

Actuarial Society of Malaysia (ASM)

# RETIREMENT SAVINGS

A Case for Lifetime Income

*How do we expect  
individuals to manage  
longevity risk on their  
own?*

June 2024

## INTRODUCTION

The retirement age in Malaysia is currently 60 years old, a threshold that was last adjusted in 2012 from age 58, reflecting the improved life expectancies observed in the population. As of 2023, the Department of Statistics Malaysia reported that life expectancy of males aged 60 are 18.3 years, while for females aged 60 it is 21.1 years. It is worth noting these life expectancies are based on historical data of the population. As comparison, the life expectancies for males and females aged 60 in 2012 is 18.0 years and 20.4 years respectively. For future 60-year-olds, allowing for mortality improvements would mean their life expectancies would be higher. The increasing life expectancy experienced over the recent decades is attributed to the advancement in healthcare and is expected to continue in the future, although possibly at a slower pace.

As life expectancy rises, retirement financial planning becomes increasingly important. A common misconception is that one should have retirement savings that can last for *exactly* as long as the life expectancy. Failure to consider the scenario of ‘what if I live longer than that’ – the possibility of living to a very old age – exposes individuals to the risk of old-age poverty. Individuals might also tend to underestimate their own life expectancy resulting in poor financial decisions. Further, as a flip side to medical advancement, there is a higher chance of spending your “extended” end of life in poorer health. This means not only is there a risk of living longer, but also surviving in poor health longer.

In Malaysia, the government currently operates the *Bantuan Warga Emas* initiative under the Jabatan Kebajikan Masyarakat, a welfare program funded by taxes, providing monthly support of RM500 to elderly citizens over 60 years old. This financial assistance is means-tested and is only limited to those living below the poverty line and who do not have any family assistance. As of October 2023, the program supports 4.2% of elders<sup>1</sup>. While programs like *Bantuan Warga Emas* offer some support to the elderly, their coverage remains limited.

However, the majority of Malaysians, particularly those working in the private industry, do not receive guaranteed lifetime income during their retirement, exposing them to the daunting prospect of longevity risk i.e. the probability of outliving their retirement savings. Therefore, it is imperative that Malaysians understand the longevity risk they are facing and start planning on how to manage that particular risk. The private sector also has a role to play in allowing those who can afford it to plan for their retirement by offering insurance or takaful plans that help to pool the longevity risk.

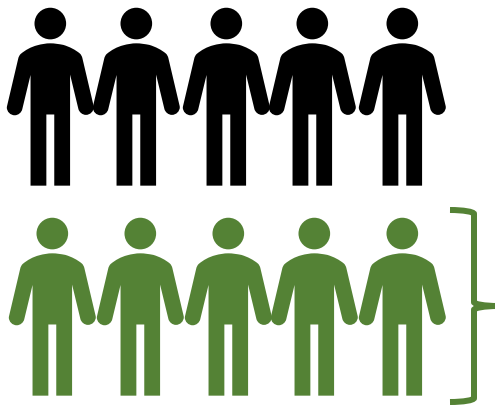
In the absence of old-age universal pension, Malaysians do not have a safety net once they are in retirement. Securing a regular lifetime income could help individuals to alleviate this concern. Question remains, how would they be able to do that and is the insurance industry ready to play its role?

**EXPLAINER BOX – WHAT DOES LIFE EXPECTANCY IMPLY?**

Life expectancy of 18 years does not mean everyone would “drop dead” in exactly 18 years. What it means statistically, is there is a 50% chance you would die within the next 18 years and a 50% chance you would live beyond 18 years.

In other words, among ten males aged 60, five is expected to die before attaining age 78 and another five would die after age 78. Only a few will live to the exact life expectancy.

If you think about your own self, how likely do you think that you will live longer than half of your peers?



*Five out of ten  
males aged 60  
in 2023  
expected to live  
beyond age 78*

## THE CURRENT LANDSCAPE

### EXPLAINER BOX – DEFINED BENEFIT (DB) vs. DEFINED CONTRIBUTION (DC) SCHEME

As the name implied, a DB scheme provides retirement benefits that are defined; the formula is known and employees can easily calculate the benefits they expect to receive at retirement. For example, the Malaysia’s civil service pension scheme is a DB scheme that provides monthly pension equivalent to 2% of last drawn basic salary for every year of service; with 30 years of service, the monthly pension is 60% of last drawn basic salary which is also the maximum pension currently.

