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SUPERANNUATION KNOWLEDGE *and plan behaviour*

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This paper presents new evidence from a national survey which indicates that working age Australians often are ill-informed about many important features of the superannuation system, and the results from regression analysis suggest a relationship between superannuation knowledge and savings behaviour. The results provide motivation for further research in the area and suggest more can be done to educate individuals about the superannuation system.[2]

Studies from abroad indicate that retirement plan participants are frequently unaware of the benefits and features of their own retirement plans, as well as lacking a basic understanding of various asset types. This is obviously problematic given the decreasing likelihood that participants will take full advantage of their retirement plan offerings. It also suggests that individuals may not have the proper knowledge to make informed asset allocation choices. Furthermore, lack of plan knowledge can render plan features designed as incentives to encourage improved savings and investment decisions ineffective.

This paper investigates whether issues of retirement plan awareness also exist in Australia. Using new evidence from a nationally representative survey, this study documents the working population's understanding of superannuation benefits and assets and explores the relationship between this knowledge and behaviour. The findings suggest that significant knowledge deficiencies exist and highlight areas where Australians' familiarity with certain superannuation provisions and asset classes can be improved.

Why retirement plan knowledge and asset awareness matter: International evidence

For many years, US academic literature has highlighted serious deficiencies in workers' understanding of their pension features. In fact, over 20 years ago, Mitchell (1988) assessed the accuracy of workers' knowledge of their retirement plan provisions by comparing administrative records from employers with responses from employee surveys. The analysis revealed widespread discrepancies between the two sources indicating that the studied workers were often ill-informed about their plans. Specifically, she found workers had a poor understanding of the plan's early retirement provisions with one-third of respondents unable to answer any questions about the related requirements and two-thirds of those who did answer providing the wrong responses. At the time, she noted that this was a concern given the popularity of early retirement. In addition, she found that those who lacked knowledge tended to be the poorer and least educated workers, which raises additional issues.

Over the years, subsequent research has supported her findings in both the US and abroad (for example, Arenas de Mesa et al. 2008; Clark et al. 2012; Gustman and Steinmeier 2004). A very recent study finds that individuals make sensible choices in their retirement plans based on the plan features they believe to be true (Brown and Weisbenner 2012). However, the study reveals that often the participant's beliefs are inaccurate, leading to suboptimal elections. Chan and Stevens (2008) also find that participants are more likely to react to their own misperceptions of the plan benefits and that individuals who are knowledgeable about their plans are more responsive to the plan features than those who are less informed. Furthermore, Brown et al. (2011) report that individuals with basic and more advanced knowledge of their plan characteristics are less likely to accept the retirement system's default choice. This is important in the long run because new research suggests that passively defaulted individuals may ultimately be less satisfied with their choices than those who were more active in the decision making process (Brown et al. 2011).

Finally, understanding the fundamentals of different investment options is critical to making informed portfolio allocation decisions. However, there is evidence that individuals lack basic asset awareness. For example, Agnew and Szykman (2005) report that only 13 per cent of individuals who participated in their experimental study could correctly identify the type of assets that comprise a US money market account. This is noteworthy because in the US, the market for this product is very large and, until recent legislative changes, this asset was a popular default selection in retirement plans. As a result, this basic investment vehicle should be well known to most individuals. Similarly, a recent survey by Agnew et al. (2012) of Vanguard clients found that 20 per cent of respondents reported that they had never heard of target date funds despite having this product included in their retirement plan's investment menu.

Together these studies suggest that retirement plan providers should not assume that participants have the necessary plan knowledge and asset awareness to make informed decisions. In light of these findings, more research is needed in Australia to understand how well the population understands superannuation features and how their level of (or lack of) understanding influences their investment behaviour. This paper seeks to provide motivation for further work in this area.

