market, insurance companies may not be willing to offer these products. However, one fundamental reason for purchasing an annuity contract is to secure a stable standard of living for a long period. If the annuity benefits are subjected to constant fluctuation and inflation risks, there is little motivation to enter into such a contract (Annuity Bureau, 2002). If insurance companies are willing to provide indexed annuities, it is unavoidable that the risk will be materialized as extra costs that are eventually borne by both parties. Thus, from the viewpoint of an insurer, indexed annuities are unattractive in the territory. From the viewpoint of a potential buyer, non-indexed annuities are similarly unattractive for their inability to fully serve the purpose intended.

To conclude this section, we suggested three causes of the difficulty an insurer has in designing and pricing annuity products in Hong Kong. The inability to design and price a fair and accurate policy can lead to market failure, not only on the supply side but also on the demand side. Unlike the demand-side causes, which are mainly psychological and intrinsic, the problems on the supply side are technical and market-oriented. We believe, however, that there are also causes that are external to the market and these will be discussed next.

4.3 *External causes*

We believe the major external cause for the underdevelopment of the annuity market in Hong Kong is that the government has historically focused too much on the accumulation phase of the retirement saving system and has placed insufficient emphasis on the corresponding decumulation phase of the system. In the old ORSO system, benefit can be withdrawn at termination, which can be voluntary and precede the normal retirement age, in a lump sum. Even though MPF goes one step further by disallowing any general withdrawal before the age of 65, workers will still eventually receive the benefit in the form of a lump sum. Thus, given the forces mentioned above, there is little reason for anyone to invest a huge amount with the dismal annuity market. We therefore believe that other decumulation frameworks may help, if not directly, to increase the annuity business in Hong Kong.

In most of the countries whose retirement saving systems have been in force for over five years, retirees can choose to make scheduled withdrawals or annuitization of benefits as alternatives to a lump sum withdrawal. Governments usually take various approaches to discourage people from choosing the lump sum method. In Ireland, the Netherlands and Mexico, a lump sum payment is generally restricted by law. In Australia, Canada and the

¹⁰ R. Thillaninathan pointed out in the Capacity–Building Workshop on Pension Fund Reforms for Asia, Asian Development Bank Institute (1999) that the short supply of fixed income products in Malaysia has contributed to EPF’s underinvestment in marketable securities and also to the underdevelopment of the annuity market in the country.

U.S., tax discounts have lured retirees to make a programmed withdrawal. In the U.K. and Italy, government allows only a partial withdrawal in form of a lump sum and requires annuitization for the rest of the benefit (Wadsworth *et al.*, 2001). In Hungary, retirees are required to choose among various types of life annuities for withdrawing their normal benefits, which are guaranteed by the government, and any surplus may be withdrawn immediately (Simonovits, 1999). The Chile government is more proactive in the matter, probably due to their retirement saving system's two decades of history. Retirees can make only scheduled withdrawals through immediate or deferred annuity plans (Rodriguez, 1999). The scheme has effectively helped Chile to secure the most developed annuity market in the world, in terms of the percentage of annuity premiums to insurance premiums, which was nearly 300 per cent in 2000. In view of the abundance of foreign examples, we believe the key external cause for the underdevelopment of Hong Kong's annuity is the lack of official effort to encourage, or even require, benefit decumulation with structured mechanisms.

However, we recognise the difficulties the Hong Kong government would experience in enacting regulated annuitization or tax discounts for programmed withdrawal. Firstly, it would be putting the cart before the horse by making annuitization of retirement benefits compulsory simply in the hope of boosting the annuity market. Any proposal for such a regulation should be driven by public demand, especially that of MPF participants. Secondly, such legislation would involve extensive regulation of the insurance industry, which is generally considered *laissez-faire* and less restricted compared with surrounding countries. The action could have a far-reaching impact on Hong Kong's business environment, its financial system and its international reputation. Thirdly, it is doubtful, in the light of the discussion above, that Hong Kong can currently provide a sound foundation for the development, marketing and management of annuity products. Compulsory annuitization may ultimately become a burden of the local insurance industry if the proposal is carried out without enough preparation within local financial system. While we do not expect regulated annuitization in the near future, we believe encouraging programmed withdrawal with tax discounts is also hardly feasible, mainly due to the Hong Kong government's systematic budget constraints and the country's already low tax environment. Even if the programmed withdrawal mechanism is welcomed by the public and eventually adopted by the government, there is still doubt whether the annuity market will benefit to the same extent as other countries.

All the same we believe that government plays an exceptionally important role in increasing the annuity industry in Hong Kong. Even though the regulated annuitization of MPF benefits may be practically impossible at the moment, we expect changes of decumulation framework to come into place sometime in the future. It is unlikely that this change will improve the chances of developing the annuity market, but we believe that a switch from the current mandatory lump-sum withdrawal may put annuity products on the shopping list of many retirees. The key question is, to what extent will the annuity market directly benefit from the change, and to what extent will the opposing forces from the demand and supply sides suppress its development.

5. Conclusion

In this paper, we have investigated the underdevelopment of Hong Kong's annuity market and answered the question of whether implementation of the MPF was the sole and certain booster of the local annuity market, as many expected. We have examined other

systems such as Singapore's CPF, Australia's Superannuation and the U.S. 401(k), which have features that are similar to those of the MPF, and briefly compared the size and maturity of the respective annuity markets. The results showed that the existence of a retirement savings system is a necessary, but not a sufficient, factor for a well-developed annuity market. Further comparisons with Hong Kong's former retirement saving scheme, ORSO, also showed that the penetration rate and average capital balance of the retirement savings system do not determine the development of an annuity market.

We then extended our studies to search for the root causes of the underdevelopment of the annuity market. We looked at the problem from three different perspectives: the investors, the insurers and considerations external to the market. Seven possible causes were identified:

On the demand side:

- myopia and unawareness;
- unwillingness to hand over lifelong savings to insurance companies;
- lack of trust of insurance companies and the principal-agent problem.

On the supply side:

- the lack of annuitant mortality tables;
- the relatively underdeveloped debt market creating reinvestment risks and an asset–liability mismatch;
- the narrow range of indexed instruments in local financial markets.

Externally:

- a deficient decumulation mechanism for retirement benefits.

We believe that solutions to these problems may lie in the provision of financial literacy education, government promotion of annuities, the formulation of annuitant tables, the development of debt market and indexed instruments, and a review of the MPF withdrawal mechanism. Further research may be conducted to investigate the details of this set of solutions and the effects of particular measures on the industry. We believe that implementation of the MPF has served as a useful starting point of the development of Hong Kong's annuity market, but that the road ahead may be long and winding.

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