

Name & Topic

Daniel Bofinger, Superannuation

Abstract

The purpose of the superannuation system is to provide or supplement an adequate level of retirement income¹. Under the current system, Australians need to take an active role in saving for retirement in order to save appropriately. As economic incentives to utilise super are strong, and the products available are effective, most rational people would participate. However, people aren't rational. They discount the value of things in the future in favour of the present², and the need for superannuation is not immediate. They experience cognitive fatigue when faced with complicated choices which cause them to defer or ignore difficult decisions³, and super is complex. They are powerfully motivated by social norms⁴, and super is not broadly understood or utilised. As a result, active participation in super is low. 63% of Australians have their super in default investment options⁵. 87% did not make concessional contributions above SG rates in FY15/16⁶. The average Australian has between 2 and 3 super accounts⁷.

This paper examines innovation in superannuation through the lens of behavioural economics. It puts forward three sets of recommendations which aim to maximise retirement incomes in Australia by working with the grain of hard-wired human behaviour, helping participants to make decisions that are in their best interest. First, it recommends new methods of engaging with customers to make them active participants in their super. Second, it recommends putting passive participants in the best possible position by setting tailored 'smart defaults' where no decision is made. Third, it recommends reframing how retirement is positioned, and the place that super has in retirement, in order to encourage Australians to stay in the workforce for longer.

Executive Summary

Current state

Since 1960, residual life expectancy at age 65 has increased by 6 and 7 years for males and females respectively⁸. As a result, people are spending larger proportions of their lives out of the workforce, and they run the real risk of outliving their assets⁹. In addition, the Australian population overall is aging, reducing the working population and putting pressures on the transfer system and health care spending¹⁰. In this context, innovation in the \$2.1 trillion superannuation system is critical to Australia's retirement solution.

The super industry has traditionally expected customers to act rationally. Logically, more information is better than less, and more options are better than fewer. As a result, lengthy disclosures and a broad variety of investment options have become the status quo. But humans are not rational agents.

Behavioural economics

The field of behavioural economics studies the biases and cognitive limitations that humans have, and is one of the great untapped opportunities in financial services. It will be a strong source of innovation in an industry that has traditionally addressed low engagement with additional disclosures and economic incentives. It provides insights on how to construct choice architecture that helps participants to make decisions that are in their best interests. In industries as broad as medicine, military and garbage collection, behavioural economics has produced results comparable with substantial changes in price or incentive – but at little or no cost.

The problems

Contributing to super: A comfortable lifestyle in retirement for a single person requires retirement assets of approximately \$545,000^{11 12}. Someone earning \$100,000 p.a. (well above average¹³) and contributing 12% SG contributions and nothing further can expect approximately \$487,000 at retirement¹⁴. Further, women retire on lower average superannuation balances¹⁵ and have higher life expectancies¹⁶, increasing their risk of outliving their assets. Contributing to superannuation above SG rates would help address these problems, however, 87% of people did not in FY15/16¹⁷. It is clear that additional contributions will be required to close these gaps.

Default investment options: The average super default option has a moderate profile¹⁸ (70% growth assets, 30% defensive assets). For a majority of younger investors, this is too conservative for their investment horizon. For a majority of investors approaching retirement, it is too aggressive, and exposes them to sequencing risk. 63% of Australians have their super in default investment options¹⁹.

Multiple super accounts: Having multiple superannuation accounts increases fees paid as well as complexity. This complexity adds an additional barrier to engagement with super. On average, Australians have between 2 and 3 super funds²⁰.

Recommendation 1: Active participants in super

A reason many lack interest in contributing to super, despite strong economic incentives to do so, is hyperbolic discounting of the future state²¹. Humans focus much more on immediate needs than on future needs – going out for dinner tonight seems more important than saving for retirement decades away. However, humans make effective decisions when present needs are not involved.

One method of engaging people is through social norms – people are powerfully influenced by what people like them are doing²². When electricity companies post bills which compare the power usage of people on a street, average electricity usage reduces by 4%²³. A similar letter from a super fund might indicate a level of salary sacrifice that someone of the same age, gender and super balance should make to receive a comfortable retirement.

Another potential method is having super members pre-commit to contributing to super some portion of a future income increase. This means they would be comparing future income with future needs. This allows hyperbolic discounting to work in favour of additional contributions. A comparable project in the United States increased contributions from participants by 10%, and 80% of participants kept their commitments²⁴.

Recommendation 2: Passive participants in super

Some portion of customers are likely to always be passive. One of the most powerful tools in behavioural economics is the default – when a large proportion of people choose to do nothing, setting the default is critical²⁵. Passive participants can be supported by setting default arrangements which are in their best interest and which are tailored to individuals based on age, gender and super balance. If no decision is made, these ‘smart defaults’ would implement the outcome that would best suit the majority.

A default, opt-out salary sacrifice arrangement with a rate based on age, gender and super balance would reach the 87% of members who did not make concessional contributions in FY15/16. Care would need to be taken to ensure that the arrangement was appropriately disclosed before implementation, and took into account the customer’s expense profile. Employers would also need to be engaged in order to implement it. However, the benefit of additional contributions by the majority almost certainly outweighs the costs.

Glide path investment options, in which asset allocation changes from aggressive to conservative as the customer approaches retirement. They are already available in some products. If they were made the default investment option for all members, the 63% of investors currently in Moderate investment options would have an asset allocation more appropriate to their situation, with no need for engagement. Data from a product that has already implemented glide path options indicates they are effective, with younger investors in more aggressive allocations and older investors in more conservative.

Finally, a default, opt-out consolidation of superannuation accounts would reduce the average number of accounts per person from between 2 and 3 to nearly one. Customers would be made aware of the system, and would have an opportunity to opt out. The fund to be rolled into would be determined by either balance or most recent contribution. Defined benefit accounts and accounts with insurance (above MySuper minimum insurance) would not be consolidated. A fee and insurance premium threshold should be implemented to prevent default investment in expensive or legacy products.

Recommendation 3: Rebranding retirement

When asked at what age they intend to retire, most people will say 65²⁶. This is particularly because of the age pension, which has created expectations about the age many expect to cease work. 47% of men and 30% of women in retirement listed it as the reason they ceased their last job²⁷ – behavioural economics refers to this effect as ‘anchoring’²⁸. Now, however, the age at which people can be expected to cease work is increasing. Average life expectancy at birth for men and women has increased from 55.2 and 58.8 years in 1901²⁹, to 80.1 and 84.3 in 2013³⁰. Quality of later life has also improved. In 2012, men and women at age 65 had a projected average of 8.7 and 9.5 further years without any form of disability, an increase of 2 years since just 1998³¹. The age pension age was recently increased from 65 to 67. 72% of older workers indicated that they are happy to continue working regardless of finances³². It is also interesting that 67% of workers between 70 and 75 years listed non-financial reasons for continuing to work, such as self-esteem, camaraderie, and personal enjoyment³³.

Retirement could be rebranded by removing the age pension in favour of a needs-based approach through an expanded disability and unemployment pension. This would create a culture in which all Australians work regardless of age unless they fund their lifestyle through savings (including superannuation), are unable to work due to illness or injury, or are able to work but unable to attain (or retain) employment. It would remove the arbitrary concept of a ‘retirement age’, while still providing for those who are unable to provide for themselves. The timing of this change should be calibrated with a particular benchmark in the super system, for example, the cohort who were 18 years old when SG reached 9%.

Superannuation conditions of release should not be adjusted. Changes to superannuation rules will create disengagement and damage trust even among currently active participants – how can they contribute to superannuation when they don’t trust the system to remain the same? The same effect can be observed in other changes to super, including those released in the 2016 Budget. In addition, the current conditions of release are appropriate, allowing a privately funded retirement or semi-retirement to those who have saved throughout their working life, and lump sum withdrawals to meet immediate retirement needs.

Rebranding retirement as a process rather than an age would create benefits for employers, government, and individuals. Each additional year the average employee continues working increases national retirement savings by \$200 billion³⁴, as well as increasing tax revenues, decreasing transfers paid, and maintaining skills and experience in the workforce. For the individual, health declines more slowly in those who continue working past 65³⁵, and each year they delay retirement increases their income and savings. By priming Australians to expect publicly funded retirement only where they are unable to work, and presenting privately funded retirement as a process rather than a particular age, these benefits can be realised.

Summary and Benefits

This suite of changes would increase retirement incomes for Australians. At retirement, the increased savings built up as a result of these recommendations will benefit the individuals and the country as a whole. Increasing active engagement with super, and improving default outcomes for passive investments, will support these savings. Reframing retirement and having people spend longer in the workforce will increase national retirement savings, improve the health of individuals who continue to work, and reduce government spending on transfers and health.

Further, the superannuation industry has an opportunity to continue innovating the way it engages customers. By testing products through a minimum viable system, and new methods of engagement through randomised controlled trials, new innovations can be uncovered at low cost and great benefit. By engaging regulators in this process, new products and methods can be collaborative and meet the intention of the legislation, not just the letter.

In the context of rising life expectancies, longevity and sequencing risks, and pressures on government spending on health care and transfers, innovation in the \$2.1 trillion superannuation system is critical to Australia’s retirement solution.

Footnotes and References

- ¹ Australian Government Treasury, *Objectives and Principles of the Australian Superannuation System*, <http://www.treasury.gov.au/Policy-Topics/SuperannuationAndRetirement/supercharter/Report/Chapter-4>, 2016, accessed 6 June 2016
- ² David Laibson, 1997, *Golden eggs and hyperbolic discounting*, Quarterly Journal of Economics 112(2): 443-477
- ³ Kahneman, D, *Thinking Fast and Slow*, 2011, page 41
- ⁴ Sunstein, Cass R and Thaler, Richard H, *Nudge: Improving Decisions About Health, Wealth and Wellbeing*, Yale University Press, 2008
- ⁵ Investment Trends – discussion with analysts
- ⁶ Investment Trends, *2015 Member Sentiment & Communications Report*
- ⁷ Investment Trends – discussion with analysts
- ⁸ Australian Institute of Health and Welfare, *Life Expectancy*, <http://www.aihw.gov.au/deaths/life-expectancy/>, 2016, accessed June 2016
- ⁹ J.P. Morgan Asset Management, *The lifecycle of spending*, January 2014, page 1
- ¹⁰ Australian Government Treasury, *Australia's Demographic Challenges*, http://demographics.treasury.gov.au/content/_download/australias_demographic_challenges/html/adc-04.asp, 2016, accessed 6 June 2016
- ¹¹ ASFA, *ASFA Retirement Standard*, 2015, page 4
- ¹² This figure assumes access to the age pension under income and assets tests as scheduled for 1 January 2017.
- ¹³ Australian Bureau of Statistics, *6302.0 - Average Weekly Earnings, Australia Nov 2015*, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/6302.0>, 2015, accessed 6 June 2016
- ¹⁴ ASFA, *Supplementary submission in response to the Tax Discussion Paper*, July 2015, page 12
- ¹⁵ The Senate Economics References Committee, *A husband is not a retirement plan*, April 2016, page 11
- ¹⁶ Australian Bureau of Statistics, *ABS Life Tables, 3302.0.55.001 - Life Tables, States, Territories and Australia, 2011-2013*, 2014
- ¹⁷ Investment Trends, *2015 Member Sentiment & Communications Report*
- ¹⁸ APRA, *An Analysis of Superannuation Fund Default Options*, 14 November 2008
- ¹⁹ Investment Trends – discussion with analysts
- ²⁰ Investment Trends – discussion with analysts
- ²¹ Ariely, D, *Predictably Irrational: The Hidden Forces That Shape Our Decisions*, 2008

²² Sunstein, Cass R and Thaler, Richard H, *Nudge: Improving Decisions About Health, Wealth and Wellbeing*, Yale University Press, 2008

²³ Sunstein, Cass R and Thaler, Richard H, *Nudge: Improving Decisions About Health, Wealth and Wellbeing*, Yale University Press, 2008

²⁴ Sunstein, Cass R and Thaler, Richard H, *Nudge: Improving Decisions About Health, Wealth and Wellbeing*, Yale University Press, 2008

²⁵ “The combination of loss aversion with mindless choosing implies that if an option is designated as the “default,” it will attract a large market share. Default options thus act as powerful nudges.” - Sunstein, Cass R and Thaler, Richard H, *Nudge: Improving Decisions About Health, Wealth and Wellbeing*, Yale University Press, 2008

²⁶ Australian Bureau of Statistics, *6238.0 - Retirement and Retirement Intentions, Australia, July 2012 to June 2013*, <http://www.abs.gov.au/ausstats/abs@.nsf/featurearticlesbytitle/828523E54C84B381CA257C39000B69EB?OpenDocument>, 2013, accessed 6 June 2016

²⁷ Australian Bureau of Statistics, *6238.0 – Retirement and Retirement Intentions, Australia, July 2012 to June 2013*, 2013

²⁸ Kahneman, D, *Thinking Fast and Slow*, 2011, page 119

²⁹ Australian Bureau of Statistics, *3302.0 – Deaths, Australia, 2010*, 2010

³⁰ Australian Bureau of Statistics, *ABS Life Tables, 3302.0.55.001 - Life Tables, States, Territories and Australia, 2011-2013*, 2014

³¹ Australian Institute of Health and Welfare, *Healthy life expectancy in Australia: patterns and trends 1998 to 2012*, 2014

³² Financial Services Council and Commonwealth Bank of Australia, *FSC-CBA Older Workers Report*, 2015, page 9

³³ Financial Services Council and Commonwealth Bank of Australia, *FSC-CBA Older Workers Report*, 2015, page 20

³⁴ Financial Services Council and Commonwealth Bank of Australia, *FSC-CBA Older Workers Report*, 2015, page 3

³⁵ US Health and Retirement Study, *Why Retire Later? UM Experts Show How To Encourage Longer Careers*, <http://www.ns.umich.edu/new/releases/20705-why-retire-later-u-m-experts-show-how-to-encourage-longer-careers>, 2015, accessed 6 June 2016

Innovation in Superannuation

FSC Future Leaders Award 2016

Daniel Bofinger

Manager, Strategy, CBA Wealth Management

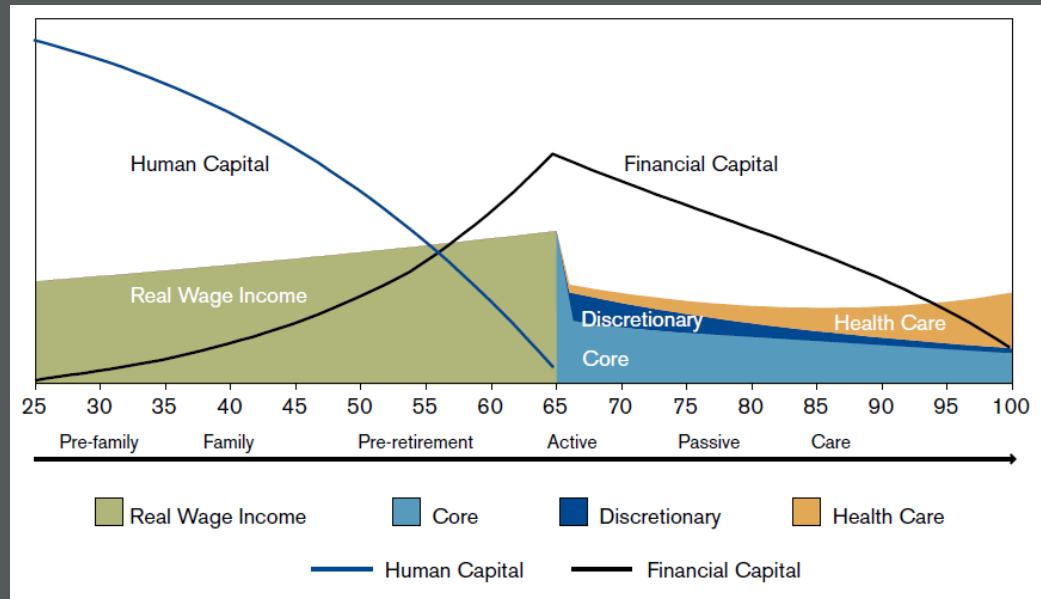
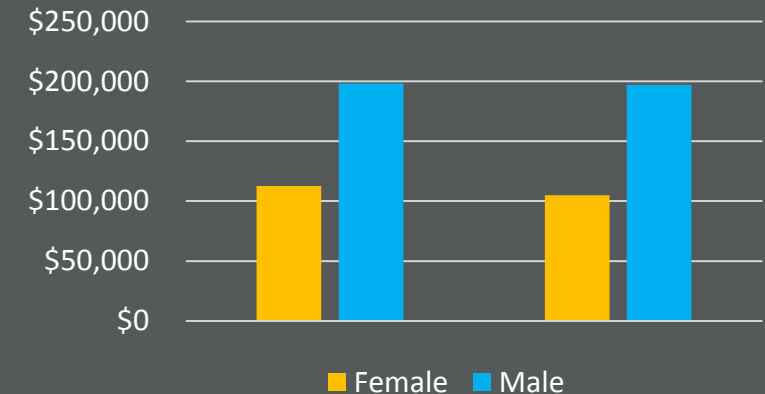


The context

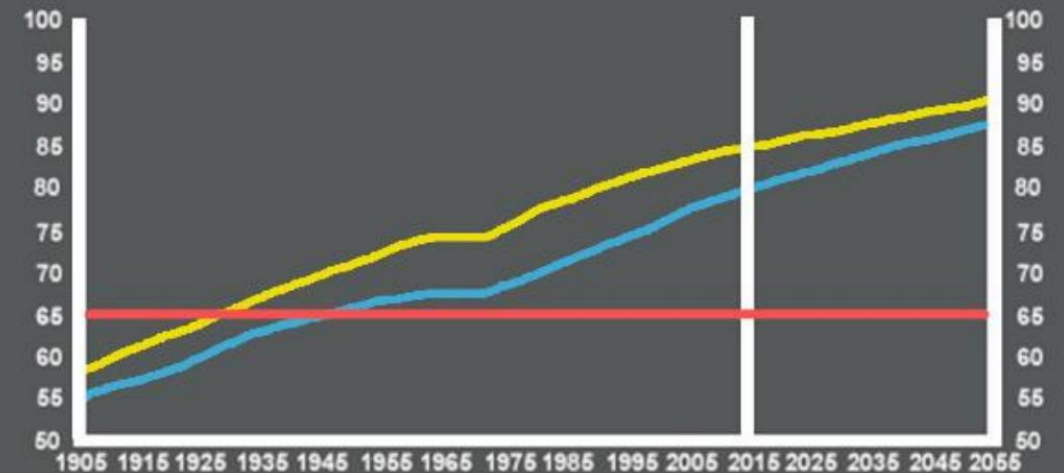


- **Engagement is low**
 - 63% have super in default options
 - 87% do not make concessional contributions above SG
 - The average Australian has between 2 and 3 accounts
- **Average retirement assets are inadequate**
 - A comfortable retirement: \$545,000 (with age pension, current rules)
 - Average super balance at retirement: \$155,000
 - Super is the main retirement asset in Australia

Super balance at retirement




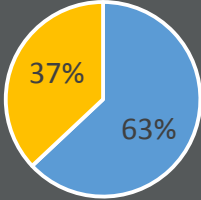

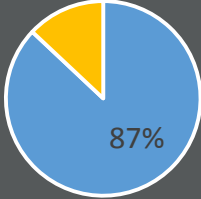

Life expectancy at birth



Defining success



Improving retirement outcomes, as measured by:

	Current state	Addresses:
Appropriate asset allocation 	 <p>■ Default ■ Non-default</p>	<ul style="list-style-type: none">• Investment horizon• Sequencing risk
Concessional contributions 	 <p>■ CC ■ No CC</p>	<ul style="list-style-type: none">• Retirement assets• Imbalance in retirement assets• Longevity risk• Use of economic incentives
Number of accounts 	2-3 per person, on average	<ul style="list-style-type: none">• Reduce complexity• Reduce fee erosion

Behavioural economics



What

- Intentional choice architecture
- Best outcome for user, as defined by user
- No mandate or incentive

Why

- Cheap
- As effective as substantial economic incentives
- Maintains user choice

How

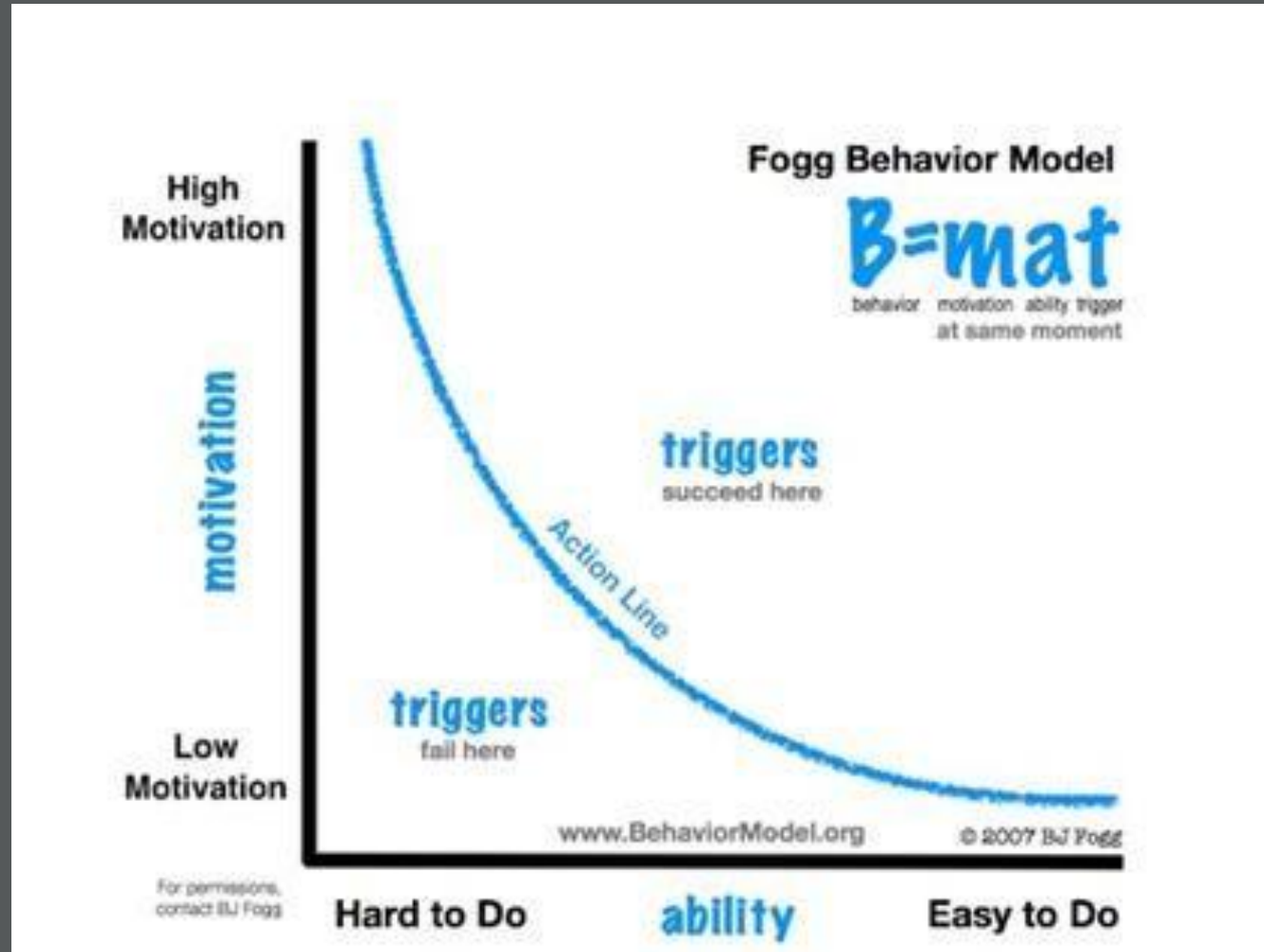
- Work with grain of human behaviour
- Insights from psychology and neuroscience



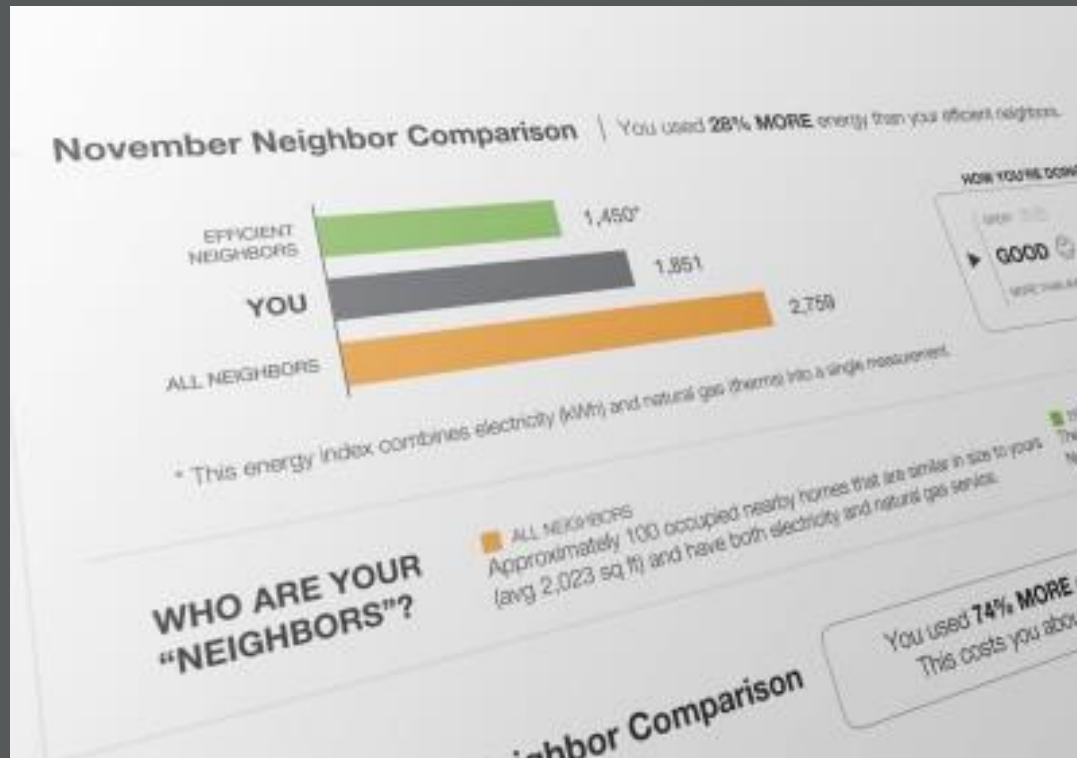
Recommendation 1: Active participants



- Use insights from behavioural economics to increase engagement with super

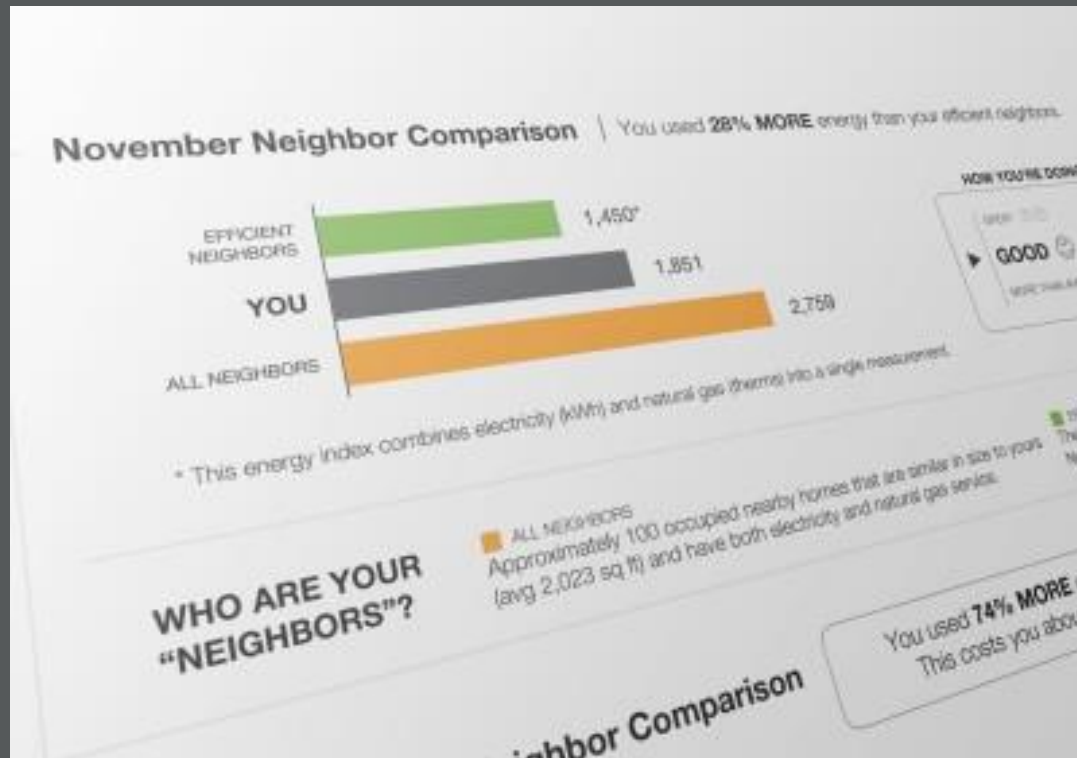


Social norming

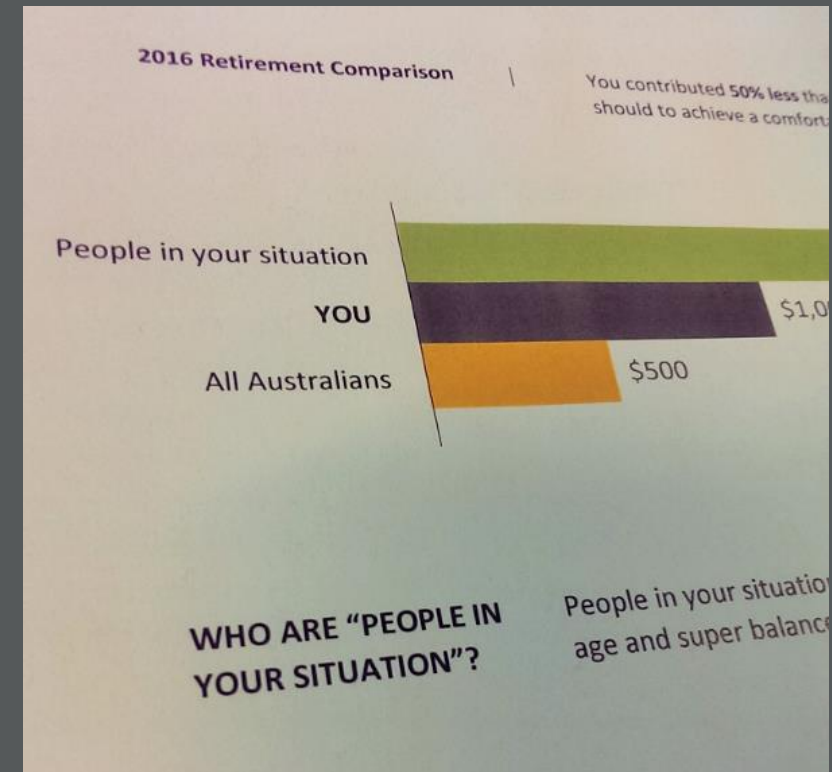


- 4% reduction in electricity consumption
- Equivalent to an 18-31% price increase
- **No cost**

Social norming



- 4% reduction in electricity consumption
- Equivalent to an 18-31% price increase
- **No cost**

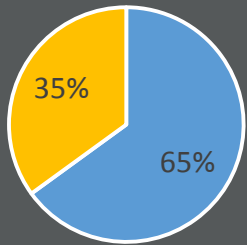


- ?% increase in concessional contributions
- Equivalent to ?% incentive increase
- **No cost**

Hyperbolic discounting



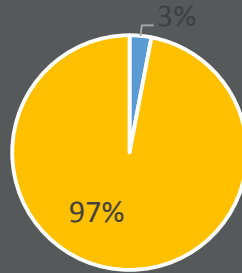
**\$50 today or
\$100 a year from
today?**



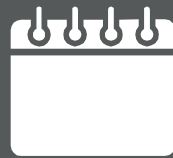
■ Now ■ Later



**\$50 five years from
today or \$100 six years
from today?**



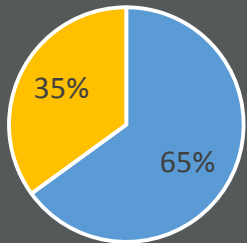
■ Five years ■ Six years



Hyperbolic discounting



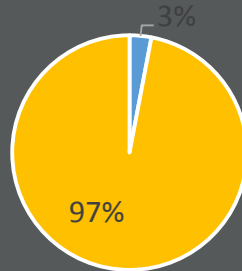
**\$50 today or
\$100 a year from
today?**



■ Now ■ Later



**\$50 five years from
today or \$100 six years
from today?**



■ Five years ■ Six years



- Pre-commitment to salary sacrifice some proportion of a future income increase
- Comparing apples with apples
- A similar system in the United States increased contributions by 10%, and 80% of participants maintained their commitments
- Challenge: engaging employers

Bring future needs into the present



Bring future needs into the present



You've just been paid a super contribution of \$545! \$200 of this was salary sacrificed, saving you tax of approximately \$44!

Cheers,
Your superannuation fund

12:54 PM

We noticed you might need a super top-up, based on your age, gender and super balance. Try our online calculator to find out more!

www.yoursuperannuationfund.com.au/calculator

Cheers,
Your superannuation fund

1:01 PM

Bring future needs into the present



Recommendation 2: Passive participants



- Defaults are a powerful element of choice architecture



Default, opt out salary sacrifice arrangement



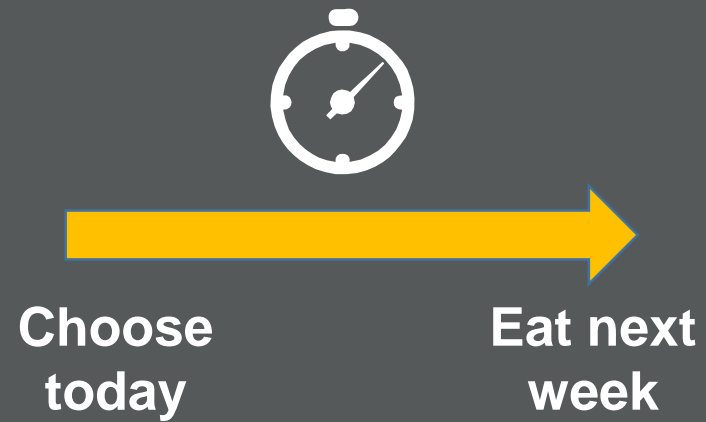
Default glide path investment options



Default consolidation of multiple accounts

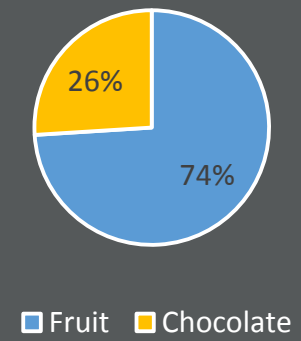
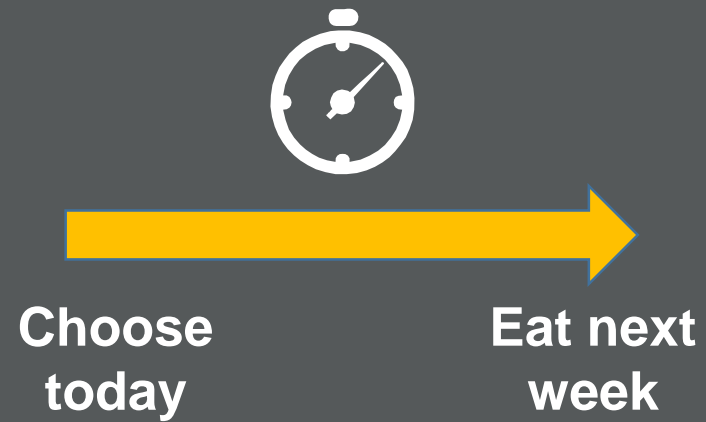
Intention/action gap

- Fruit or chocolate?



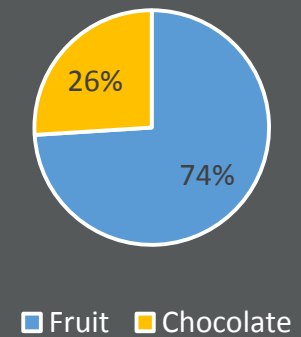
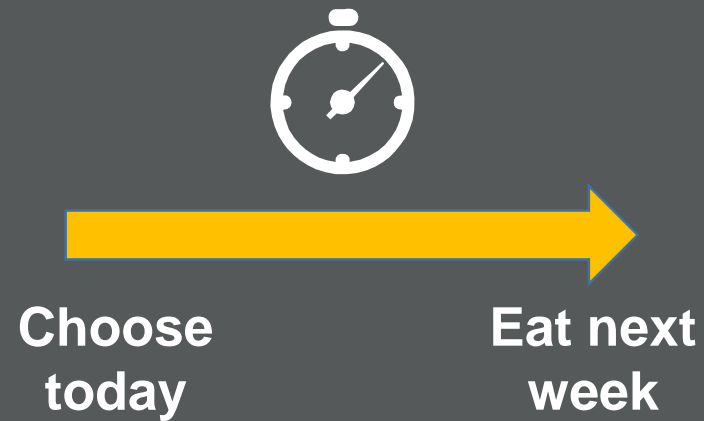
Intention/action gap

- Fruit or chocolate?



Intention/action gap

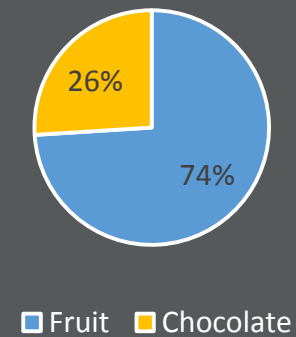
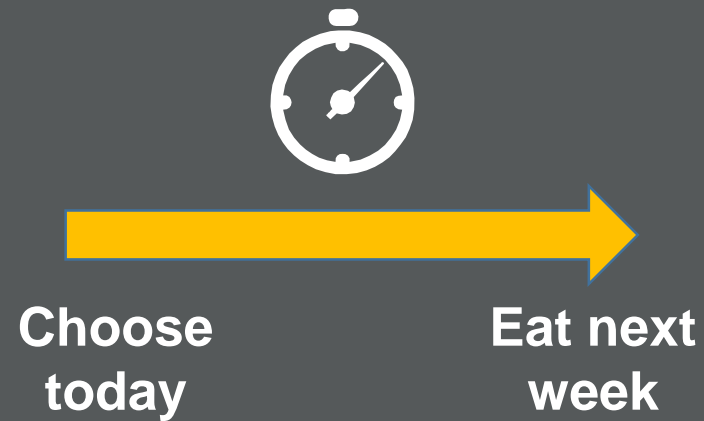
- Fruit or chocolate?



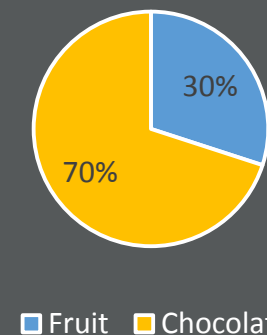
Choose now, eat now

Intention/action gap

- Fruit or chocolate?



Choose now, eat now



Intention/action gap

- Clocky



Recommendation 2: Passive participants



- Defaults are a powerful element of choice architecture



Default glide path investment options



Default, opt out salary sacrifice arrangement



Default consolidation of multiple accounts

Default salary sacrifice arrangements



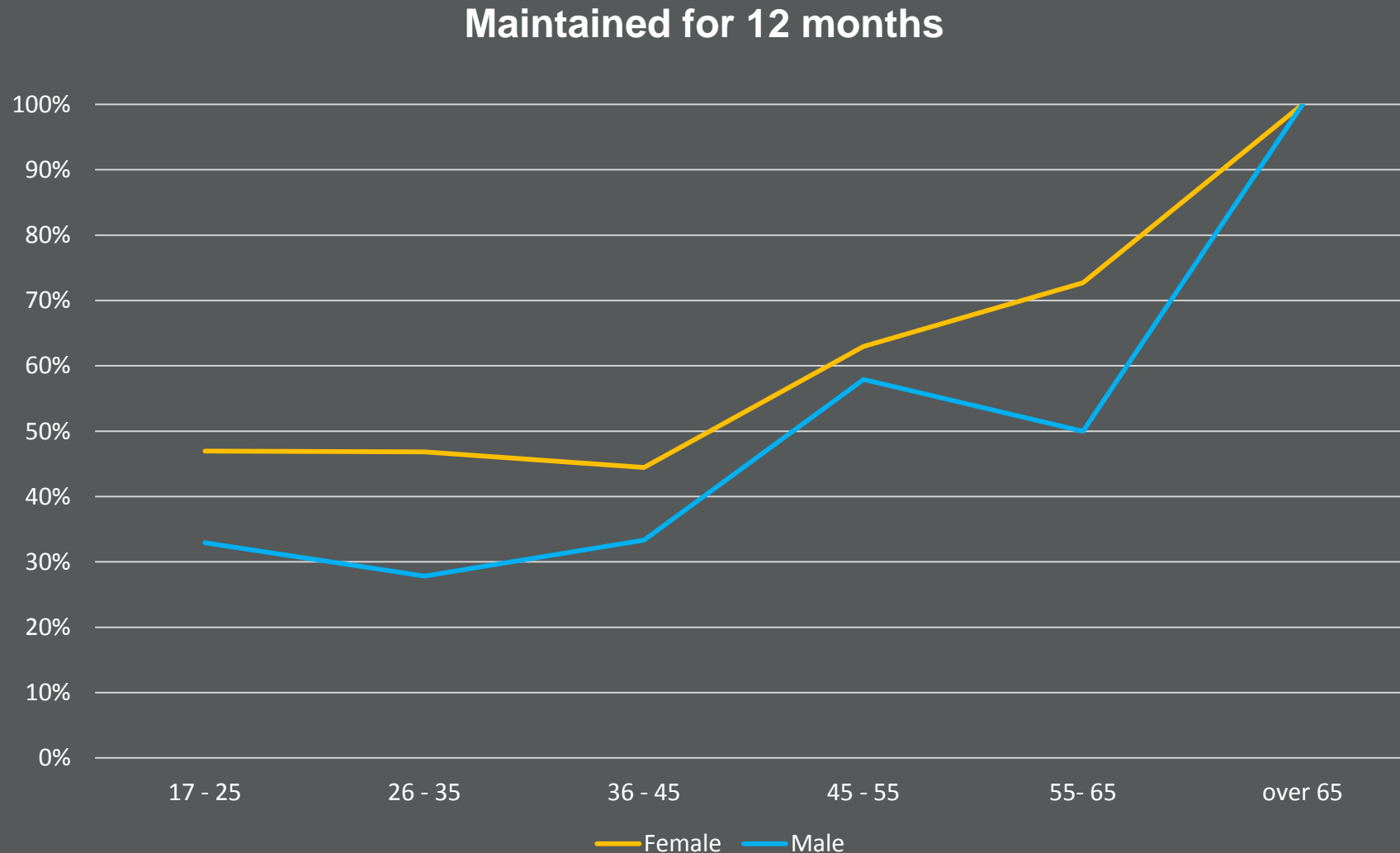
In addition to the above contributions, we will also make additional contributions on your behalf, from your pre-tax Base Remuneration, of 3% of your Base Remuneration. This will constitute a salary sacrifice agreement with you under the *Commonwealth Bank Group Enterprise Agreement 2014*.

If you do not agree to us making this additional contribution please tick the box below:

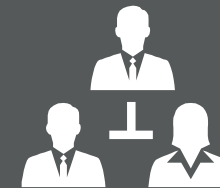
I do not want additional superannuation contributions made: [☐] (tick).

- 80% did not opt out immediately
- Anecdotal feedback positive, even among those who opted out

Default salary sacrifice arrangements



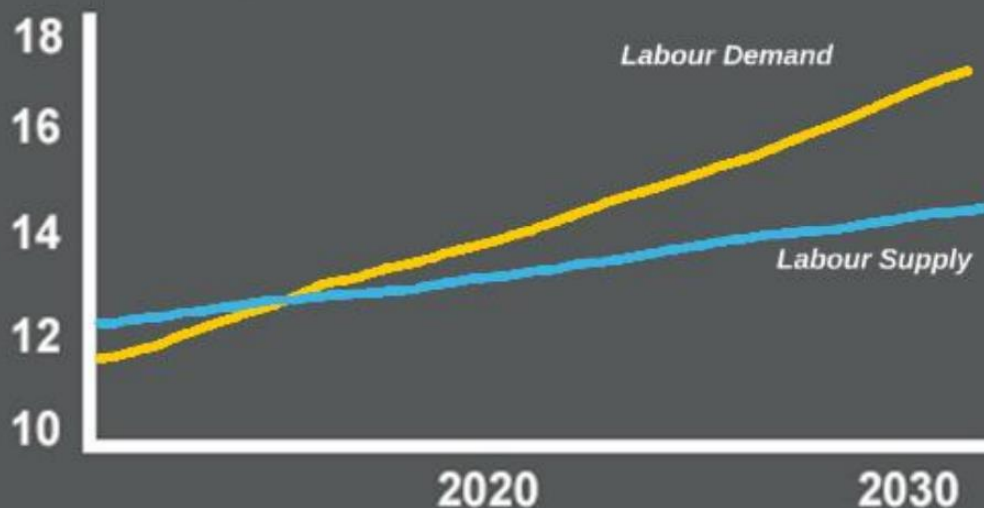
Recommendation 3: Rebranding retirement



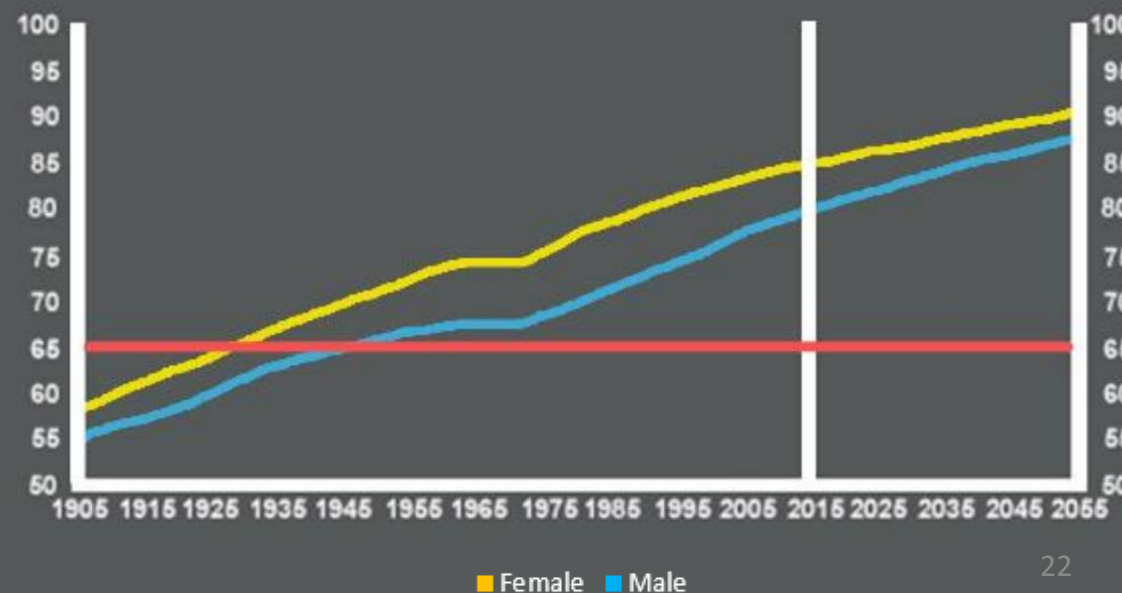
- Replace the age pension with a needs-based pension
- People ineligible for transfers would fund lifestyles through work or savings
- Removal of 'anchor' of 65 – retirement age would increase
- Benefits to individuals through increased retirement savings, businesses through retained skills, and Australia through a more skilled workforce

Labour supply and demand projections

Millions of people



Life expectancy at birth



Summary of recommendations



Recommendation	Benefits
1) Active participants <ul style="list-style-type: none">• Use insights from behavioural economics to increase engagement with super	<ul style="list-style-type: none">• Enable participants to engage with super
2) Passive participants <ul style="list-style-type: none">• Set smart defaults based on age, gender and balance to create effective outcomes	<ul style="list-style-type: none">• ↑ contributions and appropriate asset allocations• ↓ average accounts per person
3) Rebrand retirement <ul style="list-style-type: none">• Move from an age-based to a needs-based pension, leading to longer working lives	<ul style="list-style-type: none">• ↑ retirement savings and skills in workforce• ↓ government transfers• ↓ fiscal pressure