Australian Government

Productivity Commission

Members surveys

Superannuation: Assessing Efficiency and Competitiveness
Draft Report
Technical Supplement 1

May 2018

Technical supplement 1: members surveys

Two types of members surveys were conducted as part of this twin (stage 2 and 3) inquiry: the members choice survey (in stage 2); and the members survey (in stage 3).

Complementing the discussion of the members choice survey in appendix C, further details about that survey's design (including the choice and list experiments) and its results were published online as a supplement to the stage 2 inquiry — *About the survey and the results* (PC 2017). That publication along with the survey questionnaire, data and associated documentation can be downloaded on the Commission's website at http://www.pc.gov.au/inquiries/current/superannuation/alternative-default-models/draft.

This supplement provides further information on the (stage 3) members survey and should be read in conjunction with appendix C, which outlines the survey design, fieldwork, and the Commission's approach to weighting the survey data. As noted in appendix C, de-identified members survey data, and associated documentation, will be made available on the Commission's website following the conclusion of the inquiry.

This supplement is divided into three sections. Section 1.1 presents selected descriptive statistics on the members survey (table 1.1). Following this, section 1.2 presents the relevant tables and figures that support the text in various chapters throughout this inquiry report, including a description of the process used to classify a member's level of engagement and how informed they are. Section 1.3 concludes by outlining the econometric technique used to analyse the results of the choice experiment (which was conducted within the members survey) and presenting the results of the analysis.

1.1 Selected descriptive statistics

Table 1.1 Selected descriptive statistics: members survey

Selected demographic variables		No. of observations (weighted)[a]
Gender		
Male	(%)	50.3
Female	(%)	49.7
Age		
15–24	(%)	10.5
25–34	(%)	22.2
35–49	(%)	32.1
50–64	(%)	23.9
65+	(%)	11.3
Highest level of education		
Above secondary school	(%)	80.1
Secondary school	(%)	19.0
Below secondary school	(%)	0.7
Prefer not to say	(%)	0.2
Current employment situation		
Employed (full time or part time)	(%)	62.1
Looking for work (full time or part time)	(%)	5.26
Other (retired, student, non-worker, home duties)	(%)	23.1
Prefer not to say	(%)	0.9
na	(%)	8.6
Marital status		
Married or de facto	(%)	62.7
Single, including separated, divorced or widowed	(%)	35.6
Prefer not to say	(%)	1.77
Total annual household income from all sources (income)		
Less than $6 000 a year	(%)	1.29
$6 000 to $29 999 a year	(%)	9.45
$30 000 to $49 999 a year	(%)	13.4
$50 000 to $79 999 a year	(%)	19.2
$80 000 to $129 999 a year	(%)	24.8
$130 000 to $199 999 a year	(%)	11.9
$200 000 or more a year	(%)	6.3
Can't say/Prefer not to say	(%)	13.6
Superannuation phase		
Accumulation	(%)	90.8
Accumulation and pension	(%)	5.4
Pension only	(%)	3.8

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Table 1.1   (continued)

Choice of fund		
Default – acquired passively	(%)	44.6
Actively selected (including default)	(%)	51.6
None / can't say	(%)	3.8
Type of superannuation fund		
Corporate	(%)	1.3
Public sector	(%)	8.8
Industry	(%)	36.2
Retail	(%)	40.9
Self-managed super fund (SMSF) in accumulation phase	(%)	6.9
Don't know / other	(%)	2.5
na	(%)	3.5
Type of retirement income product[b]		
Account-based pension	(%)	6.2
Annuity	(%)	1.8
Transition to retirement (TTR) pension	(%)	1.2
SMSF in retirement phase	(%)	1.8
Other	(%)	0.6
None / Can't say	(%)	91.0
Median balance in main superannuation (balance)		
Corporate	($)	50 000–99 999
Public sector	($)	50 000–99 999
Industry	($)	20 000–49 999
Retail	($)	50 000–99 999
SMSF	($)	250 000–349 999
Median balance[c] **across all funds (for those in accumulation phase)**	($)	50 000–99 999
Median balance[c] **at retirement (for those in pension phase)**	($)	350 000–499 999
Number of superannuation funds		
One	(%)	76.7
Two	(%)	17.0
Three	(%)	4.2
Four or more	(%)	2.1
Number of retirement income products		
One	(%)	5.5
Two or more	(%)	2.7

a Weighted using Commission weights. **b** 'Type of retirement income product' does not sum to 100 per cent because some members have multiple types of retirement income products. c 'Median balance' questions refer to the median category of balances and therefore cannot offer a precise figure. na represents not available.

Source: Members survey.

1.2 Supporting results

Table 1.2 Members contacting their main fund[a,b]
Per cent of accumulation members whose main fund is not an SMSF

Response	Visit	Website	App	Phone	Email	Online chat
Have done this in the last 12 months	6	49	9	20	13	8
Have done this in the past, but not in the last 12 months	7	19	2	25	17	9
Never done this	87	31	90	54	70	83

a Results weighted using Commission weights. **b** Derived from question Q15a of the members survey.

Source: Members survey.

