Portfolio choice and savings decisions: How do superannuation members respond to market volatility?

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Joint work with Hazel Bateman (UNSW & CEPR) and Jacki Ellis (Aware Super)
Increased member engagement and choice is here to stay

• As the system matures, super is a greater contribution to household wealth

• Increasing policy focus on member engagement, choice and competition:
  • YSYF and the ATO super fund comparison tool
  • COVID-19 Early Release
  • Retirement Income Covenant

• Academic studies on the impact of engagement and choice are mixed:
  • Positive: analysis of actual Cbus member behaviour in response to annual Retirement Income Estimates found a **30% increase in member interactions** with the fund and a **25% increase in members making concessional contributions** (Smynis et al., 2019. CEPAR Industry Report 2019/1).
  • Negative: Cbus members COVID-19 Early Release more likely if – concerned about future needs, didn’t think about long term impact, under-estimated or did not estimate impact on their retirement savings (Bateman et al., 2021. CEPAR Working Paper 2021/21).

• No previous studies on impact of engagement and choice in the context of volatile markets in Australia
Increased engagement may exacerbate behavioral risk

- March 2020 market fall saw a sharp rise in investment switching activities
  - 2.7% of Aware Super members made a switch between Feb 2020 and April 2020
  - 13% of choice members with balance>$500K switched
  - 80% switched to a more defensive portfolio (half went to Cash)
  - A substantial proportion remain invested in Cash
  - To date, the forgone investment earnings is up to $30,000 for an average Aware Super member

- Other studies also suggest choice members tend to invest in more defensive portfolios and earn lower returns than default members (“How Australian Saves 2019“, Vanguard).
This research project

• We need to better understand the likely implications of engagement and choice – both positive and negative

• The time weighted returns of the default options will become less relevant to individual member outcomes

• Member outcomes in retirement will be determined by the interaction between the option returns and the decisions members make along the way

• Research - large-scale member survey to understand how members react to market volatility in a setting without friction – to mimic a future with increased engagement
  • Whether and how members change their investment options when frictions are removed?
  • What makes behavioural risk more/less prevalent?
  • What impact does providing additional information to support member decisions make?

Note: This presentation is based on a subset of the preliminary results of the survey. Final and full conclusions will be included in the research report that is forthcoming.
The member survey
An online experimental survey
1,600 Aware Super members in Accumulation (15 July 2021 and 25 August 2021)

• With four years of simulated superannuation experience
  • Initial setting at time 0: age, salary, balance, contributions and investment option(s) preloaded based on admin data
  • Each year, experienced simulated market returns, members choose
    ➢ Investment options: Australian Share, High Growth, Growth, Balanced Growth, Conservative Growth, and Cash (Half with Equity to Cash, half with Cash to Equity)
    ➢ Amount of voluntary contributions
  • Before making choices, can check performance of their portfolio and asked expectation of the market.

• All frictions to make active choices are removed
  • No need to initiate choice: members asked how to allocate their super and whether to contribute more
  • Minimal action required to implement the choice (no log in to their member account or need to contact the fund)
Investment allocation choices

Thinking of the scenario about the Australian share market you have just seen for year 4, please answer the following question.

How do you want to allocate your super now? You can stay with your current allocation or choose a different allocation. This will be applied to your current balance and to future contributions and roll overs.

<table>
<thead>
<tr>
<th>Pre-mix Options</th>
<th>Current Allocation (%)</th>
<th>New Allocation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative Growth</td>
<td>0%</td>
<td>100</td>
</tr>
<tr>
<td>Balanced Growth</td>
<td>100%</td>
<td>0</td>
</tr>
<tr>
<td>Growth</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>High Growth</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Single Sector Options</th>
<th>Current Allocation (%)</th>
<th>New Allocation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Australian Shares</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

Total 100

Note: Ensure the allocations add up to 100%
Between subject design and hypothetical returns
Members are randomly allocated to different groups and receive random market scenarios

Between-subject treatment:

Different default growth assets for MySuper members

<table>
<thead>
<tr>
<th>For all Choice members</th>
<th>MySuper Group 1</th>
<th>MySuper Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial portfolio similar to actual holdings</td>
<td>MySuper as it is</td>
<td>MySuper with more growth assets</td>
</tr>
</tbody>
</table>

Random variations:

