

 Open access • Journal Article • DOI:10.1016/J.JEBO.2017.11.022

## One size fits all? Tailoring retirement plan defaults — [Source link](#)

[Adam Butt](#), [M. Scott Donald](#), [F. Douglas Foster](#), [Susan Thorp](#) ...+1 more authors

**Institutions:** [Australian National University](#), [University of New South Wales](#), [University of Sydney](#)

**Published on:** 01 Jan 2018 - [Journal of Economic Behavior and Organization](#) (North-Holland)

**Topics:** [Default](#), [Investment strategy](#) and [Financial risk](#)

Related papers:

- [The economic importance of financial literacy: theory and evidence](#)
- [Retirement Savings: A Tale of Decisions and Defaults](#)
- [Financial Literacy around the World: An Overview](#)
- [Engagement with Retirement Savings: It Is a Matter of Trust](#)
- [The role of information on retirement planning: evidence from a field study](#)

Share this paper:    

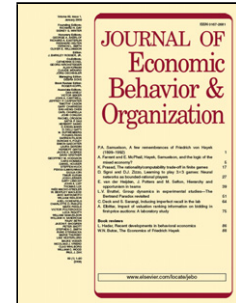
View more about this paper here: <https://typeset.io/papers/one-size-fits-all-tailoring-retirement-plan-defaults-5duz9yut9q>

## Accepted Manuscript

Title: One size fits all? Tailoring retirement plan defaults

Authors: Adam Butt, M. Scott Donald, F. Douglas Foster,  
Susan Thorp, Geoffrey J. Warren

PII: S0167-2681(17)30332-3  
DOI: <https://doi.org/10.1016/j.jebo.2017.11.022>  
Reference: JEBO 4204



To appear in: *Journal of Economic Behavior & Organization*

Received date: 7-9-2016  
Revised date: 18-9-2017  
Accepted date: 24-11-2017

Please cite this article as: Butt, Adam, Donald, M.Scott, Foster, F.Douglas, Thorp, Susan, Warren, Geoffrey J., One size fits all? Tailoring retirement plan defaults. *Journal of Economic Behavior and Organization* <https://doi.org/10.1016/j.jebo.2017.11.022>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## One size fits all? Tailoring retirement plan defaults

Adam Butt<sup>a</sup>, M. Scott Donald<sup>b</sup>, F. Douglas Foster<sup>c</sup>, Susan Thorp<sup>d</sup>, Geoffrey J. Warren<sup>e</sup>

- a. College of Business and Economics, The Australian National University, ACT 2601 Australia; Email: [Adam.Butt@anu.edu.au](mailto:Adam.Butt@anu.edu.au)
- b. Centre for Law, Markets and Regulation, Faculty of Law, UNSW Australia, Anzac Parade, Kensington, NSW 2052 Australia; Email: [S.Donald@unsw.edu.au](mailto:S.Donald@unsw.edu.au)
- c. Codrington Building H69, The University of Sydney, NSW 2006 Australia; Email: [douglas.foster@sydney.edu.au](mailto:douglas.foster@sydney.edu.au)
- d. *Corresponding author*: Rm 539, Level 5, Codrington Building H69, The University of Sydney, NSW 2006 Australia; Email: [susan.thorp@sydney.edu.au](mailto:susan.thorp@sydney.edu.au)
- e. Centre for International Finance and Regulation, 7/1 O'Connell Street, Sydney, NSW 2000 Australia; Email: [Geoff.Warren@cifr.edu.au](mailto:Geoff.Warren@cifr.edu.au)

### Highlights:

- We interview retirement plan executives and survey members to investigate default asset allocation design
- Executives do not allow for the low risk appetite of passive members
- Executives mistake inactivity based on trust for inactivity caused by disinterest
- Heterogeneity, trust and low skill of passive members support smart defaults

### Abstract

Default investment options in retirement plans are a potent influence on member choice. Little is known about how plans set them. We investigate how retirement plan providers choose default investment strategies for passive members. We interview plan executives and survey members during a review of default settings in 2013-14 prompted by a change in the regulation of the Australian retirement system. Passive plan members are different from active members in ways that matter for investment strategy. Passive members are less willing to take financial risks; they are also younger, less wealthy and more often female. Executives say they design defaults with passive members in mind, but they seem to overlook some key factors. For example, plan executives set high risk exposure in default investment strategies. Executives also assume motivations for defaulting that do not match those reported by members. Most plan executives think of passive members as uninterested in their retirement savings but passive members say they trust their plans, and lack skill rather than interest. The heterogeneity, trust and low skill of passive members make opting out of the default less likely and smart defaults more appealing.

**Keywords:** pensions; default; financial services; regulation

## 1. Introduction

Default investment options in defined contribution retirement plans are a potent influence on member choice. Most newly enrolled plan members do not select an investment option and are assigned to the “default” strategy. Around three quarters of members start in the default asset allocation, and even after several years of membership, most are still there (Cronqvist and Thaler, 2004; Choi et al., 2005a; Bateman et al., 2014). Retirement plans are required by law to design a default investment strategy for their passive members. But default design is complicated: first, by heterogeneity among passive members; second, by how little plans know about members; and third, by regulations that limit available strategies. In this study we present empirical evidence about how plan executives design default investment strategies for passive members, and assess how well they fit the people for whom they are designed.

Despite the importance of default investment strategies to members of retirement plans, few studies have addressed the question of how and why they are selected. Here we try to assess default investments from both “sides”. We collect the deliberations of plan executives soon after they had reviewed the design of their plan’s default investment strategy option and compare them with the preferences of passive members. Our “top down” and “bottom up” method exposes areas of agreement and discord between plan executives and the defaulting members whose interests they purport to serve. In addition, our survey examines choice at two levels: choice of plan provider and choice of investment option. This enables us to examine possible differences between the views of respondents who have actively chosen the default at either or both stages versus those that have been entirely passive. This method offers insights that cannot be gained from administrative data on investment in default products or from prior research into either choice of plan provider (e.g. Fry et al., 2007) or choice of product (e.g. Gerrans et al., 2010).

We show that retirement plan executives and passive members agree that strong long-term performance should be the investment goal pursued in the default strategy of the plan. Both executives and members want to secure basic retirement income. However, we also find two important points of discord. First, plans take account of the age, income and account balances of their members when they are setting asset allocations but they know little about the subjective risk preferences of their members. We find that members who default report lower than average risk

tolerance, but most plans choose high risk asset allocations for their default investment strategies. Second, plan executives often assume motivations for defaulting that do not match those reported by members. Most plan executives think of passive members as uninterested in their retirement savings. But passive members describe themselves as trusting their plans, and lacking skill, rather than lacking interest. Our study suggests that retirement plans may be able to improve defaults by better aligning default settings to the characteristics and preferences of passive members, and through a better understanding of the reasons for passive choices. We conclude that the heterogeneity, trusting attitude and low skill of passive members make opting out of the default less likely, and hence make smart defaults more appealing.

Our study makes use of a natural experiment in default design. In 2013, changes to the law required Australian retirement plan providers (“superannuation funds”) to design and implement a single default retirement savings product for their members - labelled “MySuper” (for a description, see Cooper 2010). The default investment strategy for individual retirement accounts is an important element of MySuper products. The MySuper regulation compelled providers to review both the characteristics of their passive members and the suitability of the default settings. We took this opportunity to evaluate how default investment strategies are designed. By conducting our study at this time, we minimize selection bias because the revision to defaults was not initiated by the plans we study. Rather, the revision was required across the retirement savings sector.

Default settings are important to retirement savings systems in many countries (see, for example, Choi et al. 2005a,b; Chetty et al. 2012). But they are crucially important in Australia where participation in plans is mandatory for almost all workers. Because participation has been compulsory for more than 20 years, the Australian pension sector is now valued at US\$1.6 trillion (2016). It consists of the world’s second largest pool of defined contribution savings after the U.S. (Towers Watson 2014). The majority of plan members report that their savings are invested in default investment strategies (Productivity Commission, 2012). Australia is an ideal setting for a study of default design because of the enormous impact of defaults on individual and collective welfare.

In 2014, soon after plans reviewed their default investment strategies, we conducted one-hour, face to face interviews with 28 executives from 20 plan providers. We interviewed executives who

participated in the design and management of investment default options. We asked executives about the characteristics and needs of the members of their plans, and about their approach to designing the default.<sup>1</sup> We also surveyed more than 1,000 plan members, measuring their propensity to delegate the investment of their retirement savings, their demographic characteristics, risk tolerance and general retirement savings goals.<sup>2</sup> We use survey data to characterize members who either fail to opt out of, or actively choose, the default. We then compare the surveyed characterization of members with the plan executives'. This comparison highlights the difficulty of setting defaults for heterogeneous retirement plan memberships.

We survey plan members via an online panel and provide a post-incentive to reduce non-response rates. Although we filter respondents to ensure that our sample is a cross-section consistent with the general population and that sample sizes across gender and ages allow sufficiently powerful statistical tests, our method has the usual limitations of data collections from online panels. First, a sample drawn randomly from the entire population of retirement plan members might be more fully representative; second, we do not have information about the characteristics of non-respondents; and third, we rely on self-reported information when administrative data collections might be preferred for particular questions. For these reasons we recommend caution before extrapolating some survey results, such as rates of default, to the entire population and we acknowledge the difficulties that relate to measuring subjective traits such as risk aversion. Similarly, executives might modify their interview responses to understate self-interest or other agency problems. Where possible, we verify executives' interview responses against external sources. Where we can compare our results with other surveys or administrative data collections we do so, and we find that our results are consistent.

Our results add to several strands of literature on choice architecture and financial decision making. Earlier studies have shown the powerful impact of choice architecture on retirement savings decisions, including investment choices (Choi et al. 2005a,b; Benartzi and Thaler 2007; Chetty et al. 2012). Plans' presentation of investment options affects members' asset allocations in ways that are not always consistent with rational choices, sometimes to the detriment of unsophisticated investors. For example, investors using simple diversification rules can over-invest in their employer's stock

---

<sup>1</sup> Butt et al. (2015) gives a detailed analysis of the interviews.

<sup>2</sup> A live link to the survey is at <http://survey.confirmit.com/wix/p3069725426.aspx>.

(Benartzi and Thaler 2001; Choi et al. 2005a; Huberman and Jiang 2006; Brown et al. 2007; Agnew et al. 2011; Morrin et al. 2012). Naïve and inactive plan members will tolerate poorly performing funds (Pool et al., 2016). The menu of investment options is so influential that merely streamlining the list can deliver lower fees and less systematic risk exposure to passive plan members (Keim and Mitchell 2016). So it is crucial to understand how investment menus in general, and default settings in particular, are determined.

Optimal long-run portfolio allocations are both highly individualized and dynamically complex.<sup>3</sup> But regulators in most jurisdictions, including Australia, usually restrict managers of occupational defined contribution plans to one default asset allocation. The typical choice is either a fixed (balanced) asset allocation or a simple life-cycle (target date) program (Van der Horst 2013; Chant et al., 2014). Plans choosing one life-cycle program or fixed allocation must balance the various needs and goals of numerous passive members.

Theory does not offer a simple rule for optimal defaults when plan members are heterogeneous (Choi et al. 2003). Many studies conclude that average welfare can be improved by defaults that encourage saving into diversified investment strategies (e.g., Choi et al. 2005a). However other work shows that all plan members are not equally susceptible to defaults (e.g., Hedesström et al., 2007; Bateman et al., 2014). Some members are likely to opt out of unsuitable defaults faster than others (Beshears et al., 2016). Beshears et al., (2016) propose that plan providers and policy makers responsible for choosing defaults should be attentive to the sorts of people who they affect most. We show that plans design defaults with the passive members of their plans in mind but also without knowing much about them. From the limited information they had, executives typically concentrated on certain differences between active and passive members, such as age and account balance, but not others, such as gender. We also show that passive and active plan members report significantly different risk aversion, a crucial factor in portfolio selection that executives do not know from administrative data.