Table 1.3 Passive account monitoring among selected demographic groups[a,b]

Grouping	Demographic group	Per cent
Age	Under 30	43
	30–49	42
	Over 50	43
Member type[c]	Default	39
	Choice	46
Income	Over $130 000	54
	$50 000 to $129 999	42
	Under $50 000	40
Size of balance	Over $350 000	61
	$50 000 to $349 999	48
	Under $50 000	39
Sex	Female	41
	Male	44
Overall	All	42

a Results weighted using Commission weights. **b** Derived from question Q15b of the members survey. Responses of 'Can't say' or 'Prefer not to say' are not reported for balance and income. SMSF members are not included in this sample as they were not asked this set of questions. Note that Q15b allows multiple responses. Passive account monitoring is defined as those who give at least one of the following responses: 'To check my fund balance', 'To discuss a query I had regarding my superannuation statement', 'To check about the fees and charges that apply to my superannuation', 'To check about the tax rate that applies to my superannuation', 'To check about the rate of return on my super investments', 'To check about the risks involved in investing in superannuation', or 'Amending my details'. **c** In this context, choice members are defined as a member not in a default fund *plus* members who made an active decision to stay in their default fund. Unless stated otherwise, choice members also include SMSF members.

Source: Members survey.

Grouping	Demographic	No, never used it	Yes, have used it in the past but not in the last 12 months	Yes, have used it in the last 12 months	Can't say
Age	Under 30	89	6	3	1
	30–49	85	8	5	1
	Over 50	78	13	7	3
Member type[c]	Default	89	7	3	1
	Choice	79	12	7	2
Income	Over $130 000	76	17	7	1
	$50 000 to $129 999	85	8	6	1
	Under $50 000	83	9	3	4
Balance	Over $350 000	60	23	13	4
	$50 000 to $349 000	81	12	6	1
	Under $50 000	89	6	3	2
Gender	Female	86	8	4	2
	Male	81	11	7	2
Total	All	83	10	5	2

a Results weighted using Commission weights. **b** Sample is of members with a superannuation fund (that is, members with an accumulation product). Derived from question 16b of the members survey. **c** In this context, choice members are defined as a member not in a default fund *plus* members who made an active decision to stay in their default fund. Unless stated otherwise, choice members also include SMSF members.

Source: Members survey.

Table 1.5 **Proportion of members making voluntary contributions**

By fund type, for members and funds survey[a,b,c]

	Members survey (%)	Funds survey (%)
Corporate	24.9	15.2
Public sector	32.4	15.0
Industry	19.9	11.2
Retail	21.1	9.2
SMSF	45.9	na[d]
Total	23.1	na
Total excluding SMSF [e]	21.4	11.0

a Members survey results weighted using Commission weights. Funds survey results weighted by the number of members. **b** No Retail – ERF funds responded to this question on the funds survey. Members with no accumulation products were not asked the question. Members who responded with 'Don't know / Other' or otherwise gave inconsistent responses when asked about their main fund type are excluded. **c** Derived from question Q13a of the members survey and Q20 of the funds survey. Fund survey responses use data from 2016-17. **d** SMSFs were not included in the scope of the funds survey. na represents not available.

Sources: Members survey and funds survey.

Figure 1.1 **Proportion of members making voluntary contributions[a,b,c]**

In the 12 months prior to the survey by selected demographic groups

a Data is weighted using Commission weights. **b** Choice members are defined as a member not in a default fund *plus* members who made an active decision to stay in their default fund. Unless stated otherwise, choice members also include SMSF members **c** Based on question Q13a of the members survey.
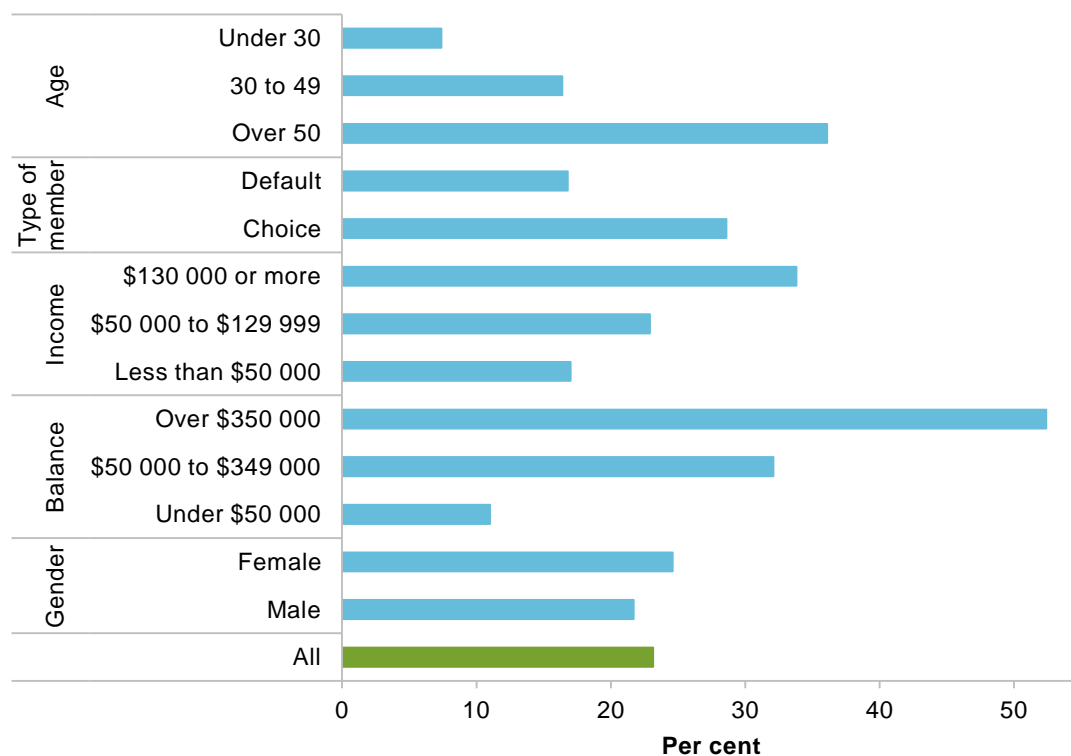
Source: Members survey.

