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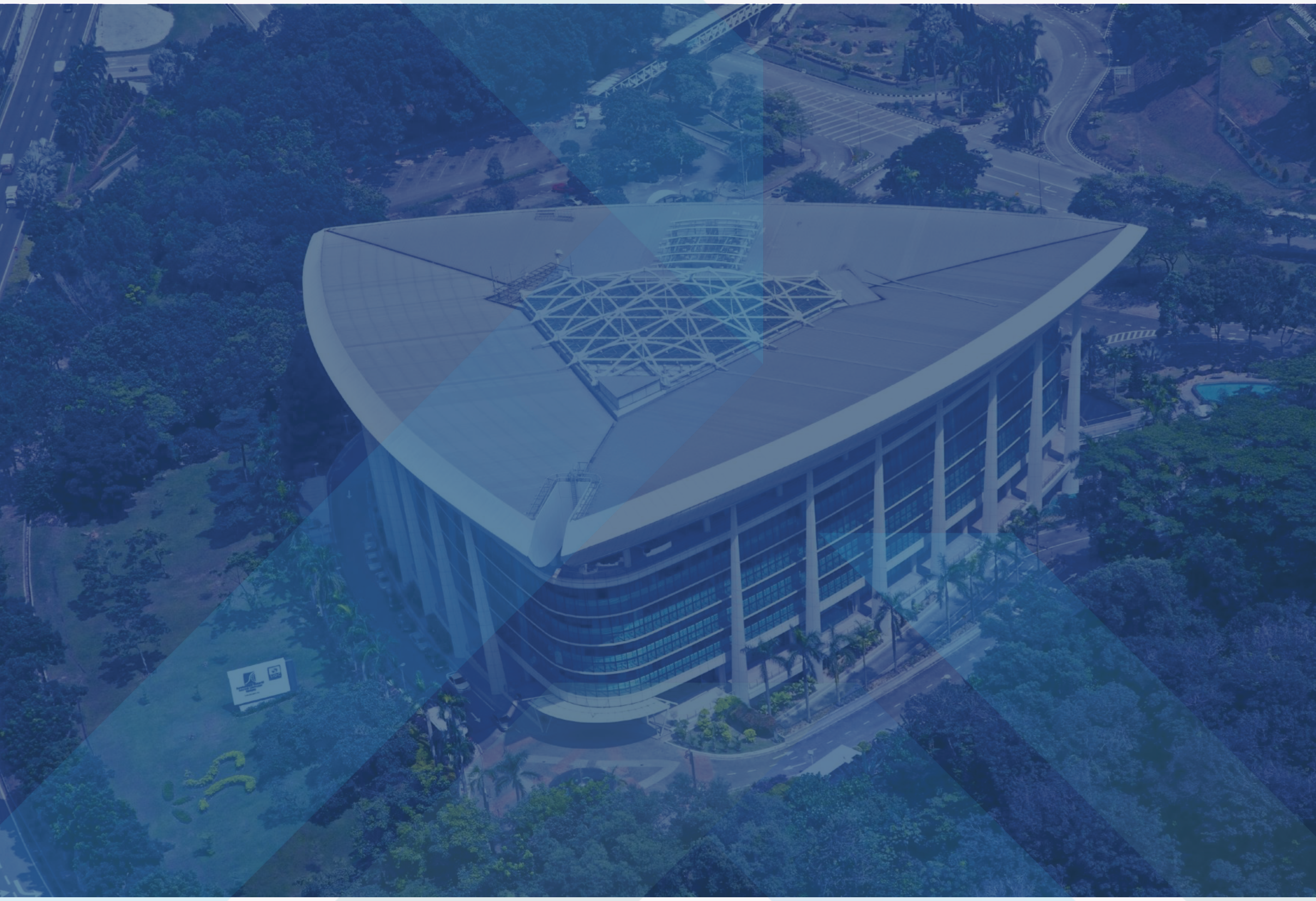
ENCOURAGING RETIREMENT SAVINGS IN MALAYSIA: A BEHAVIOURAL PERSPECTIVE

STAFF DISCUSSION PAPER

Brendan Yap, Nicholas Chong, Dheepan Ratha Krishnan,
Nurul Neesha Abdul Hazis, and Clarrise Ng



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Acknowledgements

We are grateful to Allen Ng for his guidance throughout the writing process, as well as Salmah Bee Mohd Mydin, Dr. Wong Huei Ching, Amardeep Kaur, and Katrina Empiang Adrian for their thoughts and comments, which we have greatly benefitted from. We would also like to thank the Behavioural Insights Team (Singapore) and the participants of the SC's retirement workshop for sharing their insights on the issue, which have been very helpful.

This paper has been reviewed by Datin Azleen Osman Rani, Datin Aida Jaslina Jalaludin, and Nadhirah Ibrahim from the Institute for Capital Market Research Malaysia (ICMR) and approved for publication by the SC Editorial Committee of Staff Research Publications.

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ENCOURAGING RETIREMENT SAVINGS IN MALAYSIA: A BEHAVIOURAL PERSPECTIVE*

Brendan Yap, Nicholas Chong, Dheepan Ratha Krishnan, Nurul Neesha Abdul Hazis, and Clarrise Ng

28 July 2023

KEY HIGHLIGHTS

- The Malaysian population is aging, causing issues of pension coverage and retirement savings adequacy to become increasingly pertinent.
- While many challenges to ensuring the adequacy of retirement savings among the population are structural in nature, there are also behavioural aspects that should be considered in a holistic approach towards tackling this issue.
- People naturally exhibit behavioural biases and there exists behavioural interventions that can be used to address these biases and nudge Malaysians towards better savings habits.
- We propose several behaviourally-informed solutions to encourage retirement savings using a personas framework, in which we segregate the Malaysian population into five personas – youth, gig workers, middle income, to-be retirees, and entrepreneurs – before identifying the behavioural challenges inhibiting each segment from saving for retirement and designing interventions that aim to overcome them.

ABSTRACT

Malaysia's transition towards becoming an aged nation is rapidly occurring. Longstanding issues of inadequate coverage of pension schemes and low levels of retirement savings among the public has been made worse over the COVID-19 pandemic. We argue that a holistic approach to ensuring the well-being of future retirees must include efforts to overcome behavioural biases that are inhibiting Malaysians from making better savings decisions. In this paper, we use a personas-based solutioning framework, which firstly involves segregating the Malaysian labour force into five personas, namely: youth, gig workers, middle income, to-be retirees, and entrepreneurs. Then, we identify the behavioural challenges that are affecting each segment and propose several behaviourally informed interventions that aim to overcome the biases present and encourage better retirement planning among Malaysians.

* *This paper was referenced in Special Feature 3: Behavioural Insights to Address Retirement Savings Inadequacy, SC Annual Report 2022.*

INTRODUCTION

The Malaysian population is aging rapidly, making the adequacy of retirement savings a key priority. At present, the retirement landscape in Malaysia is characterised by two underlying issues: insufficient coverage of pension schemes – most notably, the Employees Provident Fund (EPF), Kumpulan Wang Persaraan (KWAP), and private retirement schemes (PRS) – as well as a low level of savings. Exacerbating these issues further, the COVID-19 pandemic period saw the launch of several EPF withdrawal schemes, leaving many individuals with critically low levels of retirement savings. Looking at a longer time horizon, this inadequacy of retirement savings is likely to worsen. As the share of prime working-age adults in Malaysia decreases while that of retirees increases, the government will simultaneously face a shrinking tax base and a ballooning healthcare and social security spending bill. Compounding this issue further, Malaysian workers have been increasingly turning to self-employment, which comes with flexibility but at the cost of direct access to public and occupational pension schemes.

Though many of the underlying causes of retirement savings inadequacy are structural in nature, there is a behavioural aspect that should be considered to overcome this issue holistically. Without undermining the necessity for a strong and coordinated approach to tackle these structural causes, it is our belief that a behavioural one can prove to be a relatively inexpensive and efficient strategy in alleviating the retirement savings inadequacy issue. Behavioural insights, which refers to discoveries about the way humans process information and make decisions, have been playing an increasingly important role in the work of many regulators around the world, including the UK's Financial Conduct Authority (FCA), Canada's Ontario Securities Commission (OSC), the Australian Securities & Investments Commission (ASIC), and many others. By understanding the behavioural tendencies of individuals, regulators are better able to influence, or 'nudge', them towards a desired outcome. In fact, several regulators – most prominently the FCA and OSC – have begun efforts to use behavioural insights in the retirement space, implementing new methods to encourage their population to save more for retirement.

Chapter 1 of this paper takes a deeper look at the retirement savings inadequacy issue in Malaysia. We will provide further elaboration on the extent of Malaysia's insufficient public pension coverage and low savings, before describing the changing nature of work in greater detail.

Chapter 2 elaborates on the concept of behavioural insights and explores the application of behavioural insights in other jurisdictions. This would encapsulate both projects that specifically aim to encourage greater retirement savings as well as those that do not. Examples include, among others, the Save More Tomorrow programme, the FCA's stronger nudge to Pension Wise guidance, as well as Commonwealth's collective savings programme – all of which have yielded positive results.

Chapter 3 introduces our personas framework for solutioning, before elaborating on the behavioural challenges affecting each persona and offering some potential interventions to overcome such barriers. Through this process, we aim to expound on what it means to approach Malaysia's retirement savings inadequacy issue through a behavioural lens and offer some practical solutions that can be applied by private and public sector retirement stakeholders to encourage better retirement planning among Malaysians. The solutions are based on behavioural challenges and biases identified through the personas framework, which categorises Malaysian workers into one of five segments, namely: youth, gig workers, middle income, to-be retirees, and entrepreneurs.