---

<sup>3</sup> Normative studies of life-cycle portfolio strategies began with the constant proportion strategies of Samuelson (1969) and Merton (1969) but have been extensively modified for more general preferences (Polkovnichenko 2007; Gomes and Michaelides 2005; He and Zhou 2011); human capital (e.g., Jagannathan and Kocherlakota 1996; Heaton and Lucas 2000; Cocco et al. 2005; Benzoni et al. 2007; Gomes and Michaelides 2005); time varying or predictable returns to financial asset markets (e.g., Michaelides and Zhang 2015). Other important adjustments are made for housing wealth, liquidity constraints and public pension provision. Bodie et al. (2009) presents a useful survey.

Choice architecture necessarily promotes certain outcomes over others and default designers embed values (Qizilbash, 2009; White, 2013; Leggett, 2014). In the particular situation we study here, the law requires plans to act paternalistically – to choose a default that they believe is in the best interest of members - which may differ from what the members themselves say they prefer. We reveal the tension and consequent agency cost that can arise in intermediated financial arrangements when an expert or agent assesses a person’s risk tolerance differently from the person’s own self-assessment (Bird and Gray, 2013).

Our findings add to new research into the differential effects of defaults and other nudges. Along with Beshears et al. (2016), we identify who is more susceptible to defaults, less able to make active choices, and therefore less likely to opt out. We confirm the findings of Bateman et al. (2014) and Deetlefs et al. (2015) that procrastination is not the only cause of member passivity. Passive choice is also related to members’ low subjective assessment of their own investment skill and their high trust in the plan provider. People who are strongly influenced by the implicit endorsement of a default, or for whom a switch would take an inordinate amount of effort, are very unlikely to opt out of a default. These people might find themselves far from their ideal asset allocation and eventually experience regret (Brown et al. 2015). Like Brown et al. (2015) and Beshears et al. (2016), we sort out the members who deliberately choose the default from those who feel unskilled or unwilling to make a switch. Our novel contribution to this discussion is to expose the assumptions made by the default setters – the plan executives – about who defaults and why.

When members are both heterogeneous and poorly equipped to make active decisions, those responsible for designing defaults should consider smart defaults or alternative choice architecture, such as checklists. These tools add more individual information to investment strategy choices (Smith et al. 2013; Fernandes et al. 2014; Appelt et al. 2016). We document the extent to which plan providers can and do take member heterogeneity into account when they choose dynamic asset allocations. We find that executives gave heterogeneity little consideration, with the limited exception of those providers who decided to offer an age-based life-cycle strategy. The regulations



over defaults themselves were at least partly responsible for this limitation because they restricted providers to one default strategy, either a single asset allocation or an age-based life-cycle strategy.<sup>4</sup>

We describe the context of our study in detail in section 2, and set out the interview and survey structure in section 3. Section 4 presents the results and section 5 concludes.

## 2. Default regulation in Australia's retirement savings system

Australia's retirement savings system relies on both compulsion and defaults. Legislation (the "Superannuation Guarantee") stipulates mandatory minimum employer contributions of 9.5% of earnings to be paid into individual accounts on behalf of employees who meet minimal age and employment criteria. Australia does not have a public social security system with payments linked to wages, and superannuation forms the "second pillar" of retirement income provision.

Compulsory participation makes the Australian retirement savings system different from general auto-enrolment with opt out, such as in the UK and in some workplaces in the US. Over 90% of the Australian workforce has at least one superannuation account, usually in a defined contribution plan. These accounts are managed by a private provider that operates as a trustee of the plan, called a "superannuation fund."<sup>5</sup> If an employee does not choose a plan for themselves, employers will pay contributions into a default plan that the employer has chosen.<sup>6</sup> Once enrolled in a plan, if an employee does not actively choose one of the plan's investment strategies for their contributions, their contributions are placed in the default option by the plan trustee. Members can switch to another plan or to a different investment strategy within the same plan at any time.<sup>7</sup> To make a switch costs little money, but can involve a lot of time and effort.

---

<sup>4</sup> We proceed on the basis that plan providers choose default strategies that they believe to be in the best interest of passive members. At the same time we acknowledge that the retirement savings system we study involves organizational structures with many layers of delegation where incentives could be misaligned (Stracca 2006).

<sup>5</sup> Superannuation savings are tax preferred and preserved until an age between 55 and 60. At preservation age, members can withdraw their savings as a lump sum and/or purchase retirement income products.

<sup>6</sup> There are a small number of employees, such as some public servants, who are not able to choose their own superannuation fund. People in this category were excluded from our survey sample.

<sup>7</sup> The MySuper "product" is the default setting within a larger plan that also offers members less closely regulated "choice" products. Members who subsequently opt out of MySuper products into a "choice" option usually pay a switching and/or exit fee, but this is limited to cost recovery and cannot contain a profit or penalty element.

The government intended that the review of default options that we study would make the retirement savings system more efficient. Plans received regular and increasing compulsory contribution flows but were not closely monitored by members. In 2010, a review of the Australian superannuation system recommended that the consumer protections offered by market discipline and regulated disclosures should be reinforced by a simple, low-fee, scalable default structure called by “MySuper”<sup>8</sup> (Commonwealth of Australia 2010). The government implemented these recommendations over the course of 2012-13. General guidelines for setting default investments in Australian superannuation funds are similar to those for US 401(k) plans,<sup>9</sup> that is, they exclude leverage and high concentration. In addition, MySuper regulations specify that investment strategies be offered as either a single diversified investment option or as a life-cycle strategy.

Redesigned (MySuper) default products began appearing in 2013. By the end of 2014, around 40% of eligible plans were offering MySuper products, housing around 34% of assets (APRA 2015).<sup>10</sup> At the time we conducted the study, around 80% of participating plans offered MySuper default investment options that involved “balanced” strategies with an average target growth to defensive asset mix of 72% to 28% that was fixed irrespective of member age. The remainder offered life-cycle defaults where the average growth to defensive mix began at 90% growth with 10% defensive and progressed to 34% growth and 66% defensive at retirement (see Chant et al. 2014).<sup>11</sup> For some plans this outcome was a continuation of the default investment option they had been operating at the time MySuper regulations were introduced. Even so, MySuper forced a sector-wide review of default investment strategies.

### 3. Survey and interviews

---

<sup>8</sup> See Chant et al. (2014) for a description of MySuper and details of industry implementation of the policy.

<sup>9</sup> See FINRA <http://www.finra.org/Investors/SmartInvesting/Retirement/Smart401kInvesting/investing/>.

<sup>10</sup> To encourage large plan providers to offer MySuper products, the government stipulated that after 1 January 2014, default contributions could only be paid into a MySuper compliant product, and that by 1 July 2017 all outstanding default balances must be transferred into a MySuper fund. Since default offerings attract the most members and the highest contribution flows, large plan providers complied with the MySuper changes.

<sup>11</sup> In addition, the new regulation has motivated lower fees, especially among for-profit plans (Chant et al. 2014).

In this section we outline our survey and interview methods, and the characteristics of the samples. The interviews and survey were conducted independently so that participants in one did not know the responses in the other. The survey was designed before interview transcripts were analyzed by the researchers, to minimize any transfer of ideas from one context to the other. We conducted the interviews during the six months to May 2014, and fielded the survey in June-August 2014.

### ***3.1 Interview structure***

Interviews are better suited to addressing questions about default design than are surveys.<sup>12</sup> When they choose a default investment strategy, plan executives consider many goals and constraints at once. These considerations include legal restrictions on default investment strategies, members' expectations that the plan's investment strategy will fund a prosperous retirement, and the executives' wish to see the plan they manage compare well with competitors. Our face-to-face interviews record not only what executives decided but also the reasons for their decision.

Interviews can expose how executives evaluated competing goals and justified choices. And unlike rigid surveys, face-to-face interviewers can also ask follow-up questions (Tuckett 2012; Foster and Warren 2016).

We conducted one-hour in-person interviews with 28 plan executives from 20 large plans. In total, the plan executives in our study manage about 45% of total (default) savings overseen by large institutional plan providers. The executives we interviewed included CEOs, CIOs, portfolio executives, product executives, asset consultants and one legal and compliance executive. This group included managers from "for-profit" and "not-for-profit" plans; from smaller and larger plans; and from plans operating a range of investment strategy, including an equal number of life-cycle and balanced investment strategies (see Butt et al. 2015, Table 1).

Two researchers independently analyzed the content of the interviews. One researcher allocated statements from interview transcripts into categories that corresponded to common themes, concepts, viewpoints or facts, but without specifying categories in advance, iteratively updating the categories. Another researcher then made their own allocations and then the two were cross-

---

<sup>12</sup>Appendix A reports the questions asked in interviews. In a companion paper, Butt et al. (2015), we give a more detailed description and analysis of the interview sample, process and content.

checked. We then verified findings from the interviews about executives' decision making processes, their views, and the process they used to design defaults by data triangulation (a cross-check against observed behavior or documents relating to the relevant plans) and by independent verification by other researchers. Interview participants themselves also reviewed draft findings for accuracy and plausibility. In the end, we grouped findings into five sets: the purpose and motivation of MySuper design; perceptions of member needs; scope and influences on MySuper design; choice of investment strategy; and reflections on the regulatory change itself.<sup>13</sup> Table 1 summarizes the content of the interviews under broad themes.

### ***3.2 Survey structure and sample***

Our member survey<sup>14</sup> took a sample of 1,053 people<sup>15</sup> between the ages of 18 and 75 from the PureProfile nationally representative online panel of over 600,000 Australians. PureProfile initially emailed a random sample from the panel inviting them to respond to the survey. Filters ensured that the group who completed the survey matched population age (exactly) and gender (almost exactly) patterns. Further filters within the survey ensured that respondents were members of a superannuation plan, and that they had a genuine choice over the default options we study. As responses to the survey were received, PureProfile sent additional email invitations to random potential respondents of particular ages and genders in order to ensure the age and gender targets were maintained.

Respondents who completed the survey were paid around AUD4 for their time and effort. We also checked attentiveness during the survey using an Instructional Manipulation Check (IMC) (Oppenheimer et al. 2009) in the form of a repeated question.

The survey had four main sections. The first section identified rates of passive and active choices, allowing us to classify respondents accordingly and separate out “deliberate defaulters” (Brown et al. 2015). The second section used Best-Worst methods (Marley and Louviere 2005) and rating scales to measure preferences of respondents over three aspects of retirement savings management: 1)

---

<sup>13</sup> Further detail on the analysis process and categories can be found in Butt et al. (2014, 2015).

<sup>14</sup> <http://survey.confirmat.com/wix/p3069725426.aspx>

<sup>15</sup> We determined the sample size based on the available funding for the survey and the cost of the PureProfile service.

propensity to delegate; 2) investment objectives; and 3) investment philosophies. The third section measured the financial literacy and numeracy of respondents, along with their risk tolerance. The fourth section collected demographic data such as marital status, income and occupation. Appendix A describes the design and content of the survey in more detail. Before we fielded the survey, we tested it on a variety of family and friends, and made changes based on their feedback. Once in the field, we collected approximately 100 responses then stopped and checked that respondents had interpreted the questions as we expected.

Table 2 compares survey respondents with data from the 2011 Australian Census. Respondents in the survey sample are more likely to have a tertiary education and to earn a higher personal income than the 2011 population. This is consistent with the fact that survey respondents must be members of a superannuation plan and so are more likely to be employed. It is also possible that those with a higher level of education and income are more willing to take a survey on retirement incomes, although it is not possible to identify this from those who did not respond to the email invitation, as PureProfile does not keep this information for its entire panel. For these reasons we recommend caution before extrapolating full sample results described in section 4, such as rate of default, to the entire population. However, any potential biases of the type described above are less likely to have an impact on factors that predict or are conditioned on default, which is the primary focus of section 4.