Figure 1.2 Proportion of members contacting and being contacted by their main fund for intrafund advice[a,b]

In the 12 months prior to the survey by selected demographic groups[c,d]
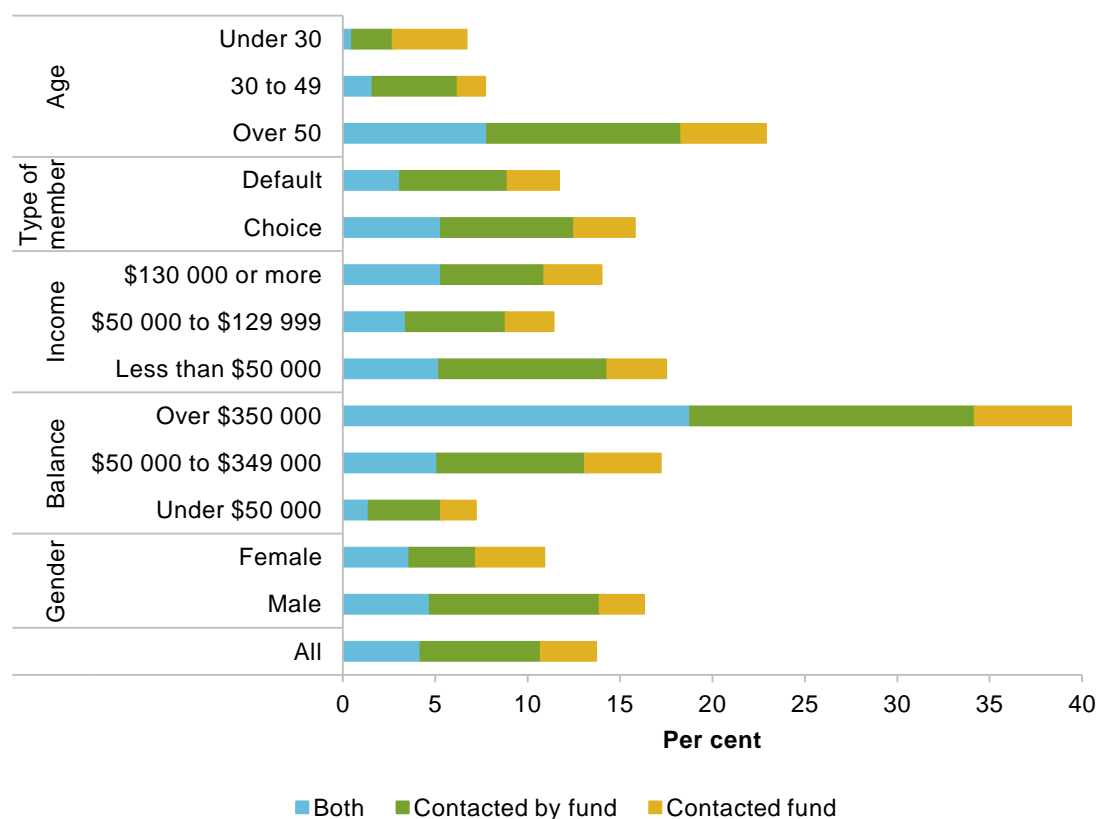
a Data is weighted using Commission weights. **b** Based on questions Q14a and Q14b. Respondents were able to select all that applied. **c** Choice members are defined as a member not in a default fund *plus* members who made an active decision to stay in their default fund. SMSF members were not asked these questions. **d** Intrafund advice is defined in the members survey as 'relatively simple, non-ongoing financial advice provided to superannuation members about things such as their superannuation account, insurance cover, and ability to increase contributions or change their investment option within a fund, for which the fund does not charge a fee-for-service. Intra-fund advice can be provided over the phone, via email or face-to-face'.

Source: Members survey.