Survey and sample

This paper analyses a subset of data collected from a survey fielded in June 2012. The original data were collected for the Australian extension of an international project investigating general financial literacy across different countries (Agnew, Bateman and Thorp 2012). The survey was completed online using the PureProfile internet panel. In total, 1,024 individuals responded to the survey. Of those, 742 were between the ages of 25 and 65, and were not retired. This group was the focus of the original paper. For this study, the sample was reduced further to include only those with at least one superannuation account and a valid birth date, resulting in a final sample size of 628. Table 1 compares the demographic characteristics of the sample with the population.

Superannuation knowledge

In the survey, nine questions were constructed to assess the respondent's basic superannuation knowledge. Table 2 summarises these basic questions and the responses in the order that they were presented to respondents in the survey. Correct answers are noted in bold. In addition, follow-up questions were asked in three cases to determine the depth of the respondent's knowledge related to the particular question's topic.

There were several questions that a significant majority of respondents answered correctly. For the most part, respondents understood that employers must pay minimum employer contributions (Question 1: 87 per cent answered correctly), that fees are deducted from superannuation accounts (Question 3: 87 per cent answered correctly) and that it is possible to make voluntary contributions to their superannuation account (Question 5: 97 per cent answered correctly). In addition, 80 per cent were aware that most people have the option to choose their own superannuation fund (Question 2). These findings are largely consistent with results from a comprehensive survey published by ANZ (2011).

However, a closer look at responses to follow-up questions related to employer contribution rates and voluntary contribution arrangements reveals that while individuals may understand the basics about these features, they may not grasp the finer details. Respondents fared best when they were asked to identify the minimum required employer contribution rate from a multiple-choice set of answers. In this

TABLE 1: Demographics

	Survey Respondent Population %	25-64 yrs Australian Population %		Survey Respondent Population %	25-64 yrs Australian Population %
Gender			**Marital Status**		
Male	45%	49%	Never Married	22%	27%
Female	54%	51%	Divorced/Separated	8%	14%
Age			Widowed	1%	2%
25–29 years	17%	13%	Married or long term relationship	68%	58%
30–34 years	18%	13%	Income		
40–44 years	17%	13%	$1–$20,799 (i.e. less than $399 a week)	16%	19%
45–49 years	15%	13%	$20,800–$51,999 (i.e. $400–$999 a week)	30%	32%
50–54 years	10%	13%	$52,000–$103,999 (i.e. $1,000–$1,999 a week)	41%	27%
55–59 years	9%	13%	$104,000 (i.e. $2,000 a week) or more	10%	9%
60–64 years	9%	11%	Negative or Nil Income	3%	6%
65–69 years	6%	11%	Not Stated	0%	7%

Note: Source for population statistics: Australian Bureau of Statistics Census of Population and Housing, Australia, 2011.

TABLE 2: Responses to superannuation and asset awareness questions

Question 1: Employers are required to pay superannuation contributions into the superannuation accounts of most of their employees. Is there a mandatory minimum employer contribution rate?	**Yes (Correct)** No Do not Know	**87%** 4% 10%
Question 2: Most people cannot choose the superannuation fund for their employer superannuation contributions.	True **False (correct)** Do not know	13% **80%** 7%
Question 3: Superannuation funds deduct fees from member's superannuation accounts.	**True (Correct)** False Do not know	**87%** 5% 7%
Question 4: Is the following statement true or false? For most people, superannuation is taxed at a higher rate than a similar investment outside superannuation.	True **False (correct)** Do not know	10% **62%** 28%
Question 5: Can people make voluntary contributions to their superannuation accounts?	**True (Correct)** False Do not know	**97%** 1% 2%
Question 6: If your superannuation account is invested in a 'balanced' investment option, this means that it is invested exclusively in safe assets such as savings accounts, cash management accounts and term deposits.	True **False (correct)** Do not know	28% **40%** 32%
Question 7: You are allowed to borrow from your superannuation account.	True **False (correct)** Do not know	17% **65%** 18%
Question 8: If you have any superannuation, you will not qualify for the Age Pension.	True **False (correct)** Do not know	9% **71%** 21%
Question 9: Do you know the minimum age at which you can spend the money in your superannuation account?	Yes **No**	52% **48%**

case, 67 per cent correctly identified the current rate of 9 per cent, while 4 per cent chose the future minimum rate of 12 per cent. The anticipated change in the contribution level could have prompted some respondents to choose the higher rate. The remaining 29 per cent either chose the wrong rate, did not know a rate existed or indicated they could not identify the specific percentage.