In section 4, we report on 1,031 respondents. We dropped 22 people who did not meet the sample criteria because of inconsistencies in their responses.<sup>16</sup>

#### 4. Results

We begin our analysis of results by dividing the member survey respondents into defaulters and choosers. We describe the characteristics of each group, and compare these with the interview statements of plan executives. We then look further into defaulters' delegation decisions. We identify the factors that most influence their passive behavior, and compare them with executives'

---

<sup>16</sup>The 22 people who were dropped from the sample consisted of respondents who identified as self-employed in one question but not in another; were a government employee and so had no choice; indicated that the respondent was "unable" to use the provider that they wanted to use; and/or identified as belonging to their default plan, but also being a member of a self-managed superannuation fund.

perceptions. After discussing “reasons” for defaulting, we compare the investment goals of members against the assumptions about passive members’ goals made by executives.

#### *4.1 Passive plan members*

Passive behavior is common but not universal. Respondents to the survey report whether they had actively chosen either a non-default plan (in Australia, “choice of fund”), and/or a non-default investment strategy.<sup>17, 18</sup> Table 3 shows the proportions of respondents who default when given the opportunity to choose a plan, and the proportion of respondents who default when given the opportunity to choose an investment strategy. People who actively choose a plan are also more likely to actively choose an investment strategy, and plan defaulters are more likely to be investment defaulters. At the same time, 37% of respondents report defaulting at one choice and not at the other. Around 27% of the sample make two active choices, and 36% make two passive choices. An active investment choice is usually easier to execute and is more common than an active plan (fund) choice (fund).<sup>19</sup>

Around 42% of respondents say they opted out of the default plan. Comprehensive administrative data on the rate at which members opt out of the plan selected by their employer are not generally available but our finding is consistent with other sources. The Productivity Commission (2012, p.36) reports several estimates of the rate at which members opt out of the employer’s plan, in a range of

---

<sup>17</sup> In this context, ‘investment strategy’ refers to a specific product or fund that is offered by the plan provider, within which the assets of the member are managed.

<sup>18</sup> We counted respondents who answered “yes” or “don’t know” to the question “Are you currently a member of the super fund [plan] recommended by your current employer?” as defaulting at the choice of plan (fund) node. We then asked respondents to think about the retirement account they held with the most money in it (their “main account”). We counted respondents as defaulting at the investment strategy node who answered “no” or “don’t know” to the question: “Most super funds choose a ‘default’ investment strategy for members who don’t choose an investment strategy for themselves. Thinking still about your main super fund, did you choose your own investment strategy or let the super fund choose?” A few respondents selected “other” and wrote in an open response box; we sorted these into default or choice categories using our best judgment over their answers.

<sup>19</sup> When starting a new job, members who make a choice of plan (fund) differing from that offered by their employer have to give their employer details of their existing account (if they want to consolidate accounts) or details of their preferred plan provider. Members who opt out of the default investment option usually only have to tick a box, or write the proportion of their contributions going into alternative investment option(s) on a form (although different strategies will usually entail different fees). Notwithstanding the work the member would need to do to decide on the best plan and investment option, the simple administrative burden of giving effect to a choice is usually less for the investment decision than for the plan decision.

from 30% to 50% of members. Our proportion is at the higher end of this range partly because we exclude from the survey respondents who *cannot* choose a plan other than their employer's. Around half (49%) of respondents report that they actively choose an investment other than the default. (The group who actively chose an investment option includes respondents in self-managed plans that do not have a default asset allocation.) Other Australian studies put the rate of non-default investment choices for members of large plans at between 18% and 53% of members (Productivity Commission 2012; Bateman et al. 2014; Gallery et al. 2010) but accurate population data are not available. The proportion of our survey respondents that say they make active investment choices is similar to that computed by Bateman et al. (2014) who analyzed administrative data on permanent employees from a large Australian pension plan. It is also consistent with rates of switching out of default asset allocations in U.S. 401(k) plans reported by Choi et al. (2005a).

The survey also identifies deliberate defaulters – people who actively choose the default. We count 15% of all respondents as deliberately choosing the default plan, and 4% as deliberately choosing the default investment strategy. This implies that around 26% of members in the default plan and about 9% of people in the default investment option are there because they prefer it. We turn now to the differences between passive and active members, and how these differences influence default design.

#### ***4.2 Demographics and default investment strategies***

Our survey highlights significant demographic differences between respondents who default and the sample as a whole (Table 2). These differences extend beyond the age and account balance that executives emphasized most often as an influence on default design. The 18-34 years (youngest) age group is over-represented among defaulters, as are women, singles, people with low education and low to middle income earners. The survey shows patterns broadly consistent with administrative data from Swedish and Australian retirement plans (Hedesström et al., 2007; Bateman et al., 2014). Beshears et al. (2016), studying U.S. retirement plans, also find that low income and younger workers are more susceptible to default settings.

Executives said that they designed their plan's default investment strategy for passive members. At the same time, they acknowledged that they know little about them. Executives know the age, gender, plan account balance and insurance status of members, and can identify the marital status of

some. By using the mandatory contribution rate (9.5%) as a guide, they can estimate members' incomes. Most executives can observe members' contribution patterns, investments, insurance, and interaction with plan websites, call centers and advice services. However, it is difficult to interpret this information without understanding members' background and the motivation for their decisions (Bateman et al. 2014). Executives do not know members' risk preferences, family make-up or background wealth, except when a member goes to a plan advisor for personal financial advice. One executive summarized it like this:

*“... we know what their contributions are, we know what their age is, we know whether they're a man or a woman. But we don't know what their spouse has, we don't know what money they have outside of [the plan], we don't know what their risk tolerance is necessarily unless they come in and utilize some form of advice.”*

Executives from 14 of the 20 plans said that they took account of member demographics when they designed their default investment strategy, and 11 also cited the influence of plan-related behavior and feedback of members. Seven executives explicitly acknowledged they knew little about members, and would like to know more.

Some executives said that the age and account balance of the typical default member guided their decisions, especially in the choice between a life-cycle (target date) or SAA default investment strategy. Executives who categorized their passive members as “young and low balance” tended to reject the de-risking implicit in life-cycle strategies. Life-cycle strategies were promoted normally by executives of plans where membership was very heterogeneous. Executives of plans adopting life-cycle strategies as defaults also maintained that passive members did not get financial advice. They argued that the gradual change from risky to safer allocations in life-cycle strategies partly compensated for a lack of advice.

No executives mentioned the most common gender of defaulting members as an influence on their default design. Regulations prevent plans offering different defaults to men and women. However, if more passive members are one gender or the other, gender could reasonably affect default strategy, as well as age. For example, median retirement account balances of men are around 50% higher than



women's, a gap that widens at older ages.<sup>20</sup> Portfolio allocations should be adapted to labor income risk (e.g., Jagannathan and Kocherlakota 1996; Heaton and Lucas 2000; Cocco et al. 2005; Gomes and Michaelides 2005; Benzoni et al. 2007). Women earn less on average and are more likely than men to leave the workforce for periods of time and consequently stop adding to their retirement account. As well as accumulating less, women experience less averaging of returns than an individual who contributes steadily from a higher income. For these reasons, some women might prefer safer asset allocations. In addition, the automatic monotonic de-risking of life-cycle defaults may not be a good match to women whose earnings from human capital are likely to be higher at younger (and older) ages, with lower returns during the child-rearing decades in mid-life. It follows that plans that have more men or women in their passive membership could adopt different dynamic allocation strategies.

#### ***4.3 Risk preferences and default investment strategies***

Few executives commented on the subjective risk tolerance of default plan members. In the interviews, executives tended to relate risk tolerance to age. Some executives interpreted the fact that default members are likely to be young as a reason to admit higher risk exposure in the default investment strategy. Others justified a life-cycle strategy by observing that risk tolerance declined with age:

*“So they tend to be more risk-averse when they get older and I think that’s something that’s not captured in a static 70/30...”*

Comments from other executives indicate that they treat risk preferences of members as secondary to the need to earn the risk premium:

*“...in early years the predominant risk may be receiving insufficient investment returns, whereas capital preservation is much more important in the stages closer to retirement date.”*

---

<sup>20</sup> See Australian Bureau of Statistics, catalogue 6523.0, Table 24.3.

*“...you cannot afford to have anything other than 100% exposure to risk assets during your working life and for some period in your retirement because you will run out of money as you live to 80, 90 and 110 in the years ahead.”*

Overall, plan executives appear to treat subjective risk preferences as a minor consideration in decisions about risk exposures. More material are observable traits such as member age and investment time horizon, a perceived need to protect capital from negative returns in the years around retirement, and executives own views of how best to reach an adequate replacement rate over a possibly long retirement. This might partly reflect the paternalism in the legal obligations imposed on the trustee which emphasize the trustees’ assessment of members’ needs over the members’ own subjective assessment. Indeed some executives acknowledged that setting default investment risk to match individual risk preferences is difficult. However, executives did not comment on the possibility that passive members could have lower average risk tolerance than active members. And they did not list default member risk tolerance among the factors that guided their choice of the default investment strategy.

The potential for mismatch between investment goals of the plan and the preferences of default members is highlighted in this exchange between the interviewer and an executive who commented on discussions with his or her investment and client relations teams:

**Executive:** *“[I asked], ‘Why are we 70/30 in default?’ And they [the investments team] looked at me as if I had three heads, and said, ‘Because that’s what gives you CPI plus 4 which is the objective of the fund.’ Okay, makes sense. When I asked our client relations people, I said, ‘Why are we CPI plus 4?’ And they looked at me as if I had two heads. and said, ‘Because that’s what 70/30 gives you.”*

**Interviewer:**

*“It’s consistent.”*

**Executive:**

*“It was perfectly consistent, and it perfectly ignored the member.”*

(Note: The plan represented by this executive subsequently changed the growth asset exposure in the default strategy.)

Our survey of members collected a measure of financial risk tolerance and other metrics of financial caution. Table 2 shows the mean risk tolerance score (0-100 scale) for the full member sample, those members in the default investment strategy, and members in the default plan. The mean (38.7) and median (40.0) willingness to take financial risks is statistically significantly lower for members that accepted the default investment strategy than for the full sample (mean 44.4 and median 46.0), and the distribution is more right skewed. (Willingness to take financial risk is only slightly lower among members that accepted the default plan than the full sample.) In addition, any decrease in risk tolerance with age is very weak in the survey data: the correlation between willingness to take financial risks and age both in the full sample and among investment fund defaulters is around -0.1 ( $p < 0.05$ ).

Our survey suggests that passive plan members are likely to have relatively low risk tolerance. However, executives express little concern with the risk preferences of passive members, being more focused on achieving strategic investment objectives in setting the default investment strategy. One could argue that members can shift into a lower risk strategy if the default asset allocation does not suit them. But for reasons we outline in the next subsection, they might not have the skill and confidence that is required to reset their investment risk level in this way.

#### ***4.4 Propensity to delegate***

The majority of executives we interviewed indicated that they assumed the typical defaulting plan member was “disengaged” and “poorly informed” when designing their default offering (see Table 1). This implies that apathy is an important explanation for members’ failure to choose.<sup>21</sup> Our survey findings lead us to question whether the assumption that passive members are typically uninterested is correct. As reported in Section 4.1, we find that 64% of our survey respondents make an active choice either of their plan and/or investment strategy. Further, a portion of the remaining 36% indicated that they have actively chosen the default. The results are inconsistent with the

---

<sup>21</sup> Brown et al. (2015) study the related issue of decision making in the presence of decision conflict, assessing procrastination, vigilance, hypervigilance and buck passing. They associate procrastination with a higher probability of default. Individuals with a strong need for a definite answer (cognitive closure) are less likely to default.

majority of default plan members being disengaged and uninterested. In addition, responses to questions about the reasons for default are consistent with motivations other than a lack of interest. Specifically, we find that passive members are better described as chiefly motivated by low skill and willingness to place trust in their plan provider, rather than low interest.