Table 1.6   **Superannuation literacy[a,b,c]**

Average number of questions correct (out of eight) among different groups

Grouping	Demographic	Average number of correct questions
Age	Under 30	4.0
	30–49	5.5
	Over 50	5.9
Member type[d]	Default	5.0
	Choice	5.8
	SMSF	5.9
Income	Over $130 000	6.3
	$50 000 to $129 999	5.6
	Under $50 000	4.9
Balance	Over $350 000	6.5
	$50 000 to $349 000	5.9
	Under $50 000	5.1
Gender	Female	5.4
	Male	5.5
Total	All	5.5

a Results weighted using Commission weights. **b** Derived from question 15b of the members survey. **c** Responses of 'Don't know/Can't say' are treated as incorrect responses as this is similar to believing the incorrect answer. This table excludes members without accumulation products. **d** In this context, choice members are defined as a member not in a default fund *plus* members who made an active decision to stay in their default fund. Unless stated otherwise, choice members also include SMSF members.

Source: Members survey.

Categorising members' engagement levels and how informed they are

In box 5.2 (chapter 5), members with a superannuation fund are placed into one of five categories depending on how informed and engaged they are, based on their responses to the Commission's members survey.

Categorising 'well-informed', 'moderately informed' and 'poorly informed' members

A member is characterised as 'well-informed' if they fulfil all of the following criteria:

- gave the correct response to at least six of the eight valid questions on superannuation literacy (Q1a)

- had had some sort of passive engagement/passive account monitoring with their fund in the 12 months prior to the survey (Q15b) (see below for the definition of passive engagement)

- gave the correct response to at least two of the three financial literacy questions (Q27, Q28 and Q29)

- had no more than one of the ten characteristics of being 'poorly' informed (see below).

A member is characterised as 'poorly informed' if they fulfil at least one of the following ten criteria:

- gave the correct response to two or fewer of the eight valid questions on superannuation literacy (Q1a)

- stated that they had 'Superannuation, including self-managed/DIY – EXCLUDING self-managed/DIY in pension phase' in question S2a but when asked what type of superannuation fund they had in question S3a they responded 'None of these' or 'Can't say'

- could not say what type of funds (for example, retail, industry) they had in questions S5a to S5e

- could not say which of their funds is their main fund (S7)

- responded with 'Can't Say/ Don't Remember' when asked the amount of money in their main fund (S8a) and when subsequently asked to choose between three categories 'To the best of your knowledge' (S8b) also responded that they 'Can't Say/ Don't Remember'

- were retired and responded with 'Can't Say/ Don't Remember' when asked how old they were when they retired and accessed their superannuation (S8d)

- claimed to have never heard of MySuper before the day of the survey (Q2a)

- stated that they had no understanding 'at all' of their fees and charges in their main fund (Q3a)

- stated that they have no understanding 'at all' of how their money is invested by their main fund (Q3e)

- stated that they either do not read their superannuation statements or that they do not understand the statements 'at all' (Q5b).

A member is characterised as 'moderately' informed if they are not 'well-informed' and not 'poorly informed'.

Categorising active and passive engagement

A member is characterised 'actively engaged' if, in the 12 months prior to the survey, they had done one of the following (from Q15b):

- joined their current main fund

- checked / changed the investment options within their superannuation fund

- checked / changed insurance options within their superannuation fund.

A member is characterised as 'passively engaged' or having engaged in 'passive account monitoring' if, in the 12 months prior to the survey they had done one of the following (from Q15b):

- checked their fund balance

- discussed a query they had regarding their superannuation statement

- checked the fees and charges that apply to their superannuation

- checked the tax rate that applies to their superannuation

- checked the rate of return on their super investments

- checked the risks involved in investing in superannuation

- amended their details.

The categories in box 5.2 are therefore defined as those who fulfil the following characteristics using the criteria above:

- the driver
    - currently 'actively engaged' and 'well-informed'
- the front passenger
    - currently not 'actively engaged' but are 'well-informed'
- the backseat driver
    - currently 'actively engaged' but are either 'moderately' or 'poorly informed'
- the backseat passenger
    - not 'actively engaged' and 'moderately informed'
- in the boot
    - not 'actively engaged' and 'poorly informed'.

Members without a superannuation fund, with no accumulation products or in the retirement phase are not included in this box.

Table 1.7   Approximately how much time, in total, did you spend gathering information for changing your fund?[a]

Asked of members who had actively changed their fund in the 12 months prior to the survey[b]

Time[c]	No. of observations (n)[d]	Weighted n	Weighted per cent
Less than 1 hour	8	95	29
1 hour to less than 2 hours	10	71	22
2 hours to less than 4 hours	16	83	26
4 hours +	12	72	22

a Results weighted using Commission weights. **b** 'Active' changing means the change was not due to changing employer or their employer changing the default fund. This includes SMSF members who set up their SMSF in the 12 months prior to the survey. **c** Based on question Q24d of the members survey. 'Can't say' responses are excluded as this would prevent numerical interpretation. However, a large proportion of those asked the question (16 members) responded with 'Can't say'. Only accumulation members were asked this question. **d** Due to the small sample size there is a high degree of uncertainty in these results.

Source: Members survey.