The respondents had more difficulty answering the multiple-choice question related to voluntary contributions limits. Figure 1 provides a breakdown of the responses.[3] In this case, only 26 per cent of the total sample correctly responded that for most people there are no limits placed on their voluntary contributions, only tax consequences if they contribute beyond a certain amount. This is notable because misunderstanding important tax incentives could adversely affect retirement planning and savings behaviour. Along the same lines, Table 2 reveals that some individuals are unaware of the existence of preferential tax treatment for assets within superannuation accounts. Only 62 per cent of respondents correctly indicated the following statement 'For most people, superannuation is taxed at a higher rate than a similar investment outside superannuation' (Question 4) was false. Furthermore, nearly one-third of the sample indicated that they 'did not know' the answer to this question. While the historically changing tax rates related to superannuation may have caused some respondent confusion, the survey results still highlight that more can be done to communicate with participants regarding tax incentives.

In addition to the important role of taxes, retirement planning decisions in Australia should also be influenced by individuals' understanding of the interaction between their superannuation balances and the age pension arrangements, as well as the age at which their accumulated superannuation savings become available. According to the survey, 71 per cent of respondents realised that owning a superannuation fund in itself did not disqualify them from the age pension (Question 8). The survey also indicates that some individuals (17 per cent) incorrectly believe they can borrow from their account (Question 7). Respondents had the most difficulty identifying the minimum age they can access their superannuation balance (the preservation age). Under current legislation, this access age, which can range from 55 to 60 years old, is based on an individual's birth date (see Table 3). In the survey, respondents were first asked to self-assess their knowledge of the access age. Requiring only a simple yes or no response, the question asked whether respondents believe they know the age they can spend the money in their superannuation accounts (Question 9). Fifty-two per cent of the sample reported that they did. Those who indicated they knew the dates were then offered a dropdown menu of different ages allowing them to select the age that was appropriate for their situation. The results are striking. Regardless of the year of birth,

TABLE 3: Legislated access to superannuation (preservation age) based on birthdate

Access Age	Birthdate
55	born prior to 1 July 1960
56	1 July 1960 – 30 June 1961
57	1 July 1961 – 30 June 1962
58	1 July 1962 – 30 June 1963
59	1 July 1963 – 30 June 1964
60	born on or after 1 July 1964

individuals' responses tend to cluster around access ages of 55, 60 or 65 years old. In fact, 86 per cent of the responses from participants clustered at one of these three ages. Further, the highest percentage (38 per cent) of participants chose the age of 65, which is greater than the highest legislated minimum age by five years (and the current age pension eligibility age for males). These findings indicate a large percentage of Australians do not have a firm grasp of key information which is essential for retirement planning.

The responses to the access age questions highlight two important points. First, simply relying on self-assessments of knowledge is not sufficient to accurately determine what individuals know. Without the follow-up question, the survey would appear to indicate that over half of the surveyed sample knew the correct answer. By asking specifics, the survey responses revealed only 14 per cent of the total sample knew the correct age. Therefore, the results suggest that those who manage and operate superannuation funds and policy makers should not rely on evidence based on individuals' self-reported knowledge. The results also suggest that individuals may be unaware of their lack of knowledge. This is an issue if their confidence in their grasp of important superannuation details prevents them from learning more about the system. As a result, this group may erroneously make decisions based on their misperceptions. Second, the clustered responses suggest that better communication of the actual age of access (the preservation age) to participants is needed. Suboptimal work and savings decisions are a possibility if people incorrectly assume they can gain access to their savings at the wrong age.