One aim of our survey was to obtain insight into how members characterized their own behavior. To do this, we adopted a series of statements on propensity to delegate from Aggarwal and Mazumdar (2008) with some slight modifications (Appendix A, Table A1). Aggarwal and Mazumdar identify two *impediments* to decision delegation: a wish by principals to control the decision, and the cost to principals of foregoing the opportunity to learn and acquire skills for future decisions. We add time and money costs of active choices to this list of impediments. Aggarwal and Mazumdar also identify four factors *encouraging* delegation: perceived differences in skill between the principal and agent; a view by principals that an agent can customize the product or service better than an impersonal source (personal suitability of the product); the trustworthiness of an agent; and the accountability of an agent. We presented plan members with this group of factors that may impede or promote delegation, and collected ratings of agreement and importance.

Defaulting members agree with statements that favored delegation more often than other members, but the extent of agreement varied between delegation factors. Table 4 reports the percentage of respondents in the total sample and among defaulters who agreed with statements that favored delegation. Surprisingly, almost half of defaulting members said they *do not* want to relinquish control over their retirement savings. Their unwillingness to relinquish control is inconsistent with an assumption that most passive members are uninterested in their retirement savings. Rather, defaulting members typically find the default investment strategy suitable, and view the agent (the plan) as trustworthy and accountable. They also emphasize their own low skill and knowledge, and express a belief that the system is well monitored.

We also collected rankings to help us understand the relative importance to members of each of the delegation factors. Table 5 reports the ranks for each statement appearing in Table 4. Table 5, Panel A, reports rankings made by respondents who agree with the pro-delegation version of the statement. In this case, low skill, suitability of the default and trust in the default are more important, whereas not needing control is less important. Panel B reports rankings made by respondents who

agreed with the anti-delegation version of the statement. These respondents, who have low propensity to delegate, want control and also rate themselves as skilled. In summary, the rankings confirm that members' assessment of their own personal skill and their trust in the plan are dominant influences on their propensity to delegate the investment of their savings.

The results in Table 5 are at odds with comments made by plan executives. In general, executives designed default investment strategies on the assumption that defaulting members are disengaged:

*"We did design these funds for a default member, so for an unengaged member, and that's an important distinction."*

*"My Super is for those members who are disengaged."*

It is less clear whether executives think all defaulting members are uninterested in their retirement savings. There were some who clearly believed this to be the case:

*"For our members that are totally disengaged, they don't want anything. The reality is, and we've polled them; they're just not interested in superannuation."*

*"[Our] membership is disengaged and despite our best efforts to engage with them, the purpose of our engagement is actually brand recognition."*

Others recognized that they were they were averaging across a range of individuals:

*"You've got to build something for a collective group. So we recognised that it might have some issues with it, but you've got to try and look at the more collective group as part of the process, and look at the average member, for want of a better term, when you never have an average member."*

Several executives observed that interest rose as the stakes increased:

*"We found that as our members age, as their salaries increase, as their balances increase, all of which are obviously related and correlated, they become more engaged."*

Regardless of the personal views of executives, passive member disinterest was clearly the working assumption they used when they designed the default investment strategy. Our member survey suggests that this view is inaccurate. A lack of interest is *not* the main reason for investment delegation according to surveyed members. Around half of defaulting members said they did not want to relinquish control. Instead, passive members emphasized their own perceived lack of skill, the suitability of the default investment option, and trust. (Passive members rate themselves as unskilled on average, but the median score of default members on a quiz of financial knowledge is only slightly lower than the median score of the whole sample, see Table 2). Our analysis suggests that some plan executives may have confused disengagement with trust. Member trust, when combined with a self-conscious lack of financial skill, can explain both defaulting and low interaction with the plan provider.

Trust did not figure prominently in interviews with executives: it was mentioned by executives from only 6 out of the 20 plans.<sup>22</sup> One executive said that members trusted their particular plan, but did not trust the superannuation industry (or the financial services sector generally):

*“Trust is huge. And look, our research ... suggests that our members trust us. They don’t necessarily trust super, they don’t trust super as an industry...”*

The trust of members is a delicate area for plan executives. Plan executives who aim to increase trust may be more likely to retain members in their plans. Trusting members are also likely to make allowances for poor plan performance (Deetlefs et al. 2015). And managers who enjoy the “blind faith” of members could defraud them more easily (Singh and Sirdeshmukh 2000). However even in this case, trust would eventually be broken by repeated performance failure or unethical practices.

Some executives did connect trusting delegation with a lack of knowledge among members:

*“Members say, ‘I don’t know what to do, just tell us.’ That’s the overarching thing, ‘I don’t know, just tell us.’”*

---

<sup>22</sup>We did not ask the executives about the trust of members in the interviews.

*“They’re relying on the Trustee, it would seem, since they’ve defaulted, to make an appropriate decision for them.”*

Our survey results suggest that members delegate the investment of their retirement savings because they trust their plan to make up for the skill they lack themselves. However, our interviews support the notion that most executives think defaulting is primarily a symptom of low interest, rather than an expression of trust. This misapprehension matters: lack of interest implies that attempts to communicate with members is futile; trust implies that communication is indispensable. Studies of trust formation, both empirical (e.g., Zak and Knack 2001) and experimental (e.g., Servatka et al. 2011), show that trust usually needs to be built incrementally (i.e. one “gift” at a time). In the context of retirement plans regular and truthful reports of satisfactory performance could be construed as gifts from executives to members. Executives who mistake trust for lack of interest may undervalue communication between the plan and members.

#### ***4.5 Goals for retirement savings***

We now turn to a comparison between members’ goals for their retirement savings and executives’ assumptions. Our results show that plan executives and defaulting members agree that securing basic retirement wealth should be the goal of the default investment strategy. A small majority of defaulting plan members would like to see their plan perform relatively well in the short-term. Nevertheless, members tend to give relative performance less attention than executives. Executives thought that they would be evaluated against their peers and wanted to compare favorably.

The legal responsibility of plans is to provide benefits to members upon retirement.<sup>23</sup> However, regulation allows several types of benefits, including the release of accumulations as lump sums, phased withdrawal accounts and annuities. Different members can receive different benefits. Executives of defined contribution plans could simply aim to maximize members’ account balances at retirement, or they could aim to provide members with retirement income streams. Alternatively, executives with short-term competitive goals or personal career ambitions might aim for high peer-relative returns or low fees. All of these complementary and competing concerns came up in our interviews with plan executives.

---

<sup>23</sup> Section 62 of Superannuation Industry (Supervision) Act 1993, (Cth).

To understand what members think their plan executives should aim for, we constructed a set of statements about retirement savings goals, and asked respondents whether they agreed or disagreed. The statements aimed to gauge the importance that respondents placed on: accepting short-term losses for higher average returns; certainty over retirement wealth; age-phasing (life-cycle strategies); comparisons with other plans (funds); and fees (Appendix A, Table A1, Panel B).

Table 6 reports the percentages of respondents in the full member sample and default member samples who agree with the “conservative” version of each of these statements. For example, respondents could agree with one of these two statements: “*I will accept lower average returns to avoid losses in the short term*”; or “*I want high average returns and will accept losses in the short term*”. The majority of survey respondents indicated the following: they want to be very certain of a basic amount of retirement wealth; they would like to reduce risk at later ages; and, that they prefer lower fees over higher fees for better service. The majority of respondents also indicated a desire for regular comparisons between plans. Around half of respondents were prepared to accept short-term losses for higher average returns.

These results are further evidence that passive members are more conservative and risk averse than average. Significantly, more of the passive members said they were willing to accept lower average returns to avoid short-term losses than did active members. Passive members also preferred more certain, but lower, retirement wealth, relative to less certain, but higher, wealth.

Table 7 reports rankings of the retirement savings goals. Respondents who say they agree with the conservative forms of the statements also say that having a safe investment ranks high, and that a comparisons between plans ranks low<sup>24</sup> when relative to other factors. Low fees rank in the middle. Overall, the majority of members, particularly those in the default investment strategy, stated that they are most interested in ensuring a basic amount of retirement wealth and moderately interested in low fees.

Plan executives say they aim to ensure basic retirement income for members, although a few acknowledge that some members will want to withdraw lump sums at retirement (Table 1). Despite

---

<sup>24</sup> Passive members also indicated that they rarely want to compare plans.



the priority of ensuring retirement income, there was little consensus among executives about what that meant for default investment strategy. Different executives used the same goal to justify both balanced strategies with fixed proportional allocations and life-cycle glide paths.

Executives' justifications of their investment strategies differed across plan providers. Executives from plans offering life-cycle defaults thought that members should have lower risk exposure as they age.<sup>25</sup> Others had a specific replacement rate in mind:

*“So we made an assumption, which is where income becomes important ... that adequacy was 70% replacement value. .... And then we modelled backwards (to) what risk did they need to take to get them to a 70% adequacy.”*

Some executives of plans with many low income, low balance members, reasoned that their members would be eligible for the public safety net (Age Pension) in retirement.<sup>26</sup> They maintained that this entitlement justified a higher-risk, balanced investment strategy for their savings, rather than a life-cycle glide path:

*“We just fundamentally disagree with how early some of the de-risking occurs, but that is actually having regard to our member demographic. It’s a specific decision for us based on the fact that we have younger members; but also the fact that our members have lower account balances and their reliance on the Age Pension ... these people are fundamentally not running a very risky portfolio in terms of present value”.*

Plans compete with each other for the business of employers and active members. Competitive pressure can influence executives' choice of default investment strategy. For instance, plan executives are divided over the importance of comparing well with peers. While the majority of executives consider peer-relative returns to matter little to members themselves, about half the executives mention relative performance as a (mainly secondary, but sometimes primary) driver of investment strategy in the default (Butt et al. 2015, pp. 13-14, 17). Some executives thought that

---

<sup>25</sup> Reasons given by life-cycle providers for de-risking included references to aspects such as mitigation of sequencing risk, or the increasing importance of the investment in superannuation and diminishing human capital as a member approaches retirement.

<sup>26</sup> Under current regulations, the public pension pays an indexed annuity stream equal to 28% of male average weekly earnings to retirees with low asset accumulations. This payment declines slowly for retirees with higher personal financial wealth.

life-cycle strategies may help divert attention away from short-term performance, and make peer comparisons more difficult. Many executives said the new MySuper regulations made them more attentive to fees, with some executives increasing the proportion of (lower cost) passive investment mandates and decreasing exposure to (high cost) alternative assets within their default strategy (see Chant et al 2014). Some referred to an implicit 1% p.a. benchmark for fees as a competitive standard; while others asserted that they did not want to be “positioned” as a “low cost offering”. Executives recognize that the new regulations will make it easier for members and other stakeholders to compare fees in different plans; and not being at either the high or low extreme of fees seems to be the goal of most.

We conclude that there are areas of agreement between interview responses of executives and the surveyed views of members on investment goals, such as concern about retirement wealth. However, there are some areas where the design their default offerings may not accord with member goals. For example, executives give more weight to comparison with peers than do members, may place a different weight on fees than members, and tend to reduce the importance of member risk preferences to a question of age-related risk reduction.

Plans that understand member’s goals well are better able to keep members informed about the outcomes that matter to them. For example, our results imply that reporting a change to plan administration that has led to lower fees, or reporting a change to portfolio allocation aiming for more certainty over retirement wealth, matches member goals. Describing the achievements of the plan in ways that are consequential to members is likely to build trust.