Table 1.8   Were you charged an exit fee?[a]

Asked of members who had changed their fund in the 12 months prior to the survey[b]

Response	No. of observations (n)[c]	Weighted n	Weighted per cent
No	38	271	66
Yes	12	70	17
Can't say	12	68	17

a Results weighted using Commission weights. **b** Based on question Q25a of the members survey. Asked of members who have an accumulation product and who have changed the provider of their main fund in the 12 months prior the survey and where this was not due to changing employer or their employer changing their default superannuation provider. This also includes SMSF members who set up their SMSF in the 12 months prior to the survey. **c** Due to the small sample size there is a high degree of uncertainty in these results.

Source: Members survey.

Table 1.9   Demographics of members who switched fund in the 12 months prior to the survey

Among members with an accumulation product[a,b]

Grouping	Demographic	No. of observations (n)	Weighted n	Weighted per cent
Phase	Accumulation	120	838	98
	Transition[c]	12	21	2
Age	Under 50	102	692	81
	50 or over	30	167	19
Current fund type[d]	SMSF	14	55	7
	Retail fund	27	401	48
	Public sector fund	16	64	8
	Corporate fund	17	9	1
	Industry fund	53	311	37

a Results weighted using Commission weights. The weighted per cent for each grouping totals to 100 per cent. **b** Based on questions Q23b and Q23c of the members survey. Applies specifically to the respondents main fund. **c** Transition refers to members who hold both accumulation and pension products. Members with only pension products were not asked questions about their switching behaviour. **d** Members with an unclear current fund type are not listed.

Source: Members survey.

Table 1.10   Why you changed to your current main superannuation fund[a]

Of those who changed in the 12 months prior to the survey

Response[b]	No. of observations (n)	Weighted n	Weighted per cent
You changed employer	51	373	46
Your employer changed to another superannuation provider	19	77	10
None of the above (i.e. you yourself made a decision to change, or were advised by an adviser)	48	354	44

a Results weighted using Commission weights. **b** Members who list their main fund as an SMSF are excluded. Based on question Q23bb of the members survey.

Source: Members survey.

Table 1.11 Proportion of members switching investment options in the 12 months prior to the survey[a,b,c]

By selected demographic groups

	Demographic	No. of observations (n)[c]	Weighted n	Weighted per cent
Age	Under 30	14	47	3
	30-49	87	473	7
	Over 50	128	627	12
Member type[d]	Default	72	333	5
	Choice	140	800	13
Income	$130 000 or more	75	331	13
	$50 000 to $129 999	115	585	10
	Less than $50 000	32	209	7
Balance	Over $350 000	71	288	22
	$50 000 to $349 000	115	610	12
	Under $50 000	45	283	5
Gender	Female	84	429	6
	Male	166	833	12
Current fund type	SMSF	38	129	13
	Retail fund	69	652	11
	Public sector fund	30	119	9
	Corporate fund	27	15	8
	Industry fund	85	347	7
	Don't know/Other	1	0.1	0
	All	250	1 262	9

a Results weighted using Commission weights. **b** Based on question Q23a of the members survey. **c** Due to the small sample size there is a high degree of uncertainty in some of these results. A response of 'Don't know/Can't say' is treated as No. **d** In this context, choice members are defined as a member not in a default fund *plus* members who made an active decision to stay in their default fund. Unless stated otherwise, choice members also include SMSF members. Derived from question 15b of the members survey.

Source: Members survey.

Table 1.12   Movement between choice and default products[a,b]

Old fund	Choice and default option[c]	No. of observations (n)	Weighted n	Weighted per cent[d]
Same fund I have now	Choice to choice	99	621.6	56.3
	Default to choice	43	154.1	14.0
	Choice to default	6	4.1	0.4
	Can't say/Don't remember	5	15.7	1.4
	Something else	24	172.0	15.6
A different fund	Choice to choice	13	49.4	4.5
	Default to choice	6	28.9	2.6
	Choice to default	7	26.9	2.4
	Can't say/Don't remember	2	7.9	0.7
	Something else	4	22.6	2.0

a Results weighted using Commission weights. **b** Based on questions Q23aa and Q23ab. **c** Choice to choice' means that the member was previously in a choice product and is now in a different choice product. Other names in the 'Choice and default options status' can be interpreted similarly. See Q23ab for the exact wording of the questions. **d** The total is calculated from members who responded to Q23ab (i.e. those who have changed their investment option in 12 months prior to the survey, whose main fund is not an SMSF, who have a superannuation fund and who did not select 'Don't know/Can't say' in Q23aa, which is asking whether they moved fund).

Source: Members survey.

Table 1.13   How members decided to change investment options[a,b]
What best describes how you made the decision?

Response[c]	No. of observations (n)	Weighted n	Weighted per cent
I did my own research or got independent advice	112	599	72
Something else	25	116	14
I was persuaded by my fund's marketing or advice to switch to this investment product	22	101	12
Can't say/ Don't remember	2	13	2

a Results weighted using Commission weights. **b** Based on question Q23ac of the members survey, for changing investment option within the member's main fund. All respondents are included. **c** Q23ac was asked of those who have switched investment options (or fund) in the 12 months prior to the survey, whose main fund is not an SMSF, who knew whether they switched within or between funds (though both groups are included) and chose a non-default option for their current investment (this excludes those who say they were switching from 'Something else' or that they 'Can't say/ Don't remember').