On the other hand, what is known in advance under a DC scheme is the contribution set aside for the retirement benefits. For example, the mandatory contribution for the EPF is set at 11% of all salaries (including bonuses, overtime, commission, etc.) from the employee and another 12%/13% from the employer (12% if monthly salary above RM5,000; 13% for RM5,000 and below). What is uncertain however is the amount accumulated at retirement as this will depend on various factors such as dividend rates, period of contributions, pre-retirement withdrawals etc.

There is a story of two tales for Malaysians working in formal employment when it comes to retirement savings – one for the public sector and another for the private sector. The retirement system for the public sector is a Defined Benefit (DB) scheme providing pension of a maximum 60% of last drawn basic salary after 30 years of service, in addition to a lumpsum gratuity and accumulated unused leaves cash award upon retirement. It is a non-contributory i.e. employees need not contribute to participate in the scheme and the benefits are paid from the Government’s revenue during the year with some partial funding via Kumpulan Wang Persaraan (Diperbadankan) [KWAP].

Being a DB scheme, members of the scheme would be able to visualize and easily quantify how much retirement benefits they could expect to receive using the formula. The pension is paid for life. Thus, the Government, as sponsor of the scheme,

“insures” the longevity risks of the pension recipients who are receiving a guaranteed lifetime income. Further, upon the death of the pensioner, 100% of the pension amount will continue to be paid to the eligible spouse.

In contrast, it is compulsory for Malaysians working in the formal private sector to be a member of the Employees Provident Fund (EPF) with contributions from both employee and employer. Retirement savings in the EPF are a capital-guarantee Defined Contribution (DC) scheme, backed by the Government, and there is a minimum annual dividend guarantee of 2.5% for conventional savings whilst there is no minimum dividend guarantee for shariah savings. Currently the total mandatory contribution rate is 23%/24% of salaries, which is laudable, as the contribution rate is considered one of the highest globally. EPF members are allowed to voluntarily contribute more than the mandatory rate, capped to a certain amount,

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and many companies also offer additional EPF contributions as part of their employee benefits package.

At present, upon reaching age 55, members have a fully flexible access to their EPF savings despite the retirement age of 60 years. Since the inception of EPF, there has been no requirement for members to take some or all of the savings as a regular income stream although the drawdown facility now exist. It is reported that in 2022, more than 7,000 EPF members voluntarily adopted for the monthly payout option<sup>2</sup>. For those who continue working after age 55, further EPF contributions will be credited in a new account, *Akaun Emas* of which full access is only given upon reaching age 60 (this arrangement was effective from 2017). In essence, individuals would transition from receiving monthly salary to having full access to a large sum of money which can be fully withdrawn and transferred in their bank account overnight with total freedom on how to spend the money. Such an abrupt change to one's financial circumstances would be overwhelming if prudent financial planning is not put in place. Making a large purchase such as a major house renovation seems very doable with the sudden windfall in hand, even though it might not be a wise decision. Thus, they face a high level of uncertainty whether they will outlive their EPF savings.

It is noted that EPF provides free services to members under its Retirement Advisory Service (RAS), introduced in 2014, for in-person consultation on retirement and financial planning. As for now, this is still on voluntary basis and has to be initiated by the members themselves.

The chart displays the amounts withdrawn by EPF members for age 55 and age 60 withdrawal schemes from 2015 to 2022; at least RM20 billion was withdrawn annually.

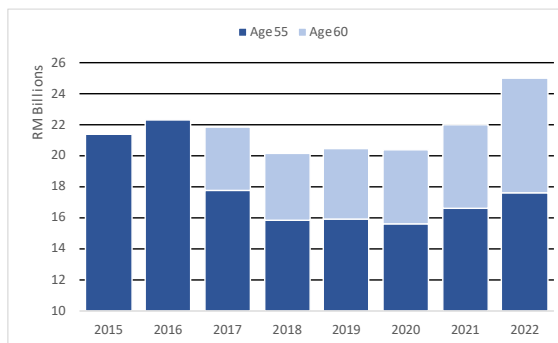


Figure 1: ASM's analysis of figures extracted from EPF Annual Report 2022

Not many might remember or were even aware that two decades ago, there were annuity schemes – conventional and takaful – managed by a group of private insurance companies, which had allowed EPF members to withdraw some of their savings for the purpose of purchasing the annuity product. It was a single premium participating deferred annuity product and within less than a year, over RM4 billion was collected from at least 200,000 EPF members, with over half of the purchasers were below the age of 35<sup>3</sup>. It was encouraging to know that even the relatively younger population i.e. those not nearing to retirement were prepared to “surrender” a cash sum in return for a guaranteed lifetime income for retirement. There seemed to be an appetite for an annuity option from EPF members. Unfortunately, the annuity schemes were terminated two years later due to a number of concerns which in hindsight could have been better handled to ensure the continuity of the schemes.