#### ***4.6 Investment practices***

Active and passive management, market timing, diversification, local preference (home bias) and socially responsible investment (SRI) practices all show up in the investment options of some defined contribution plans. We asked survey respondents whether they were aware of these practices, and to what extent they supported them, given that they understood them. Table 8, Panel A shows the percentage of respondents who report that they were aware of and understood the different investment practices. These responses confirm that members invested in the default investment option perceive themselves as having low skill. Awareness of investment practices among defaulting members was lower than the total sample in every instance: only 25% were aware

of market timing; 21% of active investing; 31% of local preference; and 24% for Socially Responsible Investing (SRI); although 49% were aware of diversification.<sup>27</sup>

## 5. Conclusion

Retirement plan defaults are crucially important to the majority of members, but little is known about how plans set them. We study retirement plan investment defaults from the perspective of plan executives and members. In Australia, contributions to a retirement plan are mandatory for most employees. Moreover, a majority of defined contribution plan members do not choose an investment strategy for their savings, and their contributions go to the default. In 2013, the Australian government introduced stricter controls over default asset allocations in retirement plans. “MySuper” regulations introduced simple, comparable low-cost retirement defaults following either a balanced (fixed) allocation or life-cycle investment strategy. Plan providers reviewed, and in many cases revised, their defaults. The change in regulations created a natural experiment in default design and thus the setting for our study.

Our study reports how plans design their defaults, and evaluates how well they suit the members who adopt them. We compare comments collected in face-to-face interviews with 28 plan executives after they had reset their defaults, with results from an online survey of plan members. We filtered the online survey collection so as to restrict responses to plan members and to match population age and gender proportions, but still our sample may not be as fully representative as a large random sample from the full member population. As with most self-reported or stated preference data, outcomes can be mis-measured if participants in the interviews and survey modify their responses toward what they think is expected or socially acceptable. For example, other commentators dispute the claim by executives that member needs are their primary concern (e.g. Drew and Stanford, 2003; Bird and Gray, 2013). And survey questions about risk tolerance are predictive but also noisy (Dohmen et al. 2011). For these reasons we suggest caution before

---

<sup>27</sup> Average ratings in favor or against these practices for those who are aware are reported in Panel B. These averages conceal some focal points in the responses: many people chose the extremes of the rating scales, as well as massing at the middle. The distribution of ratings on market timing and active investment are heavily skewed towards favoring the practice. This accords with the pervasive use of dynamic asset allocation and active management in our interview sample of plan providers (reported in Butt et al. 2014). The distributions on diversification, local preference and SRI were more evenly spread across the scale, with slight favor for SRI and local preference.

extrapolating results to the general population or to other settings. Where possible, we compare results with other collections of self-reported and administrative data and find them consistent. Our study presents a novel, if exploratory, comparison that can be corroborated with revealed preference data should it become available in the future, or by more studies of stated preferences.

The theory of optimal defaults proposes that defaults should be set for the modal member to minimize the costs of switching (Choi et al. 2003). However the theory assumes that members know their own best strategy and can switch if the default is very unsuitable. In settings where members are heterogeneous or not able to work out the optimal choice, many may fail to switch. Studies of default settings when members are poorly informed or subject to cognitive biases recommend that agents offer smart defaults, adjusted to the characteristics of the members, since active choice will not always lead to better outcomes (Smith et al. 2013). In addition, defaults set to the mode work best when members are homogeneous, as the costs of non-optimality increase with heterogeneity (Carlin et al. 2013; Fernandes et al. 2014). Further, studies of life-cycle portfolio allocation show that optimal strategies are highly individualized, accounting for personal preferences, human capital risk and background risk, as well as dynamic hedging strategies adapted to time-varying asset returns. The combination of heterogeneous but unsophisticated members makes the choice of default investment strategy in defined contribution retirement plans a challenge for plan executives.

Our survey results show that, although defaults are influential, they are not overriding. Around one half (49%) of respondents reports choosing an investment strategy other than the default. Only 36% accept both the default plan and the default investment strategy. The remainder make at least one active choice.

Our survey highlights significant demographic differences between default respondents and others. Default investors tend to be younger and less wealthy, more likely to be female, single and less educated. Executives explicitly considered the age and account balance of default members in their design of default investment strategies. For example, plans decided on aged-phased risk reduction when passive members are more heterogeneous. However they do not explicitly account for other easily observed differences, such as gender.

Another area of significant difference between passive and active members is risk appetite: passive members report significantly less subjective risk tolerance. They are also willing to trade lower average returns for fewer short term losses, and value security of retirement wealth. Plan executives acknowledge that they do not know the risk tolerance of their members. Instead, executives emphasize the need for investment in growth assets to ensure income in retirement, and subsume member risk preferences under time horizon and age in their discussion of portfolio strategies.

The decisions of fiduciaries (plan trustees) and their agents (plan executives) are affected by the way they view their responsibilities towards members. For example, plan providers may design default products paternalistically on the assumption that members, out of trust or disinterest, allow the provider to make decisions on their behalf. Alternatively, plan providers can try to design the default product to match their idea of what members want. We offer no solution to this dilemma, but only uncover a point of tension.

Demographic and other differences between individual plan members cannot be accommodated by the “one-size-fits all” default investment strategy stipulated by regulators. Hence passive members could benefit if plans used more information to guide default settings. In particular, our results raise the question of whether smart defaults could be implemented in a mandatory system with a very heterogeneous membership. Some individual information is relatively easy to collect. For example, proxies for member household income and wealth, education and other socio-demographic factors could be accessed using postal/zip codes, which plans already know. Plans could also collect data by directly surveying members. Selective choice architecture might also help members trying to evaluate defaults. For example, a checklist outlining the demographic characteristics that the plan executives had in mind when they designed the default investment might be useful to signal a poor fit between an individual’s demographics and those of a typical defaulting member.

Analysis shows that low skill and beliefs about the suitability of the default investment strategy are major factors in motivating default behavior. As members become older, richer, more knowledgeable, and more risk tolerant, they become more likely to seek professional financial advice and exercise active choice. Yet most members have to rely on the skills of plan executives and trustees. A majority of members in our survey readily acknowledge that they lack the skill to choose their own investment strategies. They adopt defaults in reliance on a trusted and well-monitored

provider, and they rate the default investment strategy as personally suitable. However, consistent with Bateman et al. (2014), we find that defaulting is not a simple proxy for low interest or engagement: almost 50% of defaulters also say they want a lot of control over their retirement savings. By contrast, plan executives tend to bundle default members together under the label of “disengaged” for the purpose of designing default retirement savings plans. They confound lack of interest with low skill combined with trust.

A high level of member trust in plan providers has been associated in other studies with both high and low personal interest in retirement savings (Deetlefs et al. 2015). Trust can motivate either defaulting, or active choice such as additional contributions. High trust can work to the advantage of the plan providers by giving them more room to raise fees or introduce risk (Gennaioli et al. 2014). And trusting members are unlikely to “be perturbed by a single negative encounter” (Singh and Sirdeshmurkh 2000, p. 163). Then again, distrust can work to the advantage of members when it motivates members to monitor plan performance (Deetlefs et al. 2015).

Trust is moderated by repeated interactions between principals and agents. It grows incrementally when plans repeatedly meet members’ expectations of service (Servatka et al., 2011; Singh and Sirdeshmurkh 2000). When executives describe the achievements of the plan in ways that are consequential to members they are likely to build trust. Plan executives who cannot tell the difference between disengagement and trust endanger the relationship between plans and passive members. Executives who mistake trust for low interest are likely to undervalue communication between the plan and members.

In the analysis we present here we do not explicitly discuss the fact that default design is complicated by possible conflicts of interest experienced by plan providers. Plan providers are both fiduciaries with respect to members and investment organizations, where asset growth and investment performance are likely to affect the careers and remuneration of plan executives. Butt et al. (2014, 2015) analyze how executives responsible for designing default plans in Australia attempt to balance their fiduciary obligations to deliver products in the best interests of members against business considerations related to competition for members and assets.

*Acknowledgements:* This research was jointly funded by the Centre for International Finance and Regulation, the Australian National University, the University of Technology Sydney and UNSW Australia under CIFR Project T004. The Centre for International Finance and Regulation is funded by the Commonwealth and NSW Governments, and supported by other Consortium members. We thank the interview participants who shared their valuable time and insights and the staff at the Institute for Choice, University of South Australia, for assistance in implementation of the survey. We would also like to thank Warren Chant, Joanna Davison, David Haynes, Jordan Louviere and Jeremy Cooper for their assistance; and participants at the 2015 Accounting and Finance Research Forum at the University of Queensland, the RMIT Finance Day, the 2016 Boulder Summer Conference on Consumer Financial Decision Making, University of Colorado, the CIFR Superannuation Showcase, the 2015 Superannuation Colloquium, UNSW and Victoria University of Wellington for helpful comments. Ethics approval was attained at The Australian National University under Protocol 2013/572, which was accepted by UNSW Australia, The University of Sydney, and endorsed by University of Technology, Sydney under UTS HREC REF NO. 2013000736.

## Bibliography

- Aggarwal, P., Mazumdar, T. 2008. Decision delegation: A conceptualization and empirical investigation. *Psychology and Marketing*, 25(1): 71-93.
- Agnew, J.R., Szykman, L.R., Utkus, S.P., Young, J.A., 2011. What people know about target-date funds: Survey and focus group evidence. Financial Security Project at Boston College, Working paper, 2011-2.
- Appelt, K. C., Knoll, M. A., Johnson, E. J., Westfall, J. E., 2016. Preference checklists: An effective, selective choice architecture, Working paper, Columbia University.
- Australian Prudential Regulation Authority (APRA) 2015. *Quarterly Superannuation Performance December 2014 (interim edition)*. Sydney, Australia.
- Bateman, H., Deetlefs, J., Dobrescu, L.I., Newell, B.R., Ortmann, A., Thorp, S., 2014. Just interested or getting involved? An analysis of superannuation attitudes and actions. *Economic Record*, 90(289):160-178.
- Benartzi, S., Thaler, R.H., 2001. I diversification strategies in defined contribution plans. *American Economic Review*, 91(1): 79-98.
- Benartzi, S., Thaler, R.H., 2007. Heuristics and biases in retirement savings behavior. *Journal of Economic Perspectives*, 21(3): 81-104.
- Benzoni, L., Collin-Dufresne, P., Goldstein, R. S., 2007. Portfolio choice over the life-cycle when the stock and labor markets are cointegrated. *Journal of Finance*, 62(5):2123-2167.
- Beshars, J., Choi, J. J., Laibson, D., Madrian, B. C., Wang, S. Y., 2016. Who Is Easier to Nudge? Working Paper, Imperial College, London, U.K.
- Bird, R. and Gray, J. 2013, Principles, principals and agents, *Rotman International Centre for Pension Management Research Paper* (December).
- Bodie, Z., Detemple, J., Rindisbacher, M. 2009. Life-cycle finance and the design of pension plans. *Annual Review of Financial Economics*, 1:249–86.