Source: Members survey.

Figure 1.3 **Younger members tend to be less satisfied than older ones**[a,b]

Net satisfaction[c]
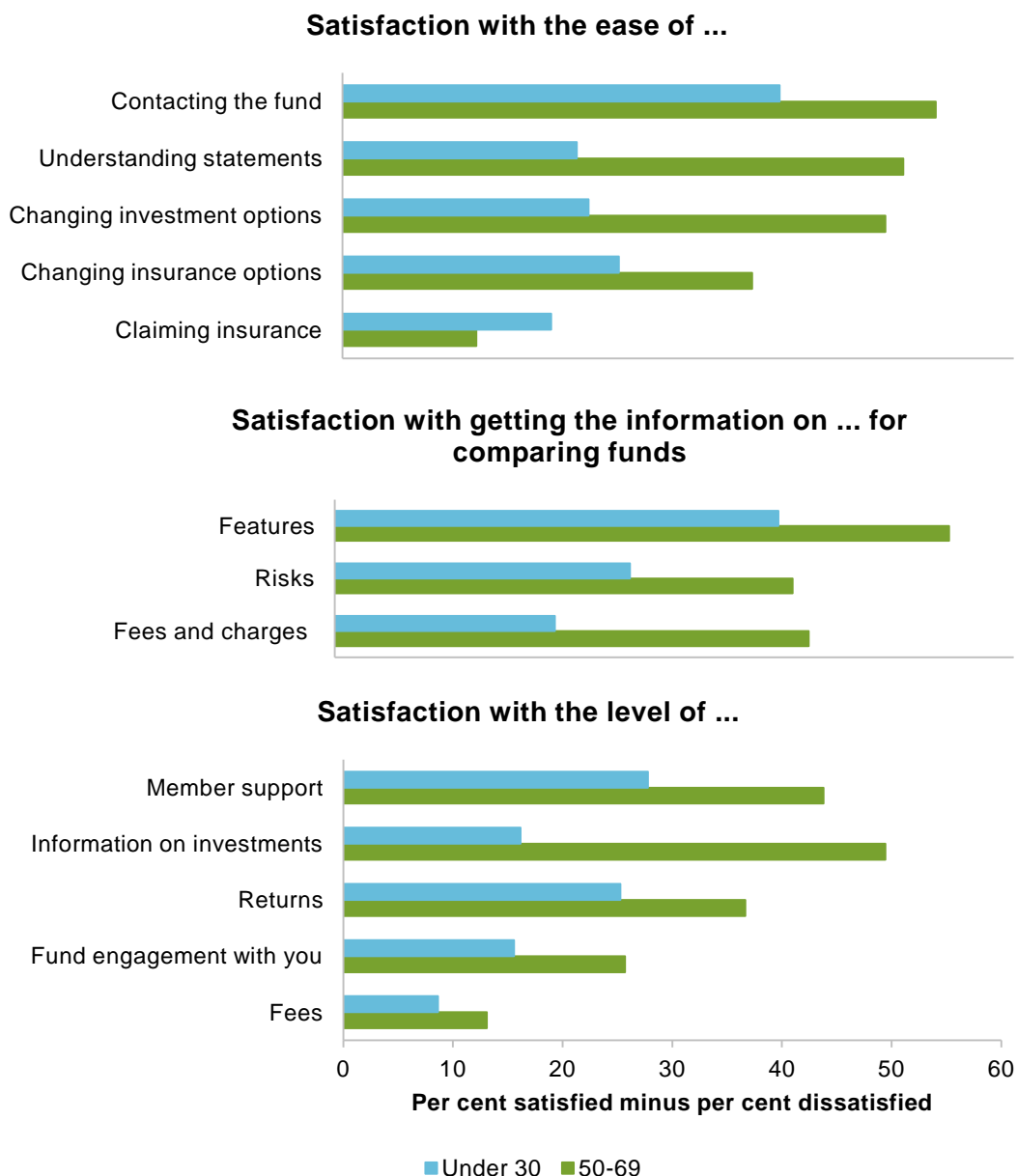
Satisfaction with the ease of ...

Satisfaction with getting the information on ... for comparing funds

Satisfaction with the level of ...

Per cent satisfied minus per cent dissatisfied

■ Under 30 ■ 50-69

a Members survey responses are weighted using Commission weights. **b** Based on question Q8 of the members survey. Note that some questions were not asked of members whose main fund is an SMSF. Members with no superannuation fund (that is, those only holding retirement products) were not asked these questions. **c** Net satisfaction is calculated as the proportion (excluding those giving 'can't say' responses and those not asked) who stated they were 'highly' or 'somewhat' satisfied, less those who stated they were 'highly' or 'somewhat' dissatisfied. Therefore respondents who stated that they were 'Neither satisfied nor dissatisfied' are included in the total but not in either of the sets of bars. Responses of 'Can't say' were removed from the total as they cannot be clearly interpreted on a ordinal scale.

Source: Members survey.

Table 1.14 **Only minor discrepancies between funds and members relative ranking of net satisfaction[a,b,c]**

Ranking of net satisfaction of different products and services

	Members survey (rank)	Funds survey[d] (rank)
How easy it is to contact the fund	1	1
How easy the statement is to understand	2	4
How easy it is to make changes to your investment options	3	6
Level of member support and advice services	4	3
How easy it is to make changes to your insurance options	5	9
Level of info you get on how your super money is being invested	6	2
Getting the information you need about the features of your super fund so you can compare funds	7	8
Level of net investment returns	8	na
Getting the information you need on risks so you can compare funds	9	10
Getting the info you need on fees and charges so you can compare funds	10	8
How easy is it to make insurance claims	11	na
How the fund engages with you to better understand your needs	12	na
Level of fees charged (Members survey)	13	na
Level of administration fees charged (Funds survey)	na	7
Level of investment fees charged (Funds survey)	na	11

a Members survey responses are weighted using Commission weights. Fund responses weighted by number of member accounts. **b** Based on question Q8 of the members survey and question Q10 of the funds survey. **c** Note that some questions were not asked of members whose main fund is an SMSF. Members with no superannuation fund (i.e. those only holding retirement products) were not asked these questions. Funds survey respondents were not asked to rate against four elements (marked 'na'). Members were only asked about their satisfaction with fees while funds were asked separately about members' satisfaction with investment and administration fees. Net satisfaction is calculated as the proportion (excluding those giving 'can't say' responses and those not asked) who stated they were 'highly' or 'somewhat' satisfied, less those who stated they were 'highly' or 'somewhat' dissatisfied. **d** While between 25 and 35 per cent of funds indicated that they were unable to answer this question, the proportion of funds (weighted by the number of accounts) that did not provide a response ranged between 7 and 20 per cent.

Sources: Members survey and funds survey.

Table 1.15   On what aspects, if any, would you like more information from your main super fund?[a]

Sub-question[b]	No. of observations (n)	Weighted n	Proportion[c]	Confidence intervals
Information on the administration fees charged to my fund	835	5 583	44	(41.7, 46.2)
Information on the taxes that apply to my superannuation	814	5 165	41	(38.5, 42.9)
Information on the returns I get on my superannuation	722	4 845	38	(36, 40.3)
Information on the insurance cover included in my fund	687	4 489	35	(33.2, 37.5)
Information on the insurance premiums charged by my fund	623	4 132	33	(30.4, 34.6)
Information on the investments options of my fund	611	3 940	31	(29, 33.1)
Information on the types of assets invested within the different options	599	3 910	31	(28.7, 32.8)
Information on the risks involved in investing in superannuation	497	3 286	26	(23.9, 27.8)
Information on how to consolidate different superannuation funds into one fund	298	2 069	16	(14.6, 17.9)
None of these	397	2 473	19	(17.7, 21.2)
Don't know	204	1 542	12	(10.7, 13.6)

[a] Results weighted using Commission weights. [b] Based on question Q10 of the members survey. [c] Base = all with superannuation excluding SMSF. n = 1979 unweighted; 12 700 weighted. Note that all questions, including 'none of these' and 'don't know' are non-exclusive.

Source: Members survey.

Table 1.16   Number of accounts[a]

Number[b]	No. of observations (n)[c]	Weighted n	Weighted per cent
1	1 581	9 817	77
2	342	2 169	17
3	93	538	4
4	18	102	1
5 to 10	21	145	1
More than 10	9	19	–

[a] Results weighted using Commission weights. [b] The number of accounts is based on the sum of the number of personal and employer default funds asked for in question S3b in addition to any SMSF in the accumulation phase (it is assumed that no members have more than one SMSF in the accumulation phase). [c] The following groups were excluded: Pension members who were not asked the question, members who responded to S3a (on what types of accumulation funds they have) with 'None of these' or 'Can't say' and those who stated to have personal and/or default accumulation products but can't say how many they have of this type/these types. The excluded population sums to 230 respondents of which 131 were non-pension members. These constitute 6.5 per cent of the weighted population with accumulation products. – represents nil or rounded to zero.

Source: Members survey.

Table 1.17   What is the main reason you have more than one superannuation fund?[a]

Response[b]	No. of observations (n)[c]	Weighted n	Weighted per cent
The process of consolidating funds is too difficult	60	370	11
I just never got around to consolidating them	173	1 283	39
Keeping more than one fund was a deliberate decision to achieve better outcomes (for example, it gives me greater flexibility or allows me to spread investment risk)	144	742	23[d]
Something else	135	812	25
Can't say	15	85	3

[a] Results weighted using Commission weights. [b] Based on question Q6 of the members survey. [c] Based on a sample of all members with multiple accumulation products. [d] This number has been used to derive the Commission's estimate that 1 in 3 of all accounts are multiples (as described in note b, figure 6.2, chapter 6).

Source: Members survey.

Table 1.18 **Satisfaction with intrafund advice[a,b,c]**

Asked of those who have received intrafund advice from their main fund in the 12 months prior to the survey

Response	No. of observations (n)	Weighted n	Weighted per cent
Completely satisfied	129	514	37
Somewhat satisfied	103	414	30
Neither satisfied nor dissatisfied	57	336	24
Somewhat dissatisfied	13	93	7
Completely dissatisfied	6	27	2

a Results weighted using Commission weights. **b** Based on question Q14d of the members survey. **c** Responses of 'Can't say' are excluded from the total.

Source: Members survey.

1.3 The choice experiment

The Commission's choice experiment in stage 3 builds on the previous choice experiment undertaken as part of the stage 2 members choice survey. In the stage 2 members choice survey, the Commission found that members valued returns, fees and investment choice over member services. The choice experiment in stage 3 explores the relative value attached specifically to member services in the accumulation phase.

Econometric model

Although some basic descriptive results from the choice experiment can be computed, econometric models are required to extract all the insights, particularly the Willingness to Pay (WTP) for product features from the choice experiment data. Discussion of this model closely follows that of Hensher et al. (2005).

Respondents are asked $T = 3$ choice experiment questions. In each choice experiment question, respondents are faced with a choice between $J = 2$ superannuation products. The utility that respondent n obtains from option j for choice experiment question t is assumed to be of the form:

$$U_{njt} = \beta'_n X_{njt} + \varepsilon_{njt}$$

β_n is a coefficient vector which represents the marginal utility derived from *observable* product features (including total fees) X_{njt}, in this case the product features presented to respondents. This model allows respondents to value different product features in different ways, rather than assuming that they value products in the same way.

For this analysis β_n is assumed to be multivariate normally distributed with mean $\beta + \gamma D_n$ and covariance matrix Σ. D_n are demographic variables obtained from other parts of the

survey, and in this analysis includes age (in ranges), superannuation literacy and financial literacy, so γ are the associated coefficients. This model also allows for some systematic variation in respondent tastes across these demographic groups. The Commission has considered alternative distributional assumptions on β_n, as described in the results section.

β_n can be rewritten as $\beta_n = \beta + \gamma D_n + L\eta_n$ where L is the lower-triangular Cholesky factor of $\sum$ (this means that L satisfies $LL' = \sum$) and η_n are the individual- and product-specific unobserved shocks. Put another way, L essentially contains the dispersion parameters for the valuation of each product feature. The dispersion parameters are not allowed to vary by respondent.

ε_{njt} represents the utility derived from *unobserved* product features and is assumed to be extreme value independently and identically distributed (iid) across observations, independent of β_n. In this case, ε_{njt} may capture things such as individual respondent perceptions of the product.

In summary, the goal of this model is to estimate $\theta = \{\beta, \gamma, L\}$, which collectively describes for each product feature the level and distribution of marginal utilities across respondents.

Respondents are assumed to choose the product which delivers them the higher utility. Let $y_n = (y_{n1}, y_{n2}, y_{n3})$ denote the respondent's sequence of choices across the choice experiment questions. Since the ε_{njt}'s are iid and extreme value distributed, the probability conditional on β_n that the respondent chooses product i in choice experiment question t is of a standard logit form:

$$L_n(i, t | \beta_n) = \frac{\exp \beta_n' X_{nit}}{\sum_j \exp \beta_n' X_{njt}}$$

Since ε_{njt} are independent over choice experiment questions, the likelihood for a respondent's sequence of choices, conditional on their β_n is just the product of logits:

$$L(y_n | \beta_n) = L_1(y_{n1}, 1 | \beta_n) L_2(y_{n2}, 2 | \beta_n) L_3(y_{n3}, 3 | \beta_n)$$

Finally to form a likelihood as a function of θ, the likelihoods are integrated over all possible values of β_n to form:

$$L(y_n | \theta) = \int L(y_n | \beta_n) g(\beta | \theta) d\beta$$

Where g is the density for β_n. Note that this likelihood does not have a closed form, so to maximise the likelihood, it must also be approximated numerically through simulation. The software used to estimate the model is from Sarrias and Daziano (2017) which further specifies the estimation and simulation procedures.

Treatment of demographic variables

In the choice experiment analysis, the Commission considered three demographic variables: age, financial literacy and superannuation literacy. The choice of these was based on two considerations: the demographic variables the Commission was interested in exploring and a limit to how many demographic variables can enter the specification without incurring perfect multicollinearity issues.

For this analysis, age was bracketed into three groups (table 1.19). This is different to that used in other parts of the members survey results. Similarly, financial literacy and superannuation literacy were bracketed into three groups (table 1.19).

Table 1.19   **Bracketing of demographic variables for the choice experiment analysis[a]**

Age	Financial literacy	Superannuation literacy
The 'young'; 15–34	Low; scored 0–1 inclusive	Low; scored 0–4 inclusive
The 'middle-aged'; 35–54	Medium; scored 2	Medium; scored 5–6 inclusive
The 'seniors'; 55+	High; scored 3	High; scored 7–9 inclusive

a Financial and superannuation literacy brackets were chosen roughly on the basis of quantile groups formed from the number of