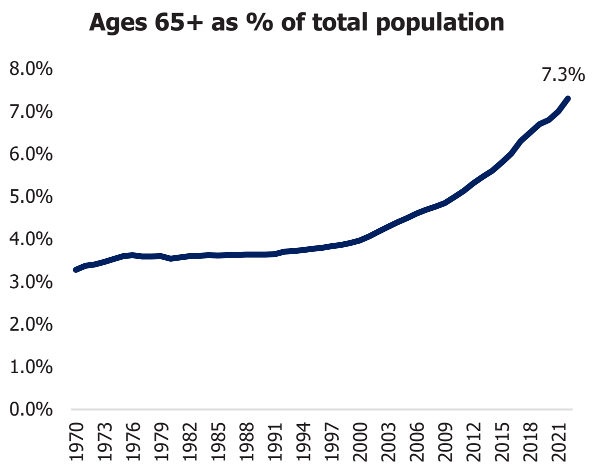
CHAPTER 1

Background: The Malaysian Retirement Savings Landscape

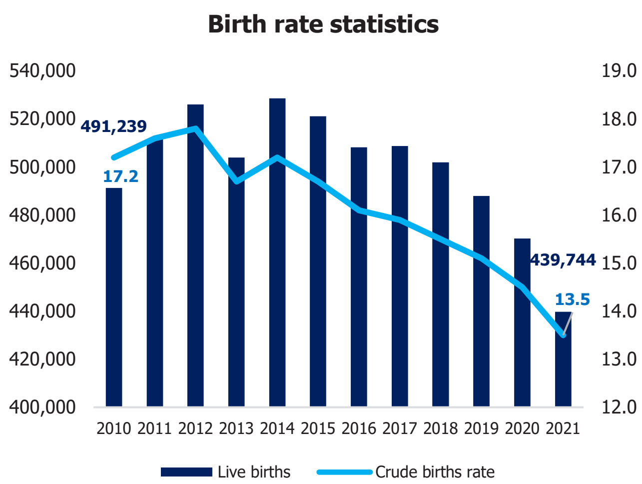
The Malaysian population is ageing. As estimated by the Department of Statistics Malaysia (DOSM), Malaysia is expected to reach ageing nation status by 2030, with the share of citizens above 60 years of age increasing to 15% (Abd Mutalib, Ismail, and Miskiman, 2020). While an ageing society is a phenomenon experienced in most parts of the world – with the United Nations identifying it as one of the four global demographic 'megatrends' – Malaysia is expected to age faster than most developed nations[1,2]. This can be attributed to the twin effects of increased life expectancy and lower birth rates. Firstly, life expectancy in Malaysia has been steadily increasing, from just 63.6 years in 1970 to 78.3 years in 2021, as the population gains access to better healthcare technology and higher living standards (DOSM, 2021a)[3]. Secondly, birth rates – as measured through the total fertility rate – has been on a downward trend, reaching a five-decade low of 1.7 children per woman of childbearing age in 2021 (DOSM, 2022). In fact, in most parts of the world, birth rates have been on the decline, as societal preferences shift and women are afforded better opportunities to pursue education and career aspirations.

Info Box 1: Retirement savings inadequacy has become a pressing issue in Malaysia

A: The Malaysian population is ageing as birth rates fall and life expectancy increases – presenting an urgent need to ensure adequacy of retirement savings



Source: Population Estimates, 1970-2022, DOSM.



Source: Abridge Life Tables, 2010-2022, DOSM

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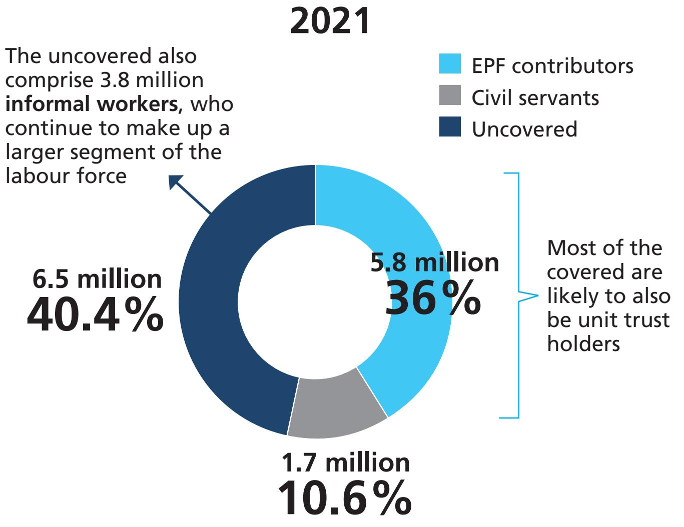
1 *World Population Ageing 2019* report, United Nations Department of Economic and Social Affairs, Population Division (2019).

2 According to Chai and Hamid (2015), developed nations such as France and Sweden took 115 and 85 years respectively to double their share of those aged above 65 years from 7% to 14%, while Malaysia is expected to take only around 20 years to do the same.

3 2022 figures were excluded as the decline in life expectancy recorded was largely due to an increase in deaths during the COVID-19 pandemic. It is unclear if life expectancy would be permanently affected moving forward.

B: Many Malaysians remain uncovered by mandatory pension schemes…



Sources: DOSM, Employees Provident Fund, Public Service Department, Tumin (2020).

C: …as pandemic era withdrawals weigh on the existing issue of low savings levels

COVID-19 related withdrawals consisted of

RM145 billion

15% of EPF assets

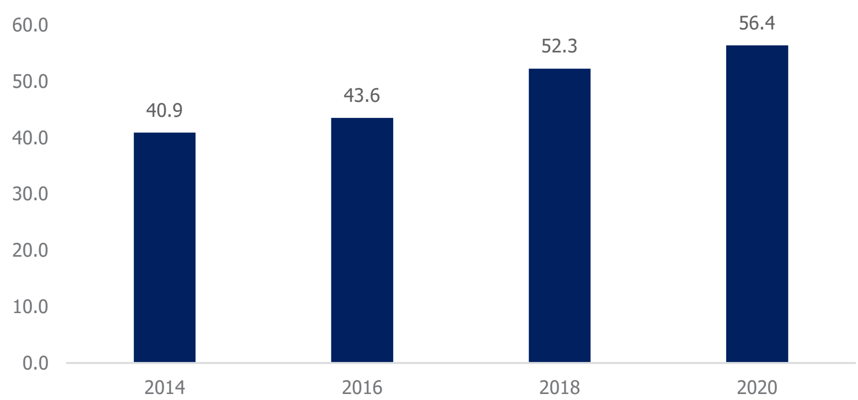
Proportion of active members with basic savings of RM240,000 by 55:

From 36% in 2020 → **to 29% by 2022**

Sources: Bernama (2022), The Star (2023).

D: Retirement savings inadequacy is compounded by the changing nature of work, with more workers now in non-standard employment in the labour force…

Share of graduates in non-standard employment (%)



Note: Non-standard employment refers to contract, temporary, self-employed, and family workers.

Source: Department of Statistics Malaysia (DOSM), Graduates Tracer Study.

E: …who are less likely to have sufficient savings for retirement

Employment status	Sufficient for less than 1 month	Sufficient for at least 3 months
Self-employed	71.4	5.0
Employer	49.2	10.5
Private employee	58.0	8.2
Multinational company employee	31.2	13.7
Government linked company employee	38.9	11.0

Note: Figure 1(B) represents the approximate share of the labour force, as of available data in 2021, which includes EPF contributors, civil servants, and the uncovered – informal workers in the agriculture/non-agriculture sector, own account workers, employers, and unpaid family workers, as well as the unemployed; while excluding foreign workers – thus below a total of 100%.

Source: Lin Lean Lim (2021).

An ageing society poses a challenge for governments as they grapple with a declining tax base and an increasing spending bill. Indeed, maintaining the level of retirement savings is vital for governments facing such a rapidly ageing population. As a nation ages, there will naturally be a decline in the share of prime working-age adults in Malaysia – thus eroding the tax base and reducing government revenues – and a greater level of withdrawals from retirement funds. Besides that, a larger share of older citizens would likely result in higher public healthcare and social security expenditure. Should citizens retire with insufficient savings, governments will be left with the difficult task of providing a social safety net for its citizens with limited resources, leading to a drag on the government's future fiscal position.

At present, the domestic retirement savings landscape is shaped by two key concerns: inadequate pension coverage and a low level of savings. The coverage of Malaysian pension schemes remains below satisfactory levels. Around 10% of the population are civil servants whose retirement savings are covered by the public pension fund KWAP, while 46% of the population contribute to the mandatory savings scheme for private sector workers by the EPF[4]. Even including the estimated 2% of the population enrolled in the voluntary private retirement schemes (PRS), this still leaves roughly 40% of the Malaysian population who are uncovered by any mandatory savings scheme[5]. There is also gender disparity at play, with a large share of those not covered by EPF being comprised of Malaysian women who are self-employed or engage in unpaid family work and are thus not covered by any mandatory social protection programmes.

Even among Malaysians with EPF savings, inadequate retirement savings remains a pressing issue. The World Bank (2020) estimates that most of these contributors will not have sufficient funds for retirement, with almost three quarters of workers at age 54 having less than RM250,000 in savings as of 2020[6]. Translated into an indexed annuity, these workers will receive a monthly benefit of less than RM1,050, only slightly above the pre-2019 revised poverty line income (PLI) of RM980 per month[7]. Women are also more vulnerable in retirement, with an average EPF balance of RM177,000 at age 54 while their male counterparts have an average of RM233,000.

The implementation of pandemic-related withdrawal facilities through EPF and PRS have greatly exacerbated the retirement savings adequacy issue and widened inequality. While the retirement savings inadequacy is an issue that predates the COVID-19 pandemic, it has only become more acute ever since. The implementation of five pandemic-related withdrawal facilities through EPF and PRS, while necessary to ensure Malaysians who were out of work had sufficient cash on hand to sustain their living expenses, have greatly exacerbated the retirement savings adequacy issue[8]. As of end-June 2022, 6.62 million members — or 52% of the total of 12.78 million EPF members aged below 55 years — had savings of less than RM10,000 (Bernama, 2022). Out of those 6.62 million members, roughly half of them reached a 'very critical' savings level of less than RM1,000. Given that those choosing to withdraw their EPF savings are likely to be low-income individuals in need of liquidity, these withdrawal facilities have disproportionately affected the B40 and M40 community, with the median savings of

4 Estimates are based on SC internal calculations with data sourced from EPF and KWAP.

5 Estimates are based on SC internal calculations. Note that those enrolled in PRS may also be enrolled in EPF, KWAP, or both. Similar analysis can also be found in: EPF (2019), World Bank (2020).

6 The official EPF basic savings quantum – which is the estimated amount needed to support an individual's basic needs for 20 years upon retirement – is RM240,000 by the age of 55 (EPF, 2018).

7 The PLI was revised in July 2019 to RM2,208 per month during the release of the Household Income & Basic Amenities Survey Report 2019 (DOSM).

8 An estimated RM145 billion was withdrawn by EPF members under the four withdrawal programmes: i-Lestari (March 2020), i-Citra (July 2021), i-Sinar (January 2021), and a special withdrawal facility (April 2022) – see figure 1c. Meanwhile, pre-retirement withdrawals as a share of total withdrawals sharply increased from 18% in 2019 to 52% in 2020, after the one-off PRS withdrawal scheme was announced as part of the Prihatin Rakyat Economic Stimulus Package in March 2020.

low-income contributors falling to between RM3,300 to RM5,000 by the end of 2022 (Aziz, Pfordten, and Rahim, 2023).

Compounding this issue further is the changing nature of work and its increasing precarity. The rapid pace of technological development has rendered more low-skilled workers, who are more likely to have inadequate savings for retirement, obsolete. Furthermore, the increasing precarity of work has increased the number of Malaysians involved in non-standard work i.e., those without the security of full-time jobs. This is a double-edged sword, providing the benefits of flexible work hours but also leaving these workers with irregular income which makes saving for retirement challenging. As the shift towards non-standard, or gig, work accelerates in Malaysia, the rules and systems governing retirement security will need to retain the stability and security of traditional safety nets without compromising on the flexibility and dynamism of modern jobs[9].

While many of the underlying challenges of retirement savings inadequacy are structural ones, there is also an opportunity to approach this issue from a behavioural perspective[10]. This paper acknowledges that there certainly are structural challenges that inhibit Malaysians from adequately planning and saving for retirement, such as low wages, rising living costs, limited access to financial services, and so on. However, overcoming such structural challenges, while essential, will take a vast amount of effort and resources to overcome and will need time – time that many Malaysians, especially those closer to retirement, may not have. As such, recognising the pressing need for a more holistic approach to the retirement savings inadequacy issue, this paper aims to contribute to the discussion on retirement savings adequacy among Malaysians by analysing the problem through a behavioural lens and offering some practical behavioural solutions that can be applied by retirement stakeholders across the public and private sectors.

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9 Appendix A provides further elaboration on the changing nature of work in Malaysia.

10 According to the Organization for Economic Co-operation and Development (OECD) (2008), there are studies in the field of behavioural economics that show that financial and savings behaviour are related to psychological factors.

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CHAPTER 2

Enabling Retirement Solutions with Behavioural Insights

2.1 Introduction to Behavioural Insights

Behavioural economics is a school of thought that examines the psychology behind economic decision making. Its roots can be traced back to the pioneering work of psychologists Daniel Kahneman and Amos Tversky in the 1970s[11]. Their research demonstrated that people's preferences and choices are often influenced by unconscious biases (formally known as behavioural biases), environmental factors, and shortcuts in thinking (known as heuristics), which may lead us to make decisions that are not fully rational. These behavioural biases are especially ubiquitous and its effects on the daily lives of individuals cannot be understated. If we look around us, there are numerous instances of humans making suboptimal decisions, such as with procrastination, impulse buying, and intentional participation in harmful activities. Importantly, these behavioural biases are particularly powerful when people make choices in highly uncertain circumstances – planning for retirement is one such example.

Behavioural insights refers to the knowledge or observations obtained from behavioural sciences, which can be used then to design effective behaviourally-informed solutions. The Behavioural Insights Team (BIT), which was established in 2010 as a seven-person unit within the UK government, coined the term 'behavioural insights' to describe empirical findings gathered from the behavioural sciences – cognitive psychology, behavioural economics, social psychology, experimental economics and so on – about the way human beings behave and make choices[12,13]. These insights are instrumental in helping us craft behavioural interventions. Only by understanding the factors that influence the decision one makes can we start thinking about solutions that can effectively address the behavioural biases identified and nudge people towards a more desirable action or behaviour.

Over the decades, there has been a growing movement to better understand human behaviour and incorporate these insights into policymaking. As the FCA explains, behaviourally-informed interventions can be an effective yet relatively inexpensive method of improving market outcomes (Erta et al., 2013). One of the early forays into behaviourally-informed policymaking involves the formation of the BIT, which has since been credited with helping to introduce a range of policies around the world based on behavioural insights, such as encouraging organ donation, reducing tax fraud, and improving energy efficiency. In fact, several multi-national organisations – such as the World Bank and the Organisation for Economic Co-operation and Development (OECD) – have recognised the potential of behavioural insights and have been actively promoting its use through their publications and outreach programmes.[14,15] At present, the OECD estimates that roughly 202 institutions have applied behavioural insights to public policy.

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11 Witynski (n.d.).

12 BIT is a now-private social purpose organisation wholly owned by Nesta, though still with its original aim of driving positive change by creating and applying behavioural insights to systems, policies, products, and services. BIT website: www.bi.team/about-us-2/who-we-are/.

13 The origin of the term 'behavioural insights' is based on representation by BIT through their social media as well as from the SC's engagement with them.

14 The World Bank's behaviourally-informed projects are undertaken by its Mind, Behavior and Development Unit (eMBeD). More on eMBed's work: www.worldbank.org/en/programs/embed.

15 The OECD's page on behavioural insights: www.oecd.org/gov/regulatory-policy/behavioural-insights.htm.

Info Box 2: How behavioural insights can be leveraged to encourage retirement savings (with examples)

Irrational Behaviour	Behavioural Economics	Behavioural Insights
What it means...		
Individuals make choices and decisions that are not based on sound reason or judgement	Understanding irrational economic decision-making through insights from the behavioural sciences	Observations and findings from the behavioural sciences that can be used to design solutions that encourage better decisions
...in the retirement context		
Example 1: Putting off or delaying retirement planning and saving	Individuals may find such financial decisions difficult or struggle to picture themselves obtaining future gains at the expense of an immediate cost	Providing default options or fewer choices can ease their decision-making process and encourage action
Example 2: Investing in funds that are not suitable for their age or risk appetite	People may not understand financial information accurately or are relying on incorrect shortcuts to make a decision	Displaying information in simple terms (e.g. whole numbers instead of percentages) can improve understanding and decision-making

2.2 Applications of Behavioural Insights to Encourage Retirement Planning and Savings

Behavioural biases are especially prevalent in the context of retirement planning, which involves highly uncertain financial choices over a long horizon. As discussed in Chapter 1, there are numerous structural factors behind the inadequate retirement savings issue in Malaysia. However, at the micro-level, there are also behavioural barriers that individual Malaysians need to overcome to make better financial decisions for retirement. By incorporating behavioural insights into policymaking and product design, we may be able to help Malaysians overcome these behavioural barriers and nudge them into making better decisions to prepare for their retirement.

Globally, an increasing number of studies in behavioural economics show that financial and savings behaviour relate to psychological factors. For example, the OECD (2008) highlighted that while there are dedicated savers who take responsibility for their retirement, there exists a much larger population that would not do so or would like to save more but are overwhelmed by the savings options available to them or simply lack the willpower to do so. In fact, many financial regulators around the world have begun incorporating behavioural insights into their efforts to encourage better retirement planning, such as the UK's Financial Conduct Authority (FCA), Canada's Ontario Securities Commission (OSC), the Australian Securities & Investments Commission (ASIC), and many others. Info Box 3 below provides some examples of notable behavioural insights projects on the topic of retirement savings conducted by both organisations both within and out of Malaysia.

Info Box 3: Notable references on behavioural insights and retirement in Malaysia and by other securities regulators

- Why don't we save more: Encouraging Malaysian Financial Resilience (PIDM and BIT, 2021)
- Enhancing Financial Literacy in a Digital World: Global Lessons from Behavioural Insights and Implications for Malaysia (ICMR, 2020)
- Impact of behavioural insights on KiwiSaver enrolment communications (FMA, 2019)
- Testing retirement communications: waking up to get wise (Adams and Ernstone, 2018)
- Encouraging Retirement Planning through Behavioural Insight (BIT, 2018)

The use of behavioural insights to encourage better retirement planning and savings extends beyond academic discussions; there have already been pilot projects and use cases which have shown promising results. One example is the Save More Tomorrow programme – introduced in the United States in 2006 – where employees voluntarily commit to saving more whenever they receive future pay raises[16]. In the initial study, the programme was shown to increase average savings rates from 3.5% to 13.6% among its participants (Thaler and Benartzi, 2004). Since then, the programme[17] has been offered by a growing number of pension plans in the United States, United Kingdom, and Australia. Other notable examples include the sidecar savings programme[17] and the stronger nudge to pension guidance by Pension Wise in the United Kingdom[18].

Closer to home, PRS and EPF have also employed some elements of behavioural insights in their design and promotion of products. For example, PRS was the first capital market product in Malaysia to require Q&A-based disclosures in simple and concise language, making it easier for investors to understand key terms and conditions at a glance. More notably, an age-based default option was introduced for PRS. This default option automatically allocates contributions into appropriate funds based on their age, greatly easing the fund selection process for investors. As of today, nearly half of all existing PRS members have opted for this option. Furthermore, EPF's i-Saraan initiative for self-contributions includes a government matching fund of up to RM300[19], which PIDM and BIT (2021) have found to be an effective method to mitigate present bias.

Behavioural interventions are a promising solution but may need finetuning before being applied in Malaysia. While there is no shortage of literature and case studies on the application of behavioural insights to encourage retirement planning and savings, it is important to note that human behaviour may differ across geographies as various social and cultural factors come into play. Hence, practitioners should be mindful to contextualise these literature and case studies to Malaysia when attempting to apply them to local retirement polices and solutions[20]. With that in mind, the following chapter will provide more detail on the behavioural challenges and biases of Malaysians to allow us to identify appropriate behavioural interventions.

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[16] Save More Tomorrow programme: http://www.shlomobenartzi.com/save-more-tomorrow.

[17] Nest Insight's sidecar savings programme: https://nestviews.org.uk/helping-workers-save-for-today-and-tomorrow-with-sidecar-savings/.

[18] Policy statement on the FCA's stronger nudge to Pension Wise guidance: https://www.fca.org.uk/publications/policy-statements/ps21-21-stronger-nudge-pensions-guidance-feedback-cp21-11-and-final-rules-and-guidance.

[19] Contributions through the i-Saraan scheme are eligible for a 15% government matching fund of up to RM250 from 2018 to 2022, and up to RM300 in 2023.

[20] The SC organised a workshop in August 2022 that focused on the intersection between behavioural economics and retirement savings, as a means of learning more about the behavioural challenges that prevail and potential solutions that can be used in Malaysia. For more details, please refer to *Appendix B – Retirement Workshop: Exploring the Application Of Behavioural Insights.*

CHAPTER 3

Behavioural Challenges and Potential Solutions

3.1 Setting up Retirement Solutions

In this chapter, we will use a personas framework to identify the behavioural challenges and biases that are prevalent in Malaysian society, before proposing and elaborating on several interventions that could address such obstacles and nudge Malaysians towards better savings habits. A key challenge to identifying these common biases is that there is a wide spectrum of Malaysian workers, each often having conflicting characteristics from multiple dimensions, such as age, income level, employment type, and living and environmental circumstances. To account for this heterogeneity and to facilitate a structured exposition of the possible solutions, we use a personas framework in which members of the Malaysian workforce are categorised into one of five main segments, namely: youth, gig workers, middle income, to-be retirees, and entrepreneurs.

Through these personas, we hope to capture, in our view, the majority of the Malaysian labour force. The youth persona encompasses those between 25 to 35 years old, unmarried, and working jobs in a traditional 9-to-5 model while the to-be retirees segment includes individuals on the other end of the age spectrum: those between 46 to 60 years old. It is also likely that there is a significant proportion of youths in non-standard work as well. However, they would be captured under the gig workers segment instead, which includes individuals of all ages earning inconsistent, low-tomoderate levels of income. Gig workers also do not have a statutory EPF contribution, reducing their access to occupational pension schemes. Meanwhile, those in non-standard work but earn, on average, a higher monthly income are classified as entrepreneurs instead. This segment includes small-to-medium size business owners, independent contractors, skilled freelancers, and many more. Lastly, the middle income persona captures all those in the middle; they are aged 35 to 45 years old, work traditional 9-to-5 jobs, have a M40 household income, and are likely to have a family to support as well. Table 1 below provides a more detailed description of each persona.

Table 1: Assumed characteristics of the personas

Persona	Description	Background
Youth	• 25 to 35 years old • Single • Working	Roughly a third of the Malaysian labour force is aged between 25 to 35 years old and around 73% of EPF members within this age range do not meet EPF's recommended basic savings requirement (DOSM, 2021b; EPF, 2021; EPF, 2018).
Gig Workers	• Earning low-to-moderate (<RM5,000) and irregular monthly income • Includes delivery riders, as well as some part timers and freelancers • Have no statutory EPF contribution	No official count but estimates suggests that the number of gig workers in Malaysia has been growing rapidly and are becoming an increasingly large share of the Malaysian workforce (Khazanah Research Institute, 2020). As they are not formally employed, they lack access to occupational pension schemes such as EPF and KWAP.

Persona	Description	Background
Middle Income	• 35 to 45 years old • Working traditional jobs (9-to-5 model) • Have a family to support – spouse and between 1-3 children • Household income between RM4,850-RM10,959 per month (M40 classification) (DOSM, 2021d)	Comprising 40% of all households, this population is likely to have various and possibly competing financial commitments, such as home/vehicle purchase, children's education, parents' retirement life, etc.
To-be Retirees	• 46 to 60 years old • Working traditional jobs (9-to-5 model)	Roughly five million Malaysians are aged between 46 to 60 years old (DOSM, 2021c). Meanwhile, around 83% of EPF members aged 46-55 years old do not meet EPF's recommended savings quantum (EPF, 2021)
Entrepreneurs	• Small-to-medium size business owner, independent contractor, or skilled freelancer • Earning moderate-to-high (RM5,000 – RM15,000) but irregular monthly income • Have no statutory EPF contribution	Roughly 15% of the Malaysian labour force are own-account workers, who, like gig workers, lack access to occupational pension schemes such as EPF and KWAP (DOSM, 2021b)

The personas framework offers an effective way of thinking of the challenges and behavioural barriers that different segments of the labour force may experience, as well as provide a more concrete framework for intervention design. It is worth mentioning that we recognise that the personas are unable to capture the entirety of the wide spectrum of Malaysian workers that exist, nor are they strictly based on any official classifications of Malaysian workers. In fact, given the diversity of characteristics and experiences among workers, it can be expected that the biases and solutions listed may also, at times, cut across personas. However, the personas allow us to anchor our thought process on several common characteristics, providing us with a framework to design potential solutions that can cater to a target segment's general challenges and needs, with the full understanding that these proposed interventions can be further enhanced and made more specific if needed. Additionally, the personas were also selected based on their potential vulnerability to the issue of inadequate retirement savings.

The following section will focus on each persona individually. Within each persona, we will elaborate on several challenges that inhibit their retirement savings journey. These challenges are a function of both structural and behavioural elements; as an example, a gig worker's inconsistent income stream can lead to both insufficient discretionary funds for retirement savings (structural) and also a tendency to focus on present needs (behavioural). This paper will focus on the behavioural aspects, listing and discussing the behavioural biases commonly experienced by that segment, before proceeding to elaborate on some potential interventions to nudge them towards better retirement planning and savings behaviours.

It is our hope that the discussion below can be used as a broad guidance for both private and public sector entities looking towards the adoption of behaviourally-informed solutions in the retirement savings space. These challenges and potential solutions were mainly identified either through a review of the literature or discussions at the aforementioned retirement workshop held by the SC. It is important to note that these challenges and solutions, in their current form, are also intended largely for discussion purposes; they are non-exhaustive and may not be sufficient for policy formulation. In fact, further empirical trials of the proposed interventions ought to be conducted to ensure that they can be adopted effectively in Malaysia and that the implementation of any new policy or solution is evidence-based.

3.2 Behavioural Challenges and Interventions by Persona

Table 2: Summary of behavioural challenges and potential interventions

Persona	Behavioural challenges	Potential interventions
Youth	1. **Lack of intent to start retirement planning** due to overconfidence, an inclination towards short-term gratification, and prevailing social norms 2. **Low financial literacy**, which is exacerbated by untargeted and unappealing financial education programmes	1. **Communicate in a more relatable manner** Enhancing communications through targeted messaging, relevant channels, strategic timing, and social norms 2. **Design savings features that are more attractive** Adding automatic, gamified, and social elements to savings programmes to encourage better savings habits
Gig Workers	1. **Inconsistent and/or inadequate income**, which leads to present bias and a need to focus on liquidity 2. **Limited retirement support**, leading to cognitive overload 3. **Overwhelming financial decisions**, exacerbated by a limited cognitive bandwidth and low confidence	1. **Offer immediate gratification** Offering matching funds and other rewards to mitigate present bias 2. **Implement a sidecar savings model** Designing a more liquid, goal-based savings programme that leverages mental accounting and reduces present bias 3. **Employer programmes to signpost retirement planning** Providing personalised retirement assistance to ease cognitive burden and overcome low confidence 4. **Make saving easier** Easing the process of saving by improving access to retirement platforms, automating contributions, and simplifying paperwork
Middle Income	1. **Inadequate savings**, due to focus towards current needs and present bias 2. **Limited cognitive bandwidth** when faced with multiple stressors and competing priorities 3. **Pressure to keep up with social norms** amid expectations for social mobility	1. **Partnerships with employers** Employers to ease cognitive burden by connecting staff to retirement planning resources and automating contributions 2. **Ease decision making** Providing easy-to-follow guides and reducing decision making points can encourage individuals to act 3. **Enhance communications strategies** Prompting people to think about the future by clearly conveying the benefits of long-term savings and engaging savers at strategic touchpoints in a lifecycle 4. **Implement a sidecar savings model** Using automatic contributions and mental accounting to help savers achieve short-term goals while strengthening long-term financial resilience

SS RP

Persona	Behavioural challenges	Potential interventions
To-be Retirees	1. **Longevity risk**, as they overestimate the adequacy of their savings at the age of retirement 2. **Over-investment in risky portfolios**, including completely withdrawing pension funds in favour of self-management, in addition to the norm of relying on children for retirement	1. **Communicate retirement risks better** Providing a clearer picture of their current and future financial standing to help them better assess their readiness for retirement 2. **Encourage more sustainable withdrawals** Promoting decumulation strategies and introducing decision points when making withdrawals to ensure sustainability of retirement funds
Entrepreneurs	1. **Heavy financial pressure**, including prioritising funds for business and deprioritising future retirement needs 2. **False sense of security**, at times due to the possibility of greater earning potential thus delaying retirement planning 3. **Lack of retirement support**, given the absence of an employer and direct access to occupational pensions	1. **Use rewards to incentivise savings** Providing immediate gratification to entice present-focused savers 2. **Emphasise visualising the future** Encouraging individuals to re-evaluate their current situation and place more importance on their own, future needs 3. **Personalised retirement planning services** Easing access to retirement planning resources to help reduce cognitive burden 4. **Automate savings** Encouraging consistent saving through automatic, adjustable contributions

Persona #1 – Youth

Challenges faced

Challenge 1 – Lack of intent to start retirement planning

In the *Youth Capital Market Survey: A Malaysian Perspective* (Youth Capital Market Survey) conducted by the Securities Commission Malaysia (2022), 73% of youth respondents did not view 'building up a retirement fund' as one of their top priorities. Instead, retirement only generally comes to mind as one advances to a later stage in life. This lack of intent to start retirement planning by the Malaysian youth could be attributed to several behavioural factors, such as: overconfidence, present bias, and social norms.

Firstly, youths may be overconfident in their abilities to prepare for retirement, either because they believe that they can easily save the money needed, or perhaps because retirement is seen as an issue that lies in the distant future. Youths may also experience present bias; they may be more inclined to spend their money on short-term rewards, such as lifestyle expenses, rather than saving it for their future self. In fact, the SC's Youth Capital Market Survey revealed that many youths experienced anxiety over their ability to achieve their investment goals due to their inability to curb impulse spending and the need to 'keep up appearances'. Lastly, the Malaysian youth may be heavily influenced by social norms. If there is a lack of urgency to plan or save for retirement within their social circle, it could create a normative expectation that proper retirement planning is neither relevant nor important for the young.

Challenge 2 – Low financial literacy

62% of all respondents from the SC's Youth Capital Market Survey were identified to have low financial literacy. Low level of financial literacy among youths is likely to affect their understanding of retirement planning – they may not be aware of the importance of saving early in life, the saving and investment options that exists, as well as the availability of various retirement savings-related benefits and resources (e.g. tax relief, free retirement planning services, etc.)[21]. Compounding this issue further, programmes that aim to promote financial literacy in the context of retirement education are generally targeted to an older age group and rarely take into consideration the behaviours, preferences, and needs of younger generations – thus making them unappealing or even ineffective in reaching out to the youth.

Potential interventions

Intervention 1 – Communicate in a more relatable manner

To overcome the issue of youths lacking the urgency to begin planning for retirement, a possible solution would be to communicate information on retirement planning in a way that is more relatable to the youth. Relevance, in this instance, may encompass the following factors:

1. **Messaging**. A report by BIT (2020) found that prompting audiences to think about their own future can be more effective in encouraging the youth to save for retirement than traditional messaging (e.g. focusing on the tax relief benefits of saving), as younger individuals are less likely to have considered future outcomes and benefits (overconfidence and present bias). Additionally, explicitly labelling the future impact of current contribution amounts could provide a simple heuristic or reference point for individuals when choosing their level of savings. For example, Canada's Canadian Retirement Income Calculator provides the estimated retirement income of an individual at the age and salary range specified, to guide users on their retirement goals[22].

2. **Method**. Promoting retirement savings schemes on platforms that are most likely to be used by the youth, such as social media, can minimise cognitive overload, as it eases their search for information on retirement savings[23].

3. **Timing**. If prompted during the right time, the youth may be more inclined to act. For example, they may be more receptive to contribute to a savings plan or sign up for a free retirement planning session during a major life event, such as when they secure their first job or receive their first year-end bonus[24].

4. **Social element**. The youth tend to rely on friends and family as a trusted source of information (Securities Commission Malaysia, 2022). In fact, ICMR (2021) finds that trust and relatability are key to youths, with social groups having a casual effect on their savings and investment decisions. Hence, communications on retirement planning and savings could be signposted in situations where many peers and family members around them could be making similar decisions, such as at university fairs or an onboarding session for a new job.

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[21] The same survey by the SC found that only 14% of youths have any form of awareness of PRS. This is significantly lower than the awareness levels of other traditional financial products, such as unit trust (86%), insurance (79%), stocks (65%), foreign currencies (47%), fixed deposit (60%), and bonds and sukuk (19%), to name a few.

[22] Canadian Income Retirement Calculator: https://www.canada.ca/en/services/benefits/publicpensions/cpp/retirement-incomecalculator.htm.

[23] *The Rise of Millennial & Gen Z Investors: Trends, Opportunities, and Challenges for Malaysia* by ICMR (2021) and the *Youth Capital Market Survey: A Malaysian Perspective* by the Securities Commission Malaysia (2022).

[24] According to Service et al. (2014), people are particularly likely to alter their behaviour or habits during periods of transition, such as when moving houses, getting married, or having children.

Intervention 2 – Design savings features that are more attractive

We can also design saving features that are more attractive to youths by leveraging their preferences and behavioural biases. This will make it more likely for youths to start and sustain their savings for retirement. For example:

1. **Incentives that provide immediate gratification**. Given that saving for retirement often results in delayed gratification (e.g. tax incentives, future comfort, etc.), incentives that offer immediate benefits, such as gamification of retirement savings schemes and gifts for contributions, could be more attractive to the youth exhibiting present bias. In fact, a pilot of SavingsQuest – a gamified savings app developed by US-based non-profit organisation Commonwealth – revealed that app users saved on average 25% more often than other non-app users (Commonwealth, 2015).

2. **Automate savings based on certain rules**. Providing simple conditions, and even default options, for saving could ease the process of building up a retirement fund. For example, one could choose to round-up every payment made and channel the balance to a savings account. These rule-based features – such as those offered by MAE and Qapital – could prove to be simple heuristics that can help the youth make their retirement savings choices[25,26].

3. **Social savings programmes**. According to the OECD (2019a), younger individuals have a greater tendency to conform to social norms. As such, features that offers a social element, such as group saving with friends and family, may be able to encourage sustained contributions to their savings. In fact, a pilot experiment on group savings by Commonwealth (2021a) and financial technology platform Esusu yielded positive results. The experiment found that, in a group savings setting, 93% of participants contributed regularly to the pooled fund while 66% saved more per month than they did before the pilot.

Persona #2 – Gig workers

Challenges faced

Challenge 1 – Inconsistent and/or inadequate income

Due to their often inconsistent and inadequate income streams, gig workers face high levels of uncertainty. This leads to gig workers exhibiting present bias, as they would tend to prioritise their short-term cash flows and present needs (Pew, 2021). In fact, the inconsistent nature of their income stream implies a strong need for liquidity – a feature that is not afforded by both EPF and PRS, whose lengthy lock-up period may prove to be a deterrent for this group when deciding whether to save in those instruments.

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25 MAE: https://www.maybank2u.com.my/maybank2u/malaysia/en/personal/services/digital_banking/mae_tabung.page
26 Qapital: https://www.qapital.com/saving/.

Challenge 2 – Limited retirement support

Largely due to the informal nature of their employment, gig workers also receive limited retirement support from their employers. In Malaysia, the terms of employment in the gig economy typically do not include automatic retirement contributions or deductions. Malaysian gig workers are not included in the mandatory retirement scheme (EPF) and all existing schemes for this segment are purely voluntary (Sazali and Tan, 2019). However, this issue is hardly unique to Malaysia – limited retirement support from employers was identified as the largest barrier to retirement savings for non-traditional workers in the US (Pew, 2021). The absence of employer contributions to one's retirement funds naturally exacerbates the issue of savings inadequacy. However, the lack of a straightforward, automatic mechanism for gig workers to personally make contributions can discourage the practice as the complicated process can worsen cognitive overload.

Challenge 3 – Overwhelming financial decisions

According to a study by BIT (2016), financial concerns can weigh heavily on the minds of low-income individuals, leaving them with less cognitive resources to make optimal decisions. Compounding this issue further, a joint study between PIDM and BIT found that those earning irregular incomes also displayed lower levels of confidence (2021). This combination of cognitive overload and low confidence can lead to inaction when it comes to saving for retirement, as gig workers may feel stressed and overwhelmed when confronted with such difficult decisions.

Potential interventions

Intervention 1 – Offer immediate gratification

To incentivise retirement savings among those who have inconsistent and/or inadequate income, or are undecided about retirement savings schemes, a possible solution is to offer immediate gratification, which can mitigate present bias. This can take the form of:

1. **Matching funds.** As recommended by both BNM (2020) and Melguizo (2010), a Matching Defined Contribution (MDC) could be introduced to nudge interest towards retirement schemes, especially as they are likely to be attractive for those with insufficient savings on their own. Furthermore, a study of a US 'saver's credit' programme by Duflo et al. (2007) finds that matching funds are more effective than tax credits in incentivising retirement savings, especially among the lower-income community.

   Such matching programmes have, in fact, been utilised to incentivise greater participation in PRS among younger Malaysians. In 2014, the Malaysian federal government launched the PRS Youth Incentive, in which the government committed to crediting RM 500 into the PRS accounts of 20- to 30-year-olds who accumulate RM 1,000 in their PRS accounts within a year. In 2017, the incentive was increased to RM 1,000 for those who contribute at least RM1,000 in a single PRS fund from 2017 – 2018. Following the launch of this programme, PRS enrolment among those in the target age group increased by close to 50% on an annualised basis between 2014 to 2018 – more than any other age groups. While this initiative targeted youths, its success in increasing enrolments – alongside the evidence provided in the literature referred to above – suggests that it may also be effective in incentivising gig workers with inadequate income to save more for their retirement.

2. **Other rewards.** Besides matching funds, other forms of rewards may also be effective, such as lucky draws, free gifts, or points.

Intervention 2 – Implement a sidecar savings model

Given gig workers' need for liquidity, a sidecar savings model could be another good way to incentivise this community to save. In a sidecar savings model, savers place money into an account, which itself is comprised of a long-term, illiquid savings pot and a short-term, liquid pot. Initially, new contributions are channelled into the liquid pot until a certain threshold has been met, after which all savings are redirected into the illiquid pot instead. By keeping a portion of savings available for withdrawal, sidecar savings models can mitigate present bias, especially among those who are uneasy about locking away funds for years. On top of that, having a short-term savings goal – such as saving for marriage or a new house – attached to a retirement fund can help individuals reframe their contributions as one that is towards a shorter-term, more attainable target. While not necessarily a new idea, sidecar savings models have gained increasing prominence in recent years. A Commonwealth (2021b) study found that 40% of respondents indicated that a liquid sidecar savings programme would make them more likely to engage with a long-term education savings account (529 plan). In the UK, the public pension scheme Nest launched their sidecar savings trial in 2018, with encouraging outcomes as of 2021 (Phillips, Kuipers, and Sandbrook, 2021)[27].

Intervention 3 – Employer programmes to signpost retirement planning

To boost participation in retirement savings schemes among gig workers who receive limited retirement support, employer programmes to signpost free retirement planning can be considered. Gig employers in Malaysia could have programmes to connect their employees with free retirement planning services, such as the Online Retirement Consultation Assistance (ORCA) service provided by PPA. With professional financial advice, gig workers may be able to gain confidence and feel more empowered to take control of their retirement savings journey. In fact, having additional resources available to them may help alter their perception that the retirement savings process is a tedious one.

Intervention 4 – Make saving easier

A key strategy to ensure that gig workers with insufficient financial knowledge contribute to a retirement savings plan is to make it easy to save for retirement. Potential solutions include:

1. **Connecting gig platforms with retirement savings platforms.** Easing gig workers' efforts to invest for retirement could potentially involve the creation of an Application Programming Interface (API) that connects gig platforms with retirement investments. In fact, this idea is not foreign to Malaysia – the part-time job platform GoGet and EPF have already come together to create an API that allows for users of GoGet to easily contribute to their voluntary EPF i-Saraan account. The Box Article below contains more information on this partnership between GoGet and EPF.

[27] Nest sidecar savings trial: https://www.nestinsight.org.uk/nest-insight-launches-sidecar-trial/.

2. **Automatic enrolment and default contributions.** As an extension of the creation of the API, an opt-out approach can also be taken whereby gig employers automatically enrol their workers into a pre-selected scheme with a default contribution rate. Through an automated enrolment and contribution process, gig workers can avoid facing difficult decisions that may lead to inaction. Furthermore, there is evidence that low-income individuals are less likely to opt-out of contribution rate defaults, which will strengthen the efficacy of this programme (Beshears et al., 2016).

3. **Simplifying existing procedures.** Easing the process of investing for retirement could even include the simplification of existing investing or saving procedures, perhaps by reducing the number of documents and paperwork needed, or by allowing savers to start a retirement savings account online.

Box Article: How is GoGet making retirement savings easier for GoGetters?

Written by: Francesca Chia, co-founder of GoGet

The gig economy has been rapidly growing in prominence. Yet, historically, Malaysia has only mandated full-time employees, and their employers, to contribute to EPF, leaving this evergrowing segment of the Malaysian population increasingly financially vulnerable. Recognising the precarious conditions surrounding gig workers, GoGet took up the challenge of ensuring that this community remains sufficiently protected with retirement savings*.

Looking at the options available today, EPF does allow gig workers to save through schemes such as the i-Saraan, with matching contributions provided by the government. While these schemes are attractive on paper, there are two main barriers preventing gig workers from contributing to i-Saraan:

1. The primary challenge is the **ability for gig workers to save from a small income**. For gig workers, especially those in the B40 segment, most of their income is spent on living expenses in the present. They often do not have much leftover income to save for future purposes.

2. The secondary challenge is the **ease of adoption**. Most gig workers understand that it is important to save, but find it difficult or tedious to do so.

As such, GoGet has structured a savings product that caters for the unique challenges faced by gig workers - a fully customisable savings programme that is integrated with EPF. By integrating EPF's services directly onto the GoGet app, their workers (known as GoGetters) could make their EPF contributions with just a few clicks - all without leaving the app. This makes saving easier and more seamless for GoGetters.

Another cornerstone feature of the programme is the ability for GoGetters to predetermine the share of their income that will be automatically channeled into their EPF savings pot. While a default option of 5% is provided, GoGetters are able to freely adjust their savings level to be anything between 1% to 30% of their income. The idea here is not to force GoGetters into a specific level of savings, but to empower them with more control and comfort in making their financial decisions.

Currently, almost half of all actively earning GoGetters contribute to EPF through the GoGet app. Though the job is not quite done yet, GoGet has shown that public-private partnerships in the retirement savings space can help safeguard the welfare of gig workers.

* *GoGet is a Malaysian platform that connects gig workers with businesses seeking part timers.*

Persona #3 – Middle income

Challenges faced

Challenge 1 – Inadequate savings

In Malaysia, household income and expenditure survey data show that at least 7.7% of M40 households do not have residual income, in that they have no income left after deduction of transfer payments and total consumption expenditure (Abdul Hamid, Ho, and Ismail, 2019). On average, M40 households record a residual income of RM1,450, compared to RM346 for B40 and RM5,779 for T20 households. This lack of residual income makes it increasingly difficult for those in the middle-income bracket to save and subsequently plan for retirement, since these individuals would either not be saving enough or perceive their savings as 'too small' or 'inconsequential' for the purposes of investments and retirement. Similar to gig workers, a lack of discretionary funds can shift their focus towards current needs.

Challenge 2 – Limited cognitive bandwidth

The process of retirement planning and saving requires some amount of time, energy, and commitment – all difficult asks when one is faced with limited cognitive bandwidth and multiple stressors. Middle income individuals tend to face several competing priorities that need to be considered ahead of retirement, including various financial goals such as home and vehicle ownership, providing for children(s) education, as well as caring for ageing or elderly parents. Despite having higher income relative to B40 households, M40 individuals still 'feel the pinch', as evidenced by many individuals who still perceive themselves as financially unstable or living paycheck-to-paycheck (ICMR, 2023), despite being in the M40 and T20 income brackets, possibly due to higher financial commitments, indebtedness, and liabilities outweighing having higher income. Related to this is the phenomenon of a 'sandwich generation', encompassing individuals who end up having to support both dependent children and elderly parents who lack their own retirement savings, all at the same time (EPF, 2021). Furthermore, the rising cost-of-living experienced in the post-pandemic era, coupled with the long-lasting issue of sticky wages, has squeezed discretionary income for middleincome households, further inhibiting their ability to save for retirement.

Challenge 3 – Pressure to keep up with social norms

Expectations and aspirations for social mobility may be particularly strong among the middle income. This pressure to keep up with social norms means that M40 individuals may be inclined to take reference from others' lifestyle choices, particularly that of affluent households and to seek higher standards of living, including outbound travel or big-ticket items like cars and the latest gadgets. Such consumption preferences and behaviour tend to reduce the funds available to put towards one's retirement. Consumption preferences also explains other features of middle-income spending, where growing demand for good public services and gentrification of urban areas have nudged middle-class households into more expensive segments of the housing market (OECD, 2019b), worsening their financial position.

Potential interventions

Intervention 1 – Partnerships with employers

To overcome issues of multiple competing priorities, financial commitments, and limited cognitive bandwidth, partnerships with employers can be considered. Integrating retirement planning benefits into their career planning and worker compensation could make it easier for them to think about and act on their retirement savings. This can be done through:

1. **Signposting retirement planning**. Employers can introduce and encourage the usage of ORCA or any other retirement planning service during the hiring, renumeration, and onboarding processes.

2. **Automatic contribution initiatives**. Employers can provide contributions or automatically deduct a portion of their employee's salary to be contributed into their retirement fund. Going further, employees can be given the option to commit to a higher contribution rate when they receive a promotion or a pay rise, similar to Richard Thaler and Shlomo Benartzi's Save More Tomorrow (SMarT) programme[28]. This way, present bias and loss aversion can be minimised as the impact of their decisions will only be felt in the future. The SMarT plan has demonstrated its effectiveness in encouraging participation in pension schemes and raising the average savings rate of participants, and has since been incorporated into the Pension Protection Act of 2006 in the US (Thaler and Benartzi, 2004).

Intervention 2 – Ease decision making

Providing simple information and decision aids is another effective way of helping individuals make better retirement planning decisions. This could take the form of:

1. **Rules of thumb**. Easy-to-digest guides that provide memorable rules of thumb for saving and investing can help investors to sift through complex calculations and financial jargon. For example, showing the potential returns in full Ringgit value instead of a percentage could help people easily understand the potential benefits of an investment portfolio.

2. **Checklists for retirement-related investing and financial planning**. These would minimise the trepidation of not knowing where to begin one's retirement planning journey, which can be greatly discouraging.

3. **Automatic enrolment**. By making participation in retirement planning schemes as the default option, cognitive overload can be avoided as employees would not be required to search for a suitable retirement plan or savings account, find and contact an agent, or go through tedious paperwork.

4. **Limited set of investment options**. Providing employees with fewer investment options to choose from can greatly reduce decision fatigue. In fact, a report by the BIT (2018) finds that people have a tendency to delay making decisions if they are faced with a large amount of information or are given too many options.

[28] SMarT plan: http://www.shlomobenartzi.com/save-more-tomorrow.

Intervention 3 – Enhance communications strategies

Though communications on retirement planning and savings are already targeted towards the middle income, these strategies could be further enhanced to improve its efficacy:

1. **Emphasising the benefits of long-term savings**. It might be prudent to encourage saving, even if in small amounts, as the first thing to do before other expenses come into the picture while disincentivising withdrawals, as a means of achieving their desired higher standard of living. After all, saving a little a day is still better than not saving at all, given the benefits of compound interest and long-term investment horizons. This can be achieved by explicitly communicating the impact of compounded interest on their savings and presenting clear illustrations on how much one would lose if they made a withdrawal now versus in the future. Indeed, providing important information in a simplified manner can nudge individuals towards making better savings decisions.

2. **Engaging savers at multiple touchpoints in a lifecycle**. Taking into account the multiple financial priorities present in middle-income lifestyles, 'just-in-time' decision making aids can catch individuals as they embark on new financial goals such as when children come into the picture or begin schooling, buying a house or vehicle, entering the workforce, changing jobs, getting married, birthdays, anniversaries, and so on – by providing these individuals with pertinent and consequential information and clear steps to take towards retirement planning as these touchpoints occur.

Intervention 4 – Implement a sidecar savings model

Though perhaps in less need of greater access to liquidity than gig workers, a sidecar savings model can also be useful for the middle income community. Having multiple, separate savings pots could help them focus on achieving their short-term financial goals, thereby encouraging a more consistent savings habit which can build up their long-term retirement fund. A sidecar savings model can also take advantage of automatic contributions, which overrides the need for more decision making points.

Persona #4 – To-be retirees

Challenges faced

Challenge 1 – Longevity risk

One of the most significant challenges to-be retirees face is longevity risk, which is the risk of outliving their retirement savings. This issue is more prevalent today as advancements in healthcare technology have greatly increased life expectancies. Not only does this result in individuals needing a larger savings pot at the time of retirement, but the issue is further compounded by overconfidence, with Malaysians overestimating the adequacy of their savings at the age of retirement[29].

[29] A joint study by PIDM and BIT (2021) shows that those aged between 45-54 years old exhibited the highest levels of overconfidence among all age groups.

Challenge 2 – Over-investment in risky portfolios

Overconfidence among the to-be retirees also increases the possibility of investing in portfolios that are mis-aligned to their goals and risk appetite. Firstly, many Malaysians close to retirement feel confident in their financial knowhow, choosing to completely withdraw their pension funds in favour of self-managing their savings[30]. Furthermore, it is a social norm among Malaysian to-be retirees to rely heavily on their children to fund their retirement, which in turn leads to them to over-invest in risky positions instead of building up a safer retirement portfolio. While this may not be as pressing an issue for multigenerational households, it can still put undue financial pressure on the family's younger members and may in fact lead to greater financial distress across generations.

Potential interventions

Intervention 1 – Communicate retirement risks better

To reduce overconfidence, communications to to-be retirees need to be effective in helping them learn about the future costs that may be incurred during their retirement – such as unexpected medical expenses – and that their existing funds may not be sufficient. This can be achieved by:

1. **Visualising the future.** Communications should explicitly mention the risks of unexpected expenses, undiversified financial portfolios, greater financial strain on their children, and rising costs of living. In fact, this could also be supplemented with a visualisation of a hypothetical retirement lifestyle of an individual with their current level of savings. More explicit communication strategies can help to-be retirees be more cognisant of the realities of their future life, which can encourage them to increase their savings rate in the lead up to their retirement.

2. **Communicating how others are doing.** This could take the form of messages that show them if they are below the average savings rate of other individuals in their age group or feedback on the average performance of self-managed retirement funds compared to pension schemes. By communicating such information, to-be retirees can be made more aware of their current financial standing as compared to others, as well as better understand their own investing capabilities. In fact, this reinforcement of social norms to induce a particular action – in this instance, saving – is a commonly used behavioural tool and has been proven to be effective. A study led by financial think tank CGAP, in partnership with the World Bank's eMBeD, Financial Sector Deepening Tanzania, Busara Center for Behavioral Economics, and Airtel Money Tanzania, found that communicating the savings balances of 'super-savers' could raise the savings rate of participants by an average of 11% (Pillai and Owsley, 2017).

Intervention 2 – Encourage more sustainable withdrawals

Another potential intervention to aid those who may be overconfident in their financial management competence is to introduce decumulation strategies that discourage full withdrawal of their pension savings at retirement. This can take the form of:

[30] This is according to information provided by KWAP during discussions with the SC and PPA.

1. **Incentives for sustainable withdrawals.** Penalties for lump-sum withdrawals or income tax breaks for more sustainable withdrawals could be considered as a means of making long-term savings more attractive[31].

2. **Adding decision points during the withdrawal process.** To encourage individuals to give more thought before withdrawing their retirement savings, warning messages could also be sent to to-be retirees that have chosen, or have indicated that they are considering, lump sum withdrawals. These messages could include an illustration of the benefits of periodic withdrawals as opposed to a lumpsum one. Going further, those still keen on lump-sum could be further directed towards financial planning services to help mitigate the risk of outliving their retirement pot.

3. **Curating financial planning and advisory programmes just for to-be retirees.** Such targeted financial planning and advisory services can help those in this demographic learn how their accumulated retirement savings can be sustained through the remainder of their lives. Financial planning for this group should promote annuity programmes, as well as guide future retirees in managing funds by incorporating various rules of thumb and/or mental accounting to budget for the year ahead.

Persona #5 – Entrepreneurs

Challenges faced

Challenge 1 – Heavy financial pressure

Among freelancers and small-business owners, it is not unusual for their personal and business funds to be highly interconnected, with many entrepreneurs freely and willingly using personal savings as capital for their work. However, the importance placed on growing or sustaining their business can oftentimes outweigh their personal needs. This, coupled with the irregular income streams commonly faced by this segment, could lead to heavy financial pressure, whereby entrepreneurs view funds dedicated for business purposes to be of higher importance, while keeping personal expenditures to only current and urgent needs, deprioritising future retirement needs in the process.

Challenge 2 – False sense of security

Given the possibility of greater earning potential as compared to their formally employed peers, entrepreneurs may develop a false sense of security with regards to their future retirement life[32]. This overconfidence, however, may in turn lead entrepreneurs to unnecessarily delay the process of planning and saving for retirement.

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[31] Sustainable withdrawals refer to those that are based on decumulation strategies such as the '4% rule'. This rule suggests that retirees can safely withdraw 4% of their savings during the year they retire and adjust for inflation each subsequent year for 30 years, providing a steady income stream through dividends earned while preserving principal savings.

[32] A study by Singh (2020) finds that most entrepreneurs are overconfident in their own abilities, which often leads to financial underperformance. Separately, there is also some evidence that the median self-employed individual earns more than the median salaried employee (Sorgner, Fritsch, and Kritikos, 2014).

Challenge 3 – Lack of retirement support

Due to the informal nature of their work, entrepreneurs experience a very similar issue to gig workers – that is, a lack of access to retirement support. Without automatic, direct access to occupational pension programmes such as EPF and KWAP, cognitive overload can arise among entrepreneurs attempting to save for retirement. Furthermore, unlike gig workers who may provide services for a company which can take on a larger role in building retirement savings, many freelancers and smallbusiness owners answer only to themselves, putting the onus of ensuring adequate retirement funds solely on the saver. Separately, though still facing irregular income sources, those in this segment are also less likely to experience insufficient income than gig workers.

Potential interventions

Intervention 1 – Use rewards to incentivise savings

Present-focused individuals, such as entrepreneurs, could be enticed to save through immediate gratification in the form of rewards. Tax relief from the government for parking away retirement savings is one such solution, but a more immediate form of gratification could be virtual reward points that can be exchanged for goods. For example, points earned from a retirement scheme provider can be exchanged for electronics, fashion accessories, etc.

Intervention 2 – Emphasise visualising the future

Addressing present bias and overcoming the effects of overconfidence could also involve making the future more salient by encouraging entrepreneurs to visualise themselves and their businesses in the future. For example, communications to entrepreneurs can include a series of forward-looking questions or a simulation of future scenarios, nudging respondents that the future may not be as far away as they would think. In fact, by providing a clear picture of what being unprepared for retirement could look like, entrepreneurs could be made more cognisant of the importance of prioritising their own personal financial needs and how that may, in turn, be better for the long-term sustainability of their business.

Intervention 3 – Personalised retirement planning services

Though potentially financially-savvy to a degree, it is important that entrepreneurs be provided easy access to personalised retirement planning services and products that can cater specifically for this community, as the needs of entrepreneurs can be quite different from others. In this case, PPA's ORCA platform can again be leveraged to begin the retirement planning process for entrepreneurs – similar to gig workers – to ease their cognitive burden. Furthermore, access to ORCA or other retirement planning services can be made available via regular touchpoints for the community – such as SME associations and the banks – and can be coupled with recommended retirement products as well.

Intervention 4 – Automate savings

In easing the efforts of entrepreneurs, a key strategy would be to ensure that the savings process is as automated as possible, reducing potential decision points which can be burdensome. Given that the entrepreneurs persona is assumed to have higher incomes and are less in need of liquidity than gig workers, commitments such as automatic contributions into retirement schemes when salaries or fees are paid are a more suitable solution for this segment. In fact, setting a pre-specified amount to be contributed would negate the need to constantly decide whether to save for retirement. This could be supplemented with a feature to adjust the contribution amount based on income received for a given time period, or based on the achievement of certain milestones (e.g. when quarterly dividends are paid across a pre-determined threshold).

CHAPTER 4

Conclusion

Malaysia is set to become an aged nation by 2030. Current issues of retirement savings inadequacy – exacerbated further by mass withdrawals from EPF and PRS during the COVID-19 pandemic – as well as rising healthcare and pension expenditure will only become more salient as the working-age population shrinks and the tax base erodes, potentially causing a large strain on public finances. Compounding this issue further, the nature of work in Malaysia has been rapidly shifting, with many looking towards gig work and self-employment which do not provide direct access to public and occupational pension schemes.

Without undermining the need to address the structural causes of retirement savings inadequacy, a behavioural approach to this issue should also be taken. Undoubtedly, many of the underlying problems that have led to this inadequacy of retirement savings are structural in nature – insufficient wages, rising living costs, low public pension coverage, and a lack of access to financial services are several such examples. However, there is also a behavioural aspect that ought to be considered; our prior review of the literature, as well as through discussions with the various retirement stakeholders in the SC retirement workshop, revealed that individual choices and preferences can at least partially explain the lack of retirement savings in certain communities. Recognising the severity of the current situation, we firmly believe that a holistic approach must be taken; one that involves viewing this issue from a behavioural lens without undermining any efforts to tackle the structural problems.

The use of behavioural interventions to encourage retirement savings is not new. The OECD estimates that roughly 200 institutions around the world have begun applying behavioural insights in their policymaking. In fact, there are already numerous examples of financial regulators, the FCA and OSC being notable examples, turning to behavioural solutions as a means of safeguarding the retirement savings of their population – to good effect. Indeed, many behaviourally informed initiatives around the world, be it in the retirement space or otherwise, have proven to be successful in 'nudging' individuals towards a desired behaviour.

Using a framework of personas, we identified common behavioural challenges faced by different segments of Malaysians and proposed several interventions to overcome them. By categorising the Malaysian workforce into five different personas, we were able to pinpoint the behavioural barriers inhibiting each persona from building up their retirement savings. Then, anchored on challenges that are more specific towards a certain group of individuals, we proposed and elaborated on several targeted behavioural interventions that aim to encourage Malaysians to save more for retirement. Indeed, we hope that this paper would be able to contribute to the ongoing global discourse on the role of behavioural economics in the retirement savings space, as well as to provide broad guidance on the possible adoption of such behavioural solutions locally.

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APPENDICES

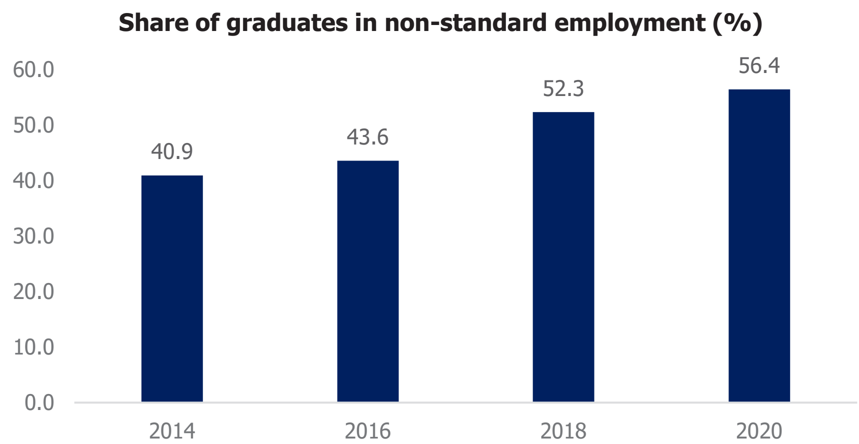
Appendix A – The Changing Nature of Work in Malaysia

As highlighted in Chapter 1, retirement savings inadequacy is further worsened by underlying trends in the economic environment and labour force. In particular, the changing nature of work and its increasing precarity will affect Malaysians' social and retirement security for years, if not generations to come.

To begin with, today's rapid pace of technological development is resulting in accelerated cycles of obsolescence in the types of work available. The introduction of new technologies in the workforce may benefit some occupations, but also risks rendering more lower-skilled workers obsolete. This is especially pertinent in Malaysia given the significant prevalence of low-skill workers. It is also more likely that these workers have inadequate retirement savings due to their income levels, notwithstanding their increased employment precarity in the years ahead.

The increasing precarity also extents the trend of the growing number of Malaysians involved in nonstandard work – i.e., workers without the security of full-time jobs and the standard employeremployee relationship. In addition, today's workers are likely to switch jobs more frequently (Khazanah Research Institute, 2017), which provides greater autonomy for workers but also erodes the stability of traditional full-time fixed modes of employment. This rise of independent work and alternative work arrangements, including contract and gig work has been reflected in Malaysia's increasing number of workers in non-standard employment, which includes contract, temporary, selfemployed and family workers who are not in traditional, permanent jobs (Figure A.1).

Figure A.1: The steadily rising trend of non-standard work in Malaysia



Note: Non-standard employment refers to contract, temporary, self-employed, and family workers.

Source: Department of Statistics Malaysia (DOSM), Graduates Tracer Study.

Although the flexibility offered by the changing nature of work has offered benefits to workers, the COVID-19 pandemic has unfortunately also highlighted the vulnerability of workers in these circumstances. According to an International Labour Organization (ILO) report on the socioeconomic impacts of COVID-19 in Malaysia, many of the most impacted were from B40 households, which themselves were more likely to include casual and low-skilled workers at higher risk of job loss (Lim, 2021). DOSM's survey of workers during the pandemic also showed that the self-employed were the least likely to have sufficient financial savings, with only 5% of self-employed having sufficient savings for at least 3 months (Lin, 2021; Figure A.2). COVID-19 also increased informal employment in the economy as an avenue to provide or supplement income during the economic downturn caused by the pandemic, such as via small scale enterprises and short-term jobs (Tumin, 2021). While these decisions exhibit the extraordinary measures taken by individuals during the pandemic to sustain their livelihoods, it has also contributed to the increasing informality of the Malaysian workforce.

Figure A.2: Sufficiency of financial savings by employment status during the COVID-19 pandemic

Employment status	Sufficient for less than 1 month	Sufficient for at least 3 months
Self-employed	71.4	5.0
Employer	49.2	10.5
Private employee	58.0	8.2
Multinational company employee	31.2	13.7
Govt. linked company employee	38.9	11.0

Source: Lim (2021).

Besides informality, another underlying trend facing Malaysian workers is job polarisation – semiskilled occupations are experiencing declines in their share of total employment, whereas occupations on both ends of the skill-wage spectrum are seeing employment gains. A similar trend can be seen in the polarisation of wages, with middle-skill and even high-skill jobs experiencing stagnation in wage growth (Abdul Hamid and Sazali, 2020). These create a 'vanishing middle' in the workforce, increasing pressure on middle-skilled workers and their financial livelihoods.

Evidently, different groups of Malaysians face unique challenges relating to retirement insecurity. The specific sets of difficulties faced by these different groups – from those in formal employment to those in gig work, or those fresh to the workforce to those soon to be retired – means it is difficult to expect general, untargeted policy actions to have any meaningful impact on retirement savings inadequacy. Indeed, gaining a more nuanced understanding of these differences in challenges must be the first step towards formulating comprehensive and holistic solutions for each target group.

It is important, now more than ever, for institutions affecting retirement to adapt to the fast-changing landscape of work (Khazanah Research Institute, 2017). The rules and systems governing retirement security will need to retain the stability and security of traditional safety nets, while not compromising on the flexibility and dynamism of modern jobs. As workers move through job cycles more rapidly, retirement benefits may need to refrain from being tied to any one single job, but rather be attached to the individual worker instead as they journey through the workforce. With the advent of new jobs in the platform and gig economy, future retirement saving methods should also be proportionate to how much a worker works or earns, whether paid on an hourly basis, monthly basis, or irregularly as is sometimes the case with self-employed and informal workers. Given the diversity and complexity of needs and challenges, it becomes clear that any work to address the issue of retirement insecurity will require multiple stakeholders to come together.

Appendix B – Retirement Workshop: Exploring the Application Of Behavioural Insights

The SC hosted a retirement workshop in August 2022 to:

- Develop a better understanding of behavioural insights among retirement stakeholders.
- Learn more about behavioural biases that exist within the various communities in Malaysia, especially with regards to attitudes towards retirement and savings.
- Explore potential applications of behavioural insights to nudge Malaysians into making better decision to prepare for retirement.

The workshop was attended by key stakeholders in the retirement ecosystem including fund managers, employers, digital services, and various agencies, and was jointly facilitated by the Behavioural Insights Team (Singapore).

Info Box 1: Participants in the SC's retirement workshop

Agencies
- Securities Commission Malaysia
- Employees Provident Fund
- Federation of Investment Managers Malaysia
- Private Pension Administrator Malaysia

PRS Providers & Distributors
- Affin Hwang Asset Management
- AIA Pension and Asset Management
- AmInvest
- Hong Leong Asset Management
- iFast Capital
- Kenanga Investors Berhad
- Principal Asset Management
- Public Mutual
- RHB Asset Management

Digital Investment Manager
- MyTHEO
- Raiz Malaysia
- Stashaway Malaysia
- Wahed Invest Malaysia

Academia & Subject Experts
- Behavioural Insights Team Singapore (Facilitator)
- University of Malaya
- Institute for Capital Market Research Malaysia

Employers
- Affin Hwang Investment Bank
- Food Panda Malaysia
- GoGet
- Malaysian Employers Federation

Digital Platforms
- Ringgit Plus
- Shopee Malaysia

Workshop participants set out to identify relevant behavioural biases that exist in Malaysian society, as well as actionable projects that could address said biases and encourage greater retirement planning and savings among the Malaysian workforce. To account for the heterogeneity that exists across various communities in Malaysia, participants were divided into groups, with each group focusing on one of five personas that the SC team had deemed to be representative of typical individuals within the Malaysian workforce, which are the youth, gig workers, middle income, to-be retirees, and self-employed[33].

[33] While the term 'entrepreneurs' was used throughout the paper, the retirement workshop had referred to that persona as 'self-employed' instead, though the definition of the persona remained largely similar.

Among the key behavioural barriers identified during the workshop were:

- **Present bias:** A tendency to focus on what is needed or desired at present with little emphasis on future payoffs, such as a comfortable retirement life. This behavioural barrier is prevalent among the self-employed and gig workers.

- **Overconfidence:** An overestimation of one's knowledge, ability, and preparedness when it comes to retirement planning and saving. This behavioural barrier is prevalent among the youths, to-be retirees, and self-employed.

- **Social norms:** An unspoken set of rules and expectations from people around us that influence our decision making. For example, there may be an inclination towards focusing on unnecessary purchases today at the expense of better retirement planning if others are also doing so. This behavioural barrier is prevalent among the middle-income, youths, and to-be retirees.

Lastly, participants brainstormed potential solutions to mitigate these behavioural biases to encourage retirement planning and savings by Malaysians. The insights from these discussions, together with additional commentary by the authors, is presented in Chapter 3.

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