- Brown, J. R., Farrell, A. M., Weisbenner, S. J. 2015. Decision-making approaches and the propensity to default: Evidence and implications. *NBER Working Papers*, No. w20949, National Bureau of Economic Research. Cambridge MA.
- Brown, J.R., Liang, N., Weisbenner, S. 2007. Individual account investment options and portfolio choice: Behavioral lessons from 401(k) plans. *Journal of Public Economics*, 91, 1992 – 2013.
- Butt, A. Donald, S., Foster, F. D., Thorp, S., Warren, G. 2014. MySuper: A stage in an evolutionary process, *CIFR Research Working Papers*, No. 048/2014 (December), Centre for International Finance and Regulation.
- Butt, A. Donald, S., Foster, F. D., Thorp, S., Warren, G.J. 2015. Design of MySuper default funds: Influences and outcomes. *Accounting and Finance*, doi:10.1111/acfi.12134.
- Carlin, B.I., Gervais, S., Manso, G., 2013. Libertarian paternalism, information production and financial decision making. *Review of Financial Studies*, 26(9): 2204-2228.
- Chant, W., Mohankumar, M., Warren, G. 2014. MySuper: A new landscape for default superannuation funds. *CIFR Research Report*, Centre for International Finance and Regulation.
- Chetty, R., Friedman, J.N., Leth-Petersen, S., Nielsen, T., Olsen, T. 2012. Active vs. passive decisions and crowdoout in retirement savings accounts: Evidence from Denmark. NBER Working Paper w18565. National Bureau of Economic Research: Cambridge MA.
- Choi, J. J., Laibson, D., Madrian, B. C., Metrick, A., 2003. Optimal defaults. *American Economic Review*, 93(2):180-185.
- Choi, J. J., Laibson, D., Madrian, B. C., Metrick, A., 2005a. Saving for retirement on the path of least resistance. Rodney L. White Center for Financial Research Working papers, 9.
- Choi, J. J., Laibson, D., Madrian, B. C., Metrick, A. 2005b. Passive decisions and potent defaults. In Wise, David A., (ed.) *Analyses in the Economics of Aging*. University of Chicago Press: Chicago, pp. 59-73.
- Cocco, J., Gomes F., Maenhout P.J. 2005. Consumption and portfolio choice over the life-cycle. *Review of Financial Studies*, 18(2):491–533.
- Commonwealth of Australia 2010. Super System Review, Final Report Part 1, Overview and Recommendations, Commonwealth of Australia. Available at <http://www.treasury.gov.au/ConsultationsandReviews/Reviews/2009/Super-System-Review/Publications/Final-Report>
- Cooper, J., 2010. Super for Members: A new paradigm for Australia's retirement income system. *Rotman International Journal of Pension Management*, 3(2): 8-15.
- Cronqvist, H., Thaler, R.H. 2004. Design choices in privatized social security systems: Learning from the Swedish experience. *American Economic Review*, 94(2):424-28.
- Deetlefs, J., Bateman, H. Dobrescu, L., Newell, B., Ortmann, A., Thorp, S. 2015. Suspicious minds. Working paper, available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2575482](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2575482).
- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., Wagner, G. G., 2011. Individual risk attitudes: Measurement, determinants, and behavioral consequences. *Journal of the European Economic Association*, 9(3):522-550.



- Drew, M.E. and Stanford, J.D., 2003, Principal and agent problems in superannuation funds, *Australian Economic Review* 36(1): 98-107.
- Fernandes, D., Lynch Jr, J. G., Netemeyer, R. G. 2014. Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8): 1861-1883.
- Foster, F. D., Warren, G. J. 2016. Interviews with institutional investors: The how and why of active investing. *Journal of Behavioral Finance*, 17(1): 60-84.
- Fry, T., Heaney, R., McKeown, W. 2007. Will investors change their superannuation fund given the choice? *Accounting and Finance*, 47(2): 267-283.
- Gallery, G.T., Gallery, N. and McDougall, L. 2010. Don't judge a superannuation default investment option by its name. *Australian Accounting Review*, 20(3): 286-295.
- Gennaioli, N., Shleifer, A., Vishny, R. 2015. Money doctors. *Journal of Finance*, 70(1): 91–114.
- Gerrans, P., Clark-Murphy, M and Speelman, C. 2010. Asset allocation and age effects in retirement savings choices. *Accounting and Finance*, 50(2):301-319.
- Gomes, F.J., Michaelides, A.G., 2005. Optimal life-cycle asset allocation: Understanding the empirical evidence. *Journal of Finance*, 60(2): 869-904.
- He, X. D., Zhou, X. Y. 2011. Portfolio choice under cumulative prospect theory: An analytical treatment. *Management Science*, 57(2):315-331.
- Heaton, J., Lucas, D. 2000. Portfolio choice and asset prices: the importance of entrepreneurial risk. *Journal of Finance*, 55(3):1163–98.
- Hedesström, T.M., Svedsäter, H. and Gärling, T. 2007. Determinants of the use of heuristic choice rules in the Swedish Premium Pension Scheme: An Internet-based survey. *Journal of Economic Psychology*, 28:113–126.
- Huberman, G., Jiang, W., 2006. Offering versus choice in 401 (k) Plans: Equity exposure and number of Funds. *Journal of Finance*, 61(2):763 -801.
- Jagannathan, R., Kocherlakota, N. R. 1996. Why should older people invest less in stocks than younger people? *Federal Reserve Bank Minneapolis Quarterly Review*, 20:11–23.
- Keim, D. B., Mitchell, O. S. 2016. Simplifying choices in defined contribution retirement plan design. NBER working paper w21854. National Bureau of Economic Research, Cambridge MA.
- Leggett, W., 2014. The politics of behaviour change: nudge, neoliberalism and the state. *Policy & Politics*, 42(1), 3–19.
- Lipkus, I.M., Samsa, G., Rimer, B.K., 2001. General performance on a numeracy scale among highly educated samples. *Medical Decision Making*, 21(1):37-44.
- Lusardi, A., Mitchell, O.S. 2011. Financial literacy around the world: An overview. *Journal of Pension Economics and Finance*, 10(04):497-508.
- Marley A.A.J., Louviere, J.J. 2005. Some probabilistic models of best, worst, and best-worst choices. *Journal of Mathematical Psychology*, 49(6):464-480.

- Merton, R.C. 1969. Lifetime portfolio selection under uncertainty: the continuous-time case. *Review of Economics and Statistics*, 51:247–57.
- Michaelides, A., Zhang, Y. 2015. Stock market mean reversion and portfolio choice over the life-cycle (February 13). Working paper, available at: <http://dx.doi.org/10.2139/ssrn.2564447>.
- Morrin, M., Inman, J.J., Broniarczyk, S.M., Nenkov, G.Y., Reuter, J. 2012. Investing for retirement: The moderating effect of fund assortment on the 1/n heuristic. *Journal of Marketing Research*, 49(4):537-50.
- Oppenheimer, D. M., Meyvis, T., Davidenko, N. 2009. Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45(4):867-872.
- Polkovnichenko, V. 2007. Life-cycle portfolio choice with additive habit formation preferences and uninsurable labor income risk. *Review Financial Studies*, 20(1): 83–124.
- Pool, V. K., Sialm, C., Stefanescu, I. 2016. It pays to set the menu: Mutual fund investment options in 401 (k) plans. Forthcoming, *Journal of Finance*.
- Productivity Commission 2012. *Default Superannuation Funds in Modern Awards*. Report no. 60, Final Inquiry Report, Canberra, Australia.
- Qizilbash, M. 2009. ‘Well-Being, Preference Formation and the Danger of Paternalism.’ *Papers on Economics and Evolution*, Max Planck Institute of Economics, Evolutionary Economics Group 18: 1–30.
- Samuelson, P.A. 1969. Lifetime portfolio selection by dynamic stochastic programming. *Review of Economics and Statistics*. 51:239–46.
- Servatka, M., Tucker, S. Vadovic, R. 2011. Building trust – One gift at a time, *Games*, 2:412-413.
- Singh, J., Sirdeshmukh, D. 2000. Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *Journal of the Academy of Marketing Science*, 28(1):150–167.
- Smith, N. C., Goldstein, D.G., Johnson, E.J. 2013. Choice without awareness: Ethical and policy implications of defaults. *Journal of Public Policy & Marketing*, 32(2):159-172.
- Stracca, L. 2006. Delegated portfolio management: A survey of the theoretical literature. *Journal of Economic Surveys*, 20(5):823-848.
- Towers Watson 2014. *Global Pensions Asset Study – 2014*. <http://www.towerswatson.com/en-AU/Insights/IC-Types/Survey-Research-Results/2014/02/Global-Pensions-Asset-Study-2014>.
- Tuckett, D. 2012. Financial markets are markets in stories: Some possible advantages of using interviews to supplement existing economic data sources. *Journal of Economic Dynamics and Control*, 36(8):1077-1087.
- Van der Horst, L. 2013. DC Defaults 2.0: An international framework in order to improve the investment strategy for DC defaults across Europe. *Netspar MSc. Thesis*, 2013:008. Tilburg University, The Netherlands.
- White M., 2013. *The Manipulation of Choice: Ethics and Libertarian Paternalism* (Palgrave Macmillan US).
- Zak, P.J., Knack, S. 2001. Trust and growth. *Economic Journal*, 111:295-321.

## Appendix A: Survey design and Interview Guide

### Survey design

The first section of the survey identified rates of passive and active choices, allowing us to classify respondents accordingly and separate out “deliberate defaulters” (Brown et al. 2015). The second section used Best-Worst methods (Marley and Louviere 2005) and rating scales to measure preferences of respondents over three aspects of retirement savings investment management: 1) propensity to delegate; 2) retirement savings goals / investment objectives; and 3) investment philosophies. The third section measured the financial literacy and numeracy of respondents, along with their risk tolerance; and the fourth section collected demographics such as marital status, income and occupation, in a structure consistent with the 2011 Australian Census.

For 1 and 2, we showed respondents a list of statements about delegation factors (control, skill, product suitability, trust, monitoring and accountability) and investment objectives (short term risk/return trade off, retirement income security, life-cycle glide path, peer comparison and fees), and asked them to “please select which statement best matches what you want or think” (Table A1). We then showed respondents a table populated by the statements they had said most matched what they wanted or thought, and asked them to choose the most and least important factors that affected their superannuation decisions or non-decisions from the list. This was done over several stages, until we had a complete ranking of the relative importance of each factor for each individual. At the end, we understood a respondent’s views on a delegation factor or investment objective, and the relative importance they placed on each factor or objective compared with the others in the list.

For 3, we questioned respondents about their knowledge of investment philosophies ; we showed respondents a table listing “market timing”, “active investing”, “diversification”, “local preference”, and “socially responsible investing”; coupled with a short sentence defining what we meant by each investment method. We asked respondents to select those investment methods that they were aware of and understood. For each method that a respondent said they were aware of and understood, we then measured their opinion. We showed them a slider where the left position expressed one extreme of opinion, the middle expressed “I have no opinion either way”, and the right expressed the other extreme. For example, if the respondent said they were aware of and understood diversification, on the left side of the slider they saw the statement “I want my fund to be broadly diversified at all times, to get smoother returns”; at the center, the statement “I have no opinion”; and at the right side of the slider, “I want my fund to be concentrated in the best investment prospects, even if I get uneven returns”. Figure A1 shows screenshots of the table of investment methods, and an example of a slider screen that would be presented to a respondent who selected all the investment methods. Even though the sliders did not show a numerical scale to respondents, we collected the slider positions people chose on the scale as numbers from 0 to 100. These questions informed us about the importance of common investment strategies to the members of plans.

In the third section, respondents answered three numeracy questions on a widely-used scale (Lipkus et al. 2001) testing fractions, proportions and probability. Financial literacy was measured using three standard questions (Lusardi and Mitchell 2011) on simple interest, inflation and diversification. We added three more questions on compound interest, investment management fees and understanding of the risk of a typical balanced fund. We also asked respondents to rate their own risk tolerance by asking “How do you see yourself? Are you generally a person who is fully prepared to take risks in financial matters or do you try to avoid taking risks?” (Dohmen et al. 2011). Responses were collected using an (unnumbered) slider with “Unwilling to take risks in financial matters” on the left

extreme, and “Fully prepared to take risks in financial matters” on the right extreme. We include responses to these last two sections both as covariates in the econometric modeling described in section 4, and to check whether our sample represented the general population.