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Nowadays, products marketed in Malaysia for *retirement* by private market providers and insurers are mainly investment products to further increase savings. While it is commendable for people to save more for retirement, there is certainly a gap in the market for retirement products that offer lifetime income. Currently, there are no insurance products available on the market for retirees to insure the longevity risk such as a whole life annuity. Annuity products are seen as capital intensive under a Risk Based

Capital Framework and thus lower investment yields generally make it difficult to price the products attractively. Furthermore, lack of sufficiently long-term assets (beyond 20 years) available in Malaysia might hinder insurance companies to offer these long-term retirement products. Some might also say there is no demand for this type of products thus there is no point in selling them, but is that so? Or is this simply a classic chicken and egg conundrum?

### Alternatives to Whole Life Annuities

Only as recent as 2022, Malaysia's first reverse mortgage product was launched by Cagamas Berhad, the National Mortgage Corporation of Malaysia, that provides retired homeowners lifetime monthly income or up to age 120 (for the Islamic financing). However, it is currently limited to homes in certain cities and the monthly payment amount is fixed throughout, thus individuals would be exposed to inflation risk. Based on the reverse mortgage calculator on its website, the monthly payment would not only depend on the property value and age of the individual but also the property type and location i.e. homes with the same market value but in different cities would provide different monthly payout. For comparison, table below sets out the estimated monthly payout using its calculator, for a single individual aged 60 with a freehold property – either a terrace or high-rise – valued at RM500,000 in four areas. Even for the highest payout i.e. terrace in Kuala Lumpur, the monthly payment amount is lower than the estimated reasonable living budget for a single retiree in Klang Valley of RM2,520 per month as per the Belanjawanku guide (2022/2023 edition) published by EPF in collaboration with the Social Wellbeing Research Centre (SWRC) of Universiti Malaya.

#### Single individual aged 60 with a freehold property valued RM500,000

Monthly payout	Kuala Lumpur	Penang Island	Seremban	Ipoh
<i>Terrace</i>	RM969.72	RM521.49	RM504.45	RM531.93
<i>High-rise</i>	RM774.60	RM514.62	RM337.80	RM280.92

Source: <https://ssb.cagamas.com.my/reverse-mortgage-calculator>, figures as of 7<sup>th</sup> May 2024

### EXPLAINER BOX – WHAT IS LONGEVITY RISK?

It is the risk that individuals live longer than expected and outlive their assets. When referring to life expectancy and adequate retirement savings, a typical illustration seems to imply that an individual would *instantly* die once they hit their life expectancy. This can be misleading as a life expectancy of 18 years for a male age 60 means *half* of the population is expected to die prior to age 78 and another half would live *beyond* 78. Furthermore, once they have survived to age 78, there is still a chance that they will live even longer!

A study<sup>4</sup> concluded that enlightening people with additional information about their **probability** of living long *does* change their views about living a long time, which would help them make better financial decisions when spending their accumulated retirement savings.

In many developed markets, insurance companies sell a variety of annuity products whereby the insurer guarantees to pay the policyholder a regular income for however long they live. The availability of such products gives options for retirees to manage the risk of outliving their retirement savings. Effectively, the longevity and investment risk are pooled or transferred to the insurance company and depending on the annuity indexation (i.e. annual increase to the initial monthly payment), so is the inflation risk. Individuals with poor health condition could also benefit from an enhanced annuity – insurance companies may be willing to offer higher retirement income from the annuity due to the “unhealthy” status (as the policyholder is expected to not live as long hence shorter payment period).