Three different scenarios in years 2 – 4, all paths are possible

<table>
<thead>
<tr>
<th>Year</th>
<th>Large</th>
<th>Medium</th>
<th>Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Last year, the Australian share market increased by 8%.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Last year, the Australian share market dived to its worst year since 2008 and lost 40%!</td>
<td>Last year, the Australian share market tumbled 24%!</td>
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<td>Year 3</td>
<td>Last year, the Australian share market dived to its worst year since 2008 and lost 40%!</td>
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<tr>
<td>Year 4</td>
<td>Last year, the Australian share market surged 40% in its best year since 1993!</td>
<td>Last year, the Australian share market bounced back 24%!</td>
<td>Last year, the Australian share market advanced 16%!</td>
</tr>
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Results
A higher tendency to make a choice when frictions are removed
With roughly equal proportion to defensive and growth portfolios

- 60% of members changed their portfolio when market delivers expected return
Behavioural risk was prevalent during market volatility
Members move to a more defensive portfolio with market falls and move back after the rebound

Year 3 versus Year 1: after two drops

Year 4 versus Year 3: after the rebound

Year 4 versus Year 1: the end result

• Members’ perspective: Of the 33% who ended up in a more defensive portfolio, on average they had 16% more defensive assets, likely to have material impact on their retirement outcomes (if kept unchanged)
• Fund perspective: In total >50% participants switched (compared to Year 1) and the group ended up ~3% more defensive asset
What are driving the switching decisions?
A combination of rational responses and behavioural impacts

Year 1
(Normal market)

Rational responses:
• Increasing growth assets if a member has
  o A higher risk tolerance
  o A higher retirement income goal

Behavioural impacts:
• Choice members who invested in only one option are very sticky: less likely to go riskier & defensive
• Choice members who invested in multiple options are changers: more likely to go riskier & defensive
• Order of investment menu matters: participants who see options ordered from least (top) to most risky (bottom) are more likely to switch to less growth assets (and vice versa)

Years 2 & 3
(Market crashes)

Common predictors in both years:
• Participants who switched previously are more likely to switch
• Women are more likely to go more defensive (hidden factors other than what we have captured?)
• Stabilizers
  o The higher the financial literacy
  o Choice members invested in only one option
The level of risk in the default portfolio only mattered in Year 1 when members firstly saw their portfolio, but are irrelevant to switching decisions in years with market volatility.

- Members with different levels of risk in their initial portfolio moved towards the middle (exercising choice reflecting their circumstances).

  Change in portfolio in year 1 for members with lower risk in initial portfolio

  Change in portfolio in year 1 for members with higher risk in initial portfolio

- However, the risk level of the initial portfolio has no impact from a behavioural risk perspective (i.e., no impact on switching decisions when the market is volatile)
Participants who are more ‘engaged’ in the experiment are more prevalent to behavioural risk

• Apart from the market headline, we offered participants the option to click & view the performance of their own portfolio

• **We find those who clicked to see performance**
  ➢ are more likely to make a **growth switch** and, on average, **put more risk on** among the switchers in year 1 (normal market).
  ➢ are more likely to make a **defensive switch** and, on average, **reduce more risk** among the switchers in year 2 (drop).

• **This suggests those participants who are more ‘engaged’ in the experiment are more prevalent to behavioural risk**

• This is consistent with evidence based on revealed preference data

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Financial year 2

It is one year later and you are now 37 years old.

Last year, the Australian share market dived to its worst year since 2008 and **lost 40%!**

Click this button to **view the performance of your investment option(s) over the past year**

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<th>Your Investment allocation</th>
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IE 14
Concluding remarks
Conclusions & implications

• If we don’t take behavioural risk seriously
  • We risk compromising the efficiency of our retirement system – where savings rates may rise, but are not invested in a way that allows them to work as hard as they could
  • Resulting in poorer member outcomes despite the increase in engagement and savings rates

• Appropriate member guidance and support is required
  • to ensure members engage in a positive way and are empowered to feel confident and make good decisions about their financial future
  • Implications for the Quality of Advice Review and ASIC CP351 Superannuation forecast
Appendix
Survey implementation and other information

• **Implementation:**
  • Sample: 1,600 Aware Super members in Accumulation (15 July 2021 and 25 August 2021)
  • Average age 51, 60% females, 64% MySuper members
  • Offered a prize draw of $100 Westfield gift card (20 winners)
  • Median time spent on survey - 17 mins

• **Other information collected**
  • Demographics not provided from admin data, retirement goals
  • Health, risk attitudes, bequest motives, financial literacy, numeracy, engagement with super etc.