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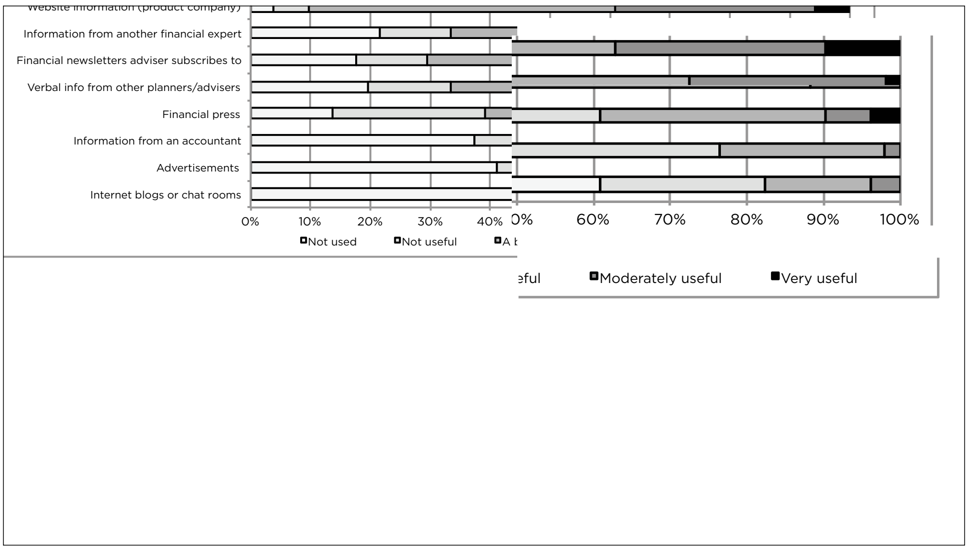
In terms of asset awareness, survey responses suggest this is also a problem. Participants were quizzed on their understanding of the composition of balanced funds, a common default investment option for superannuation contributions. Only 40 per cent of the sample knew that a balanced investment option was *not* exclusively invested in safe assets, such as savings accounts, cash management accounts and term deposits. Given the strong default bias in superannuation, it should be cause for concern that 28 per cent of individuals thought balanced funds are essentially riskless and approximately one-third responded that they did not know the answer. It follows that some of these respondents may not realise that these balanced investments can decline in value. The popularity of balanced funds makes these results an even larger cause for concern. Consistent with recommendations made earlier in the paper, these results suggest that more can be done to educate individuals about their investment choices.

FIGURE 1: Voluntary contribution limits, % of sample



Notes: Responses to 'Are there any limits to the amount of these voluntary contributions' [n=628].

Topping up and superannuation knowledge

While it is evident from the earlier results that significant gaps in superannuation knowledge exist, it is not clear whether these deficiencies relate to financial behaviour with respect to superannuation. To determine this, participants were asked the following question:

'Have you ever topped up your superannuation with additional contributions?'

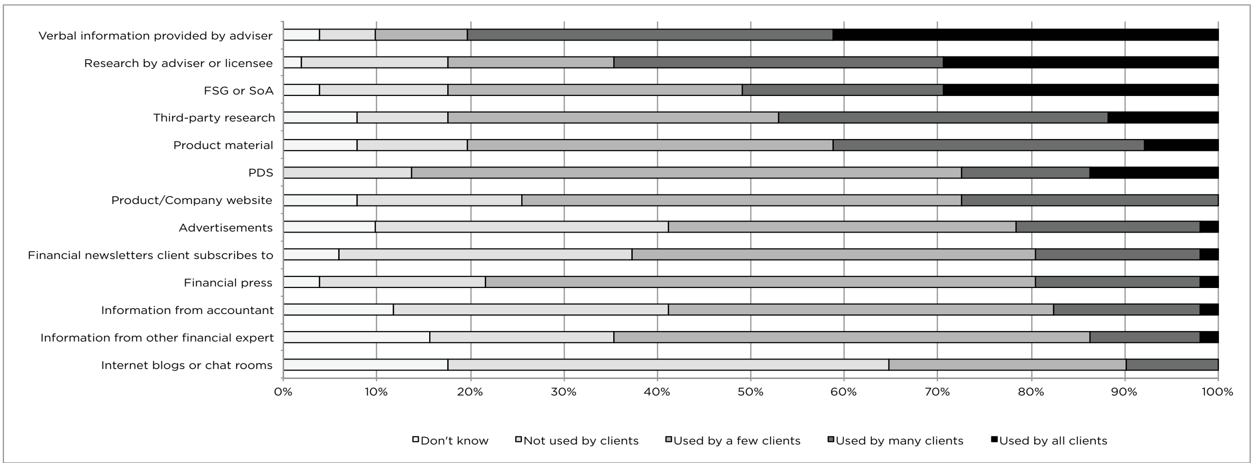
In the sample, 40 per cent of respondents had topped up their account sometime in the past.