## DRAWING ON EXPERIENCE OF OTHERS

When talking about the gold standard of retirement systems, a few countries are often mentioned. Denmark and Netherlands managed to secure grade A in the Mercer CFA Institute Global Pension Index 2023 which is described as “a first-class and robust retirement income system that delivers good benefits, is sustainable and has a high level of integrity”. A good system would consist of multi-pillar or multi-tier framework. The multiple pillar approach adopted by Denmark and the Netherlands are envied by many as they are designed to ensure widespread inclusion and sufficient risk diversification. Each pillar is crucial and plays a different role in the pension system. The mandatory participation in the first pillar effectively mitigates the risk of old-age poverty and the periodic benefit adjustment protects retirees from the weakening of purchasing power due to inflation. The second pillar facilitates employee savings for retirement, spreading the burden of retirement provision to business. Finally, the third pillar offers individuals flexibility to tailor their retirement plans to suit their individual circumstances and aspirations. We summarise below features of the national retirement systems of the two countries.

### Denmark

The Danish pension system comprises of three main pillars: the state pension, occupational pension schemes and individual pension savings. The state pension in Denmark is funded through taxes and provides a basic level of income for all residents commencing from the statutory retirement age, which is tied to the life expectancy in Denmark regardless of their working status and income level. The amount that individuals receive from state pension is made up of two components: a basic amount and a pension supplement. The basic amount is the same for everyone, while pension supplement is means-tested and varies according to income level and marital status. As of 2022, the basic amount is approximately 21% of average earnings of the working age population<sup>5</sup>.

In addition, the Danish government also operates a supplementary pension scheme known as the Labour Market Supplementary Pension Fund (widely recognized as ATP in Denmark), which resembles an occupational pension scheme. Contributions to the fund are mandatory for both employers and employees who work more than 9 hours per week, but

voluntary for the self-employed. As of 2023, ATP covers almost the entire working population and achieve near universal coverage<sup>9</sup>. Contribution to the scheme is fixed and depends solely on the number of hours work per week. Employers cover two-thirds of the contribution with employees responsible for the remainder. Pension benefits paid out from ATP depend on the duration of contributions made and are paid out either as a lump sum if the balance is lower than a threshold or in the form of an annuity.

Employed individuals are often enrolled in the second pillar of the pension system, which comprises occupation pension schemes. These schemes are established through collective agreements negotiated between employers and employees. Unlike the Netherlands, a considerable portion of the workforce is covered by defined contribution (DC) schemes rather than defined benefit schemes (DB). These schemes not only provide retirement benefits, but also commonly include provisions for death and disability benefits.

The third pillar of Denmark’s pension system offers individuals an opportunity to take control



of their retirement planning by saving and investing additional funds in a tax efficient manner. By supplementing the state and

occupational pension schemes, it contributes to the overall financial wellbeing and retirement security of the Danish population.

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### Netherlands

The pension system in Netherlands has been widely recognized as one of the best in the world. Similar to Denmark, it consists of three main pillars: the state pension, occupational pension schemes and individual pension schemes. In the Netherlands, a basic state pension is provided by the government to everyone who lived or worked in the country between the ages of 15 and 65. It operates as a Pay-As-You-Go (PAYG) system and is funded by payroll taxes from the working population. The amount of state pension is linked to the country's net minimum wage and varies according to marital status. Single pensioners could receive up to 70% of the net minimum wage, while married or cohabiting couples could receive up to 50% each. The minimum wage in Netherlands is revised biannually to reflect the increase in basic cost of living due to inflation. The age at which one can start receiving the pension is linked to the development of life expectancy, with the current age being 67 as of 2024. This means that the date individuals could begin receiving their pension depends on their birth year. Overall, the state pension ensures a basic level of lifetime income for all Dutch residents upon reaching the state pension age, protecting them from the risk of poverty in their later years.

The occupational pension schemes under the second pillar are arrangements between employers and employees, typically managed by pension funds. These pension funds may serve all businesses within a specific industry, employees in a single company or a professional group. Occupational pension scheme may take

the form of either defined benefit (DB) schemes, where the benefit amount is predetermined based on factors such as salary and years of service, or defined contribution (DC) schemes, where the pension amount depends on the contributions made and investment returns. As of 2022, around 90% of the employees are covered by a DB scheme, while the remaining are covered by a DC scheme<sup>6</sup>. Reforms were introduced to this second pillar in recent years to adapt to the evolving economic and demographic environment. The New Dutch Pension Act, which came into effect on 1<sup>st</sup> July 2023, requires all DB pension funds to transition to DC schemes before 2028. Starting from 2028, employees' new benefit entitlements can only be built up in DC schemes. It is reported that these reforms have been introduced *to address the changing demographics, financial sustainability and the evolving needs of all Dutch pension beneficiaries*.