**Table A1: Propensity to delegate and investment goals – Statements shown to respondents**

***Panel A: Propensity to delegate***

I want a lot of control over my super

I do not want a lot of control over my super

I have plenty of skill and knowledge for making decisions about my super

I have little skill and knowledge for making decisions about my super

It takes, or would take, a lot of time to make my own decisions about super

It does not take, or would not take, a lot of time to make my own decisions about super

It costs, or would cost, a lot of money to make my own decisions about super

It does not cost, or would not cost, a lot of money to make my own decisions about super

The super fund recommended by my employer suits me

The super fund recommended by my employer does not suit me

Default investment options of superannuation funds suit me

Default investment options of superannuation funds do not suit me

I trust the super fund recommended by my employer to make decisions in my best interests

I do not trust the super fund recommended by my employer to make decisions in my best interests

The super fund recommended by my employer is well monitored

The super fund recommended by my employer is not well monitored

The super fund recommended by my employer is accountable for its actions

The super fund recommended by my employer is not accountable for its actions

***Panel B: Retirement savings goals***

I will accept lower average returns to avoid losses in the short term

I want high average returns and will accept losses in the short term

I want to be very certain of a basic amount of retirement wealth

I will accept uncertainty for a better chance of high retirement wealth

I want to compare my fund with similar funds regularly

I want to compare my fund with similar funds rarely, if ever

I want my super investment strategy to be less risky as I age, even if it means lower returns

I want my super investment strategy to stay much the same as I age

I want my fund to charge lower fees than other funds

I will pay higher fees than other funds, if my fund is better than average

Figure A1: Investment philosophy description table and example slider

*Panel A: Investment philosophy*

The following questions ask you about your general investment philosophy.

This table shows some general methods of investment that can be used by super funds. Select the boxes next to the methods that you are aware of and understand.

If you are not aware of any of them, don't tick any boxes.

	Strategy	Description
<input type="checkbox"/>	Market timing	Moving money between various assets at particular times to try to reduce losses and capture gains. (The alternative is to keep the same mix of assets all the time)
<input type="checkbox"/>	Active investing (i.e. stock picking)	Paying higher fees to managers who try to choose the shares that are expected to do better than the market average. (The alternative is to buy all the stocks in the market and pay lower fees)
<input type="checkbox"/>	Diversification	Putting money into a wide range of investments to get more even returns. (The alternative is to put more money in investments with the best prospects but get more uneven returns)
<input type="checkbox"/>	Local preference	A preference for Australian over international investments
<input type="checkbox"/>	Socially responsible investing (SRI)	An investment strategy that promotes positive environmental, social or ethical issues (e.g. avoiding companies involved in tobacco, weapons manufacture, gambling)

*Panel B: Sliders*

For each way to invest that you said you "understood" in the previous question, rate your position on them.

Please use the slider to indicate your position on each investment method. You must move each slider at least once before proceeding.

**Market Timing**

I don't want my super fund to attempt to time the markets I have no opinion I want my super fund to attempt to time the markets

**Active investing, i.e. stock picking**

I don't want my fund to try to choose the best shares, and would prefer lower fees I have no opinion I want my fund to try to choose the best shares, even if I pay more in fees

**Diversification**

I want my fund to be broadly diversified at all times, to get smoother returns I have no opinion I want my fund to be concentrated in the best investment prospects, even if I get uneven returns

**Local preference**

I want mainly Australian investments I have no opinion I don't have a preference for Australian or international investments

**Socially responsible or ethical investing (SRI)**

I want my fund to stick to socially responsible investments I have no opinion I don't expect my fund to stick to socially responsible investments, and want them to hold whatever investments will give the best returns

## Interview Guide – Design of MySuper Products

### d. *Opening*

About this interview:

- Our broad aim is to better understand how the investment options of super funds came to be structured as they are, including asset allocation and overall product design. We also want to gather views on how effectively member needs are being met. To achieve this, we would like to focus on the development of your MySuper product as a case study.
- This interview will be structured into four main parts:
  1. Gather some background information;
  2. Obtain an account of how your MySuper product was designed;
  3. Find out how the underlying asset allocation is determined;
  4. Ask for your views on the effectiveness of current industry structures.

Checks to perform:

- d. Consent form?
- ii. Permission to record interview and take notes?
- iii. Observe right to opt out of involvement or cease recording at any time
- iv. Any questions?

### 2. *Background Information*

- a) First, we have done some preliminary research into your fund and MySuper product based on publically available information. Can you tell us if the summary provided is accurate, and help us fill in any gaps?
- b) Can we also ask about:
  - Your industry sector – how do you view yourself?
  - Your member base – any distinguishing features for your fund?
- c) What is your understanding of the needs of your members?

### 3. *Account of MySuper Product Design*

Can you give an account of how your MySuper product came to be structured as it is?

### 4. *Asset Allocation*

We now want to ask you to describe investment strategy for the MySuper product.

- d) Who is involved in determining asset allocation?  
Follow-up question:
  - i. What is the role of any asset consultant?
- b) What asset classes are considered?
- c) What is the investment philosophy and objectives which underlie asset allocation?  
Specifically how are risk and return defined, and then traded off?
- d) Can you describe the process of how asset allocation is determined?

d. *Effectiveness of Current Industry Structures*

We now want to get your thoughts on the effectiveness of current industry structures. First, we will ask about MySuper specifically. Then we will get your thoughts on the superannuation system in general (if time permits). Our aim is to document industry perspectives on the effectiveness of the system in meeting member needs.

- d) Do you have any comments on the extent to which MySuper is likely to enhance the ability to meet the needs of members?

Follow-up questions:

- d. Do you have any comments on the MySuper development process?

- ii. Do you have any comments on the relevance of fund scale?

- b) Are there any design aspects of your MySuper product that you either have plans to improve, or would like to do so if possible?

Follow-up question:

- i. Do any notable barriers exist to making these improvements?

- c) Do you have any comments on the superannuation system in general, and how well it is configured to meet the needs of you members?

Follow-up question:

- i. Any notable strengths or weaknesses of the regulatory framework, including either the regulations and/or the regulators?

6. *Other Issues and Wrap-up*

- a) Any other important items that we have overlooked?

- b) Would you mind being contacted if we any follow-up questions?

- c) Can we send a copy of the transcript, and then our write-up, for your comments? This would help to ensure that our account and interpretations are correct.

- d) Thank-you again!

Table 1: Interview Code Mapping and Summary of Findings

Research Questions	Code Mapping		Findings	
	Level 1 Nodes: Broad Topics	Level 2 Nodes: Specific Categories	Features	Themes
1. <i>What are the objectives and motivations of fund providers when designing MySuper (default) funds?</i>	Motives	Members Other	<i>Member-related:</i> • Catering for disengaged members • Paternalism	<ul style="list-style-type: none"> <li>• Fiduciary duty <i>vs.</i> role as product providers in a competitive market</li> <li>• Member needs as primary; business requirements are important, but tend to be presented as subsidiary or constraints</li> </ul>
	Members	Engagement Trust Member or Client Base		
	Motives	Business Other	<i>Business-related:</i> • Need for a competitive product • Catering for intermediaries: employers, financial advisers	
2. <i>How do fund providers perceive their default fund members and their needs?</i>	Members	Engagement Trust Member or Client Base	<i>Perceptions of members:</i> • Characterization of ‘typical’ member as disengaged and often poorly informed, but: • Potential for member heterogeneity recognized • Member base differs across funds [plans]	<ul style="list-style-type: none"> <li>• The ‘typical’ default member characterized as disengaged, with a primary need for retirement outcomes</li> <li>• Recognition that heterogeneity exists, both across members and funds [plans]</li> </ul>
	Choice	Choice		
	Members	Needs – Perceptions Needs – Inputs Lump Sum vs Income Trust	<i>Perceptions of member needs:</i> • Retirement outcomes as primary need; with some debate over income <i>vs.</i> account balance at retirement • Dislike of return shocks • Some want to be looked after • Short-term relative returns of little relevance to members	
3. <i>What are the key influences on the design of MySuper (default) funds?</i>	Advice	Advice		
	Design Considerations	Designs Considered Balanced – Reasons Life-cycle – Reasons	<i>Framing:</i> • Widespread use of the language of life-cycle theory • Balanced providers considered range of options; life-cycle providers predisposed to life-cycle	<ul style="list-style-type: none"> <li>• Theory of life-cycle investing provides main conceptual framing</li> <li>• Different approach by balanced and life-cycle providers</li> </ul>
	Members	Needs – Perceptions	<i>Key influences mentioned:</i> • Nature of the member base, and revealed preferences • Regulatory guidance • Business constraints: fee budgets; admin; information • Competitive positioning: returns, price (fees), features	
Design Considerations	Admin Constraints Fee Constraints Information Constraints Legacy Effects			
	Investment Strategy	Asset Classes		<ul style="list-style-type: none"> <li>• Juggling member needs &amp; business requirements</li> <li>• Positioning on the value-add <i>vs.</i> price spectrum</li> <li>• Diverse influences lead to diverse offerings</li> </ul>
	Regulation	Regulation – Impact MySuper Reflections		



Table 2: Survey sample and 2011 Population Census (18-74 years), proportions

	<i>Survey respondents</i>	<i>Pop'n Census</i>	<i>Default plan</i>	<i>Default investment</i>
<b>Gender</b>				
Male	0.497	0.495	0.471*	0.390***
Female	0.503	0.505	0.529*	0.610***
<b>Marital Status</b>				
Never married and not in a de facto relationship	0.248	0.334	0.271**	0.322***
Widowed	0.012	0.025	0.010	0.011
Divorced	0.077	0.091	0.067	0.076
Separated	0.034	0.034	0.027	0.027
Married	0.500	0.516	0.498	0.409***
De facto relationship	0.130	N/A	0.127	0.155**
<b>Highest Tertiary Education Level</b>				
PhD	0.015	0.009	0.023***	0.001
Postgraduate	0.175	0.057	0.179	0.142***
Bachelor degree	0.259	0.167	0.261	0.256
Technical or vocational training	0.384	0.315	0.367	0.393
None	0.168	0.452	0.169	0.199***
<b>Highest Secondary Education Level</b>				
Year 12	0.769	0.564	0.767	0.796**
Year 10-11	0.209	0.327	0.199	0.186*
Lower	0.022	0.109	0.034***	0.019
<b>Personal Income</b>				
Negative income	0.000	0.006	0.000	0.000
Nil income	0.006	0.064	0.007	0.006
\$1-\$199 (\$1-\$10,399)	0.043	0.068	0.049	0.053*
\$200-\$299 (\$10,400-\$15,599)	0.048	0.104	0.045	0.068***
\$300-\$399 (\$15,600-\$20,799)	0.048	0.093	0.047	0.063**
\$400-\$599 (\$20,800-\$31,199)	0.113	0.126	0.127	0.150
\$600-\$799 (\$31,200-\$41,599)	0.108	0.122	0.116	0.131**
\$800-\$999 (\$41,600-\$51,999)	0.122	0.100	0.117	0.110
\$1,000-\$1,249 (\$52,000-\$64,999)	0.151	0.096	0.142	0.165
\$1,250-\$1,499 (\$65,000-\$77,999)	0.089	0.067	0.094	0.085
\$1,500-\$1,999 (\$78,000-\$103,999)	0.143	0.079	0.141	0.116
\$2,000 or more (\$104,000 or more)	0.128	0.076	0.116	0.055
<b>Age group</b>				
18-34 years	0.325		0.365***	0.430***
35-54 years	0.437		0.435	0.405**
55+ years	0.241		0.201***	0.165***
<b>Financial Knowledge</b>				
Median no. correct answers (/9)	5		5	4
<b>Financial Risk Tolerance</b>				
Mean (0-100 Scale)	44.4		43.6	38.7***
<i>Obs</i>	<i>1031</i>		<i>597</i>	<i>528</i>

*Notes:* This table reports attribute proportions for 1,053 survey respondents from PureProfile online panel in August 2014, and 2011 Census data from the Australian Bureau of Statistics. Age proportions are filtered to match the population exactly, whilst gender proportions are filtered to almost exactly match the population. \*\*\*/\*\*/\* reflects significance at the 10%/5%/1% level for the difference in proportion of respondents of a certain demographic (e.g. "Male") within the default group compared to the non-default group.