Two different measures where constructed to capture superannuation knowledge measures. The first measure, 'basic knowledge', is the sum of correct answers to the nine basic superannuation questions found in Table 2. The second measure, 'advanced knowledge', is calculated similarly but incorporates the responses to the follow-up questions rather than the basic questions they were based on. On average, individuals answered 6.4 basic questions correctly and 5.2 of the more advanced set of questions correctly out of a possible 9 questions. The distribution of the correct answers for both the basic and advanced measure can be found in Figure 2. From the earlier discussion, the leftward shift of the advanced distribution should not be surprising.

To determine how the superannuation knowledge measures relate to voluntary superannuation savings, we estimated two probit regressions with a different knowledge measure used in each. An indicator variable equaling one if the participant had topped up their superannuation in the past, or zero otherwise, was the dependent variable. In both regressions, we controlled for each individual's general financial knowledge, as well as demographics and other characteristics demonstrated to be important in earlier research.[4] The results reveal a positive and statistically significant relationship between superannuation savings behaviour and both knowledge measures.[5] However, causality between superannuation knowledge and extra savings cannot be determined without further statistical analysis.

Without a test of causality, these findings can be interpreted in two ways: either individuals become more informed because of their active participation in their superannuation accounts or because they are informed they adjust their behaviour. Either interpretation has important implications. For the former, it suggests that more creative approaches are needed to engage members so they become more actively involved in their superannuation accounts and, as a result, improve their understanding of the scheme and system features. The members who become better informed will then be armed with the necessary information for future decisions. The latter interpretation suggests that education and communication may be critical to improving behaviour. In both cases, more research is needed.

FIGURE 2: Distribution of basic and advanced superannuation knowledge



Conclusion

In conclusion, this paper highlights important issues in retirement income knowledge in Australia and hopefully will motivate further academic research in this area. For Australians, optimal retirement planning requires a solid appreciation of the many features and incentives embedded in the superannuation system. However, as shown in this paper, many individuals lack a firm understanding of essential provisions, such as the tax treatment of contributions and allocations, the composition of balanced funds (a widespread default investment option) and the minimum age when participants can access their superannuation balances (the preservation age). One can speculate whether these effects are due to complacency associated with mandatory participation via the superannuation guarantee and the existence of default superannuation funds and investment options. These findings suggest many directions for future work, including determining the most effective means of education and communication to raise awareness, identifying other areas of superannuation knowledge deficiencies and a closer examination of the causality between superannuation knowledge and savings behaviour. This new research could help Australians become more engaged retirement planners and improve their savings outcomes. ■

Notes

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3. Note that the responses include as a separate group the respondents who answered the earlier question about the option for voluntary contributions incorrectly. Thus, the percentages are based off the entire sample.
4. Controls in the regression included general financial knowledge, education, marital status, gender, number of children in the household, salary, self-employment status, home ownerships and past experience with financial loss.
5. The average marginal effects for both the basic and advanced superannuation knowledge measures were 3 per cent. While both measures were significant, the basic measure was significant at the 1 per cent level and the advanced measure was significant at the 5 per cent level.

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