The third pillar in the Dutch pension system is formed by individual pension savings, which may consist of insurance, banking or wealth management products. In this pillar, the retirement savings is voluntarily undertaken by individuals themselves and is particularly crucial for the self-employed or those without coverage under occupational pension schemes (Pillar 2). To encourage self-provision, tax incentives are typically offered for contributions made to these pension arrangements up to a specified limit. This pillar also offers flexibility to individuals, enabling them to tailor their retirement savings plan to suit their specific needs and preferences for their retirement life.

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Most countries around the globe have its own sets of problems and difficulties in solving their retirement crisis, but there is certainly no one size fits all solution. What is clear is that some trade-offs may be required in order to meet certain objectives. In the tables below, we briefly discuss the recent developments in a few other countries with regards to providing lifetime retirement income and how Malaysia might draw lessons from them.

<b>Hong Kong</b>
<p>Mandatory Provident Fund (MPF) is a DC scheme and its members can withdraw their retirement savings in one lump sum, albeit at an older age of 65 years old. In July 2018, the first public annuity backed by the HKSAR government via HMC Annuity Limited, launched a new life annuity scheme named HKMC Annuity Plan<sup>7</sup>. Since its launch, there are over 15,000 customers contributing about HK\$15 billion for the annuity product<sup>8</sup>. The HKMC Annuity Plan is a single premium whole-life immediate annuity, providing a fixed monthly amount to the policyholder, with some death benefits offered and special withdrawal arrangement.</p> <p>In Hong Kong, there is a non-means-tested scheme providing monthly allowance to elderly aged 70 and above. As of 1 February 2024, the Old Age Allowance pays out HK\$1,620 monthly (approximately RM970 per month).</p>
<b>Australia</b>
<p>Australia's superannuation system is a DC scheme and is considered one of the largest systems in the world; total superannuation assets as of March 2024 is approaching 4 trillion AUD. Similar to our EPF, there is no requirements for Australians to take part or all of their retirement savings in the superannuation as an income stream. In December 2023, the Australian government released a discussion paper<sup>9</sup> to seek the views of community and industry on how the superannuation system can be improved to provide security and income that Australians need as they live longer and healthier lives in retirement. The key areas that the government is focusing on in the paper are supporting superannuation funds to deliver better retirement income products and services; and making lifetime income products more accessible.</p> <p>One of the recommendations from a fund's response<sup>10</sup> to the paper is that <i>the Government should ensure that regulatory and legislative settings are better calibrated to boost competition and innovation in the lifetime income market and increase the uptake of longevity solutions.</i></p> <p>In Australia, there is a means-tested old age pension (currently at age 67) which eligibility depends on passing income and asset tests.</p>
<b>United Kingdom (UK)</b>
<p>Prior to April 2015, it was compulsory to purchase an annuity with a DC retirement savings in the UK. A radical legislation, also known as the Pension Freedoms, was then introduced allowing people aged 55 total freedom on how to use their money, similar to how the EPF system in Malaysia works currently. It is important to note however there is a state pension system in the UK (pillar one) providing guaranteed lifetime income for UK pensioners which forms a very important part of retirement income even for middle- and high-income people. It is reported that "amongst those aged 66–74 who have left paid</p>

work (almost all of whom report being retired), the state pension makes up 70% of the income for the lowest-income fifth, 45% for the middle fifth, and even 20% for the highest-income fifth”.

A decade later, experts said there are still improvements needed in the UK pension industry to provide better guidance and advice framework in place. Even though it is no longer compulsory to purchase annuities, the Association of British Insurers (ABI) reported there was a substantial increase in the number of annuity contracts sold in 2023 – a 34% increase from prior year – and the largest number recorded since 2016, implying there is still strong customer desire to lock in a guaranteed lifetime income.

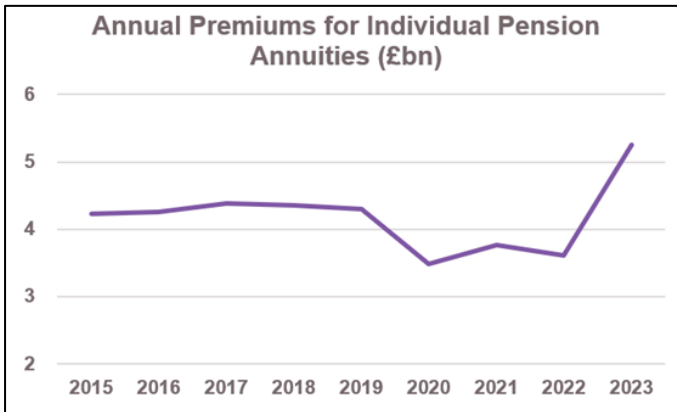


Figure 2: Chart extracted from ABI article titled “2023 sets new post-pension freedoms record for annuity sales”

### Singapore

Taking the opposite approach from the UK, in 2012 Singapore mandated annuitisation on parts of the retirement savings in Central Provident Fund (CPF), capped to a certain sum. An annuity scheme was introduced called CPF Lifelong Income For Elderly (CPF LIFE), whereby members aged 55 with sufficient funds in their CPF accounts are required to join, which is considered to be a national longevity insurance scheme guaranteed by the Singaporean government. Under the CPF Life, members can either choose for a fixed monthly amount or an increasing amount at 2% per annum. Monthly payment commences at age 65 or members can choose to defer at a later age, up to age 70 with increase to the initial payment amount of up to 7% per annum.

The contribution rate to CPF is considered one of the highest e.g. total rate is 37% of wages for members aged 55 and below, however it is worth noting that there is a wage ceiling applicable to the monthly salary (SGD\$6,800 monthly as of 2024, which will be gradually revised to SGD\$8,000 by 2026).

## CONCLUSIONS

In 2022, those aged 65 and above made up 7.3% of the population in Malaysia and so by the United Nations definition, we have become an ageing society<sup>11</sup>. The Department of Statistics Malaysia projected that by 2040, there will be more than 8 million individuals in retirement i.e. those aged 60 and above in Malaysia if all remains status quo. It is high time for the country to better prepare Malaysians for their old age – to ensure they have guaranteed lifetime income in retirement. Without longevity and inflation protection, retirees would not be able to enjoy life after many years of working, instead worrying how to conserve their assets for their remaining lifetime.

With the compulsion of contributing to EPF for retirement savings for most private sector workers, what is sorely missing in the ecosystem is the availability of lifetime retirement income products. As the country is moving towards an aged population, the industry should be more proactive in coming up with a range of innovative retirement income solutions particularly longevity protection products. Policymakers could also play a significant role such as setting specific policies to ensure prolong income sustained by Malaysians in the old age. The regulatory and legislative environment should also be less capital-intensive without sacrificing the security of policyholders. In line with recommendations from Mercer CFA Institute Global Pension Index 2023, Malaysia could introduce a requirement that part of the retirement benefit provided by EPF be taken as an income stream to improve our retirement system.

As for actuaries, there is a lot more to be done in helping Malaysians to really understand longevity risk. Simply telling people about their life expectancy may not be enough and we should educate and provide more information on the risks of outliving their assets to address the importance of lifetime income in retirement. One should not have to worry about making ends meet in their golden years. It should come with peace of mind and the assurance of financial security, ensuring that every Malaysian can embrace retirement with confidence and joy.

*The most effective approach to addressing longevity risk involves either sharing it with others or utilizing insurance.*

## DISCLAIMER

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<sup>2</sup> [EPF: Proposal to formalise monthly drawdown instead of lump-sum still being studied | The Star](#)

<sup>3</sup> [Pension Design and Marketing – Actuarial Partners Consulting](#)

<sup>4</sup> Mitchell, Olivia S. and Sade, Orly and Hurwitz, Abigail, Testing Methods to Enhance Longevity Awareness (December 21, 2022). SAFE Working Paper No. 375, Available at SSRN: <https://ssrn.com/abstract=4308658> or <http://dx.doi.org/10.2139/ssrn.4308658>

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<sup>7</sup> [HKMC Annuity Plan](#)

<sup>8</sup> HKMC Annuity Limited press release 26 April 2024

<sup>9</sup> [Superannuation in retirement | Treasury.gov.au](#)

<sup>10</sup> [Microsoft Word - Challenger submission to Retirement Phase of Superannuation](#)

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