**Table 3: Active and passive choices of fund (plan provider) and investment option**

	<i>All respondents</i>		<i>Respondents who passed the IMC</i>	
<b>Did you choose a different plan [fund] to the default of your employer?</b>		% (all)		% (passed imc)
Yes	434	42.1	306	40.9
No - but I actively chose the default	158	15.3	127	17.0
No - I was already in the default when I came to this employer	15	1.5	11	1.5
No - I just went with the employer fund without investigation, OR I don't know	424	41.1	305	40.7
<i>Total</i>	<i>1031</i>		<i>749</i>	
<b><i>Respondents making fund choice</i></b>				
<b>Did you choose a different investment option to the default?</b>		% (all)		% (passed imc)
Yes	211	20.5	150	20.0
No - but I actively chose the default	23	2.2	18	2.4
No - I just went with the default without investigation, OR I don't know	136	13.2	97	13.0
Self-managed super fund	64	6.2	41	5.5
<i>Total</i>	<i>434</i>		<i>306</i>	
<b><i>Respondents not making fund choice</i></b>				
<b>Did you choose a different investment option to the default?</b>		% (all)		% (passed imc)
Yes	228	22.1	163	21.8
No - but I actively chose the default	22	2.1	18	2.4
No - I just went with the default without investigation, OR I don't know	347	33.6	262	35.0
<i>Total</i>	<i>597</i>		<i>443</i>	

*Notes:* This table shows counts of respondents who opted into or out of defaults at the choice of plan (fund) stage and/or at the choice of investment option stage. The far right column reports counts only for respondents who passed the instructional manipulation check for attentiveness.

**Table 4: Agreement with statements promoting delegation (percentage of respondents)**

	<i>Full sample</i>	<i>Default fund</i>	<i>Default investment</i>
<b>Propensity to delegate</b>	<i>%</i>	<i>%</i>	<i>%</i>
I do not want a lot of control over my super	42	43	53***
I have little skill and knowledge for making decisions about my super	73	77***	87***
It takes, or would take, a lot of time to make my own decisions about super	62	66***	71***
It costs, or would cost, a lot of money to make my own decisions about super	33	36***	34
The super fund recommended by my employer suits me	62	87***	75***
Default investment options of superannuation funds suit me	64	71***	82***
I trust the super fund recommended by my employer to make decisions in my best interests	67	82***	78***
The super fund recommended by my employer is well monitored	75	84***	79***
The super fund recommended by my employer is accountable for its actions	82	89***	85***

\*\*\*/\*\*/\* reflects significance at the 10%/5%/1% level for the difference in proportion of respondents of a certain propensity (e.g. “I do not want a lot of control over my super”) within the default group compared to the non-default group.

*Notes:* This table reports the percentage of respondents who agreed with each statement listed in column 1 for the full sample (n=1031), respondents who defaulted into the employer’s plan (n=597), and respondents who defaulted into the plan’s default investment strategy (n=528). Statements indicate willingness to delegate.

Table 5: Conditional rankings of delegation factors

<i>Panel A: High Propensity to Delegate</i>									
Factor/Ranking	(most)1	2	3	4	5	6	7	8	(least)9
Don't want control over super	0.083	0.055	0.060	0.046	0.081	0.136	0.111	0.124	<b>0.304</b>
Little skill and knowledge	<b>0.182</b>	<b>0.147</b>	0.098	0.071	0.063	0.063	0.119	0.135	0.123
Takes a lot of time	0.078	<b>0.143</b>	0.132	0.074	0.058	0.093	0.116	<b>0.148</b>	<b>0.159</b>
Costs a lot of money	0.078	<b>0.143</b>	<b>0.146</b>	<b>0.152</b>	0.081	0.096	0.116	0.090	0.099
Default fund is suitable	0.133	0.134	<b>0.142</b>	0.106	0.086	0.103	0.080	0.119	0.097
Default investment is suitable	0.052	0.099	0.112	0.124	<b>0.140</b>	0.115	0.138	0.115	0.105
I trust default fund	<b>0.147</b>	0.126	<b>0.147</b>	<b>0.167</b>	0.121	0.084	0.097	0.070	0.041
Default fund is well monitored	0.059	0.089	0.119	<b>0.155</b>	<b>0.170</b>	<b>0.159</b>	0.103	0.070	0.077
Default fund is accountable	0.068	0.073	0.099	<b>0.164</b>	0.240	<b>0.142</b>	0.092	0.061	0.062
<i>Panel B: Low Propensity to Delegate</i>									
Factor/Ranking	(most)1	2	3	4	5	6	7	8	(least)9
Do want control over super	<b>0.472</b>	0.121	0.075	0.067	0.050	0.064	0.047	0.042	0.062
Plenty of skill and knowledge	0.131	<b>0.322</b>	<b>0.159</b>	0.099	0.071	0.046	0.053	0.071	0.049
Doesn't take a lot of time	0.051	0.114	<b>0.140</b>	0.117	0.051	0.102	0.109	<b>0.145</b>	<b>0.173</b>
Doesn't cost a lot of money	0.070	0.129	0.135	0.105	0.062	0.135	0.135	0.128	0.101
Default fund is not suitable	0.074	0.087	0.087	0.069	0.102	0.115	0.125	<b>0.189</b>	<b>0.151</b>
Default investment is not suitable	0.043	0.067	0.059	0.091	0.113	0.134	<b>0.161</b>	<b>0.175</b>	<b>0.156</b>
I don't trust default fund	0.041	0.052	0.093	0.120	0.120	0.108	<b>0.160</b>	<b>0.190</b>	0.117
Default fund is not well monitored	0.020	0.043	0.078	0.102	0.133	<b>0.184</b>	<b>0.165</b>	0.129	<b>0.145</b>
Default fund is not accountable	0.042	0.021	0.058	0.115	<b>0.267</b>	<b>0.147</b>	<b>0.152</b>	0.099	0.099

*Notes:* This table shows proportions of respondents who ranked the delegation factor one through to nine in importance to them in their decisions about superannuation, conditional on initially agreeing with the statement as stated in the far left column. Statements in Panel A indicate high propensity to delegate, and statements in Panel B indicate low propensity to delegate. For example, respondents who agreed that they have “little skill and knowledge” for superannuation decisions, (Panel A, row 2), 18.2% subsequently ranked this as best matching their thinking about superannuation (column 1), while 12.3% ranked it as least matching their thinking (column 9). Assuming that individuals choose randomly, the expected proportion in each cell is equal to  $1/9 = 0.111$ . On an individual cell basis, cells with a proportion higher than 0.128/0.132/0.139 or lower than 0.096/0.093/0.088 reflect significance at the 10%/5%/1% level compared to random choice. Boldface type shows cells with high proportions significant at 1% level.

**Table 6: Agreement with statements on goals for retirement savings (% of respondents)**

	<i>Full sample</i>	<i>Default fund</i>	<i>Default investment</i>
<b>Plan goals</b>	%	%	%
I will accept lower average returns to avoid losses in the short term	53	53	59***
I want to be very certain of a basic amount of retirement wealth	69	70	74***
I want to compare my fund with similar funds rarely, if ever	43	46***	46**
I want my super investment strategy to be less risky as I age, even if it means lower returns	67	66	67
I want my fund to charge lower fees than other funds	77	77	80**

\*\*\*/\*\*/\* reflects significance at the 10%/5%/1% level for the difference in proportion of respondents of certain goals (e.g. “I will accept lower average returns to avoid losses in the short term”) within the default group compared to the non-default group.

*Notes:* This table shows percentage who agreed with each statement listed in column 1 for the full sample (n=1,031), respondents who defaulted into the employer’s plan (n=597), and respondents who defaulted into the plan’s default investment strategy (n=528). Statements relate to plan goals.

Table 7: Conditional rankings of retirement savings goals

<i>Panel A: Conservative Response</i>					
Factor (conservative)/Ranking	<i>(Most)</i> 1	2	3	4	<i>(Least)</i> 5
Lower average returns and avoiding losses	<b>0.273</b>	0.168	<b>0.242</b>	0.196	0.122
Certainty of basic amount of retirement wealth	<b>0.395</b>	<b>0.295</b>	0.133	0.099	0.078
Rarely compare my fund with similar funds	0.029	0.050	0.077	<b>0.240</b>	<b>0.604</b>
Reduce risk of investment as I age	0.110	0.301	<b>0.277</b>	0.193	0.120
Want my fund to charge lower fees than other funds	0.192	0.202	<b>0.282</b>	0.194	0.130
<i>Panel B: Aggressive Response</i>					
Factor (aggressive)/Ranking	<i>(Most)</i> 1	2	3	4	<i>(Least)</i> 5
Higher average returns and accept losses	<b>0.470</b>	0.186	0.143	0.112	0.088
Uncertainty for better chance of high retirement wealth	0.161	<b>0.313</b>	<b>0.245</b>	0.170	0.111
Regularly compare my fund with similar funds	0.053	0.081	0.129	<b>0.290</b>	<b>0.447</b>
Maintain risk of investment as I age	0.074	0.175	0.205	<b>0.341</b>	0.205
I will pay higher fees than other funds for better return	0.099	0.172	<b>0.262</b>	<b>0.275</b>	0.193

Assuming that individuals choose randomly, the expected proportion in each cell is equal to  $1/5 = 0.200$ . On an individual cell basis, cells with a proportion higher than 0.221/0.226/0.234 or *lower* than 0.180/0.177/0.170 reflect significance at the 10%/5%/1% level compared to random choice.

*Notes:* This table shows proportions of respondents who ranked the delegation factor first through to fifth in importance to them in their decisions about superannuation, conditional on agreeing with the statement as stated in the far left column. Statements in Panel A indicate conservative investment goals, while statements in Panel B indicate aggressive investment goals. For example, of respondents who agreed that they have “lower average returns to avoid losses” for superannuation decisions, (Panel A, row 1), 27.3% ranked this as best matching their thinking about superannuation (column 1), while 12.2% ranked it as least matching their thinking (column 5).

**Table 8: Awareness of investment practices**

	<i>Full sample</i>	<i>Default plan</i>	<i>Default investment</i>
<b>Panel A: Percentage aware of, and understand, the practice</b>			
	%	%	%
Market timing	34	31**	25***
Active investing	31	28*	21***
Diversification	60	56***	49***
Local preference	44	41**	31***
Socially responsible investing	33	30**	24***
<b>Panel B: Average rating out of 100 (conditional on awareness)</b>			
Market timing (0 = no market timing; 100 = full market timing)	64	64	63
Active investing (0 = no active investing; 100 = fully active investing)	63	63	59*
Diversification (0 = full diversification; 100 = concentration)	48	45**	44**
Local preference (0 = high local bias; 100 = no local bias)	46	46	46
Socially responsible investing (0 = high SRI; 100 = unconcerned)	45	45	39***

\*\*\*/\*\*/\* reflects significance at the 10%/5%/1% level for the difference in proportion of respondents of knowing certain investment practices (e.g. "Market timing"), or the difference in average rating, within the default group compared to the non-default group.

*Notes:* This table shows percentage of respondents who said that they were aware of and understood the investment practice in the far right column (Panel A), and the average rating out of 100 assigned to the practice according to the sliders (as shown in Figure 1). Results are reported for full sample respondents (n=1,031), respondents who defaulted into the employer's plan (n=597), and respondents who defaulted into the plan's default investment strategy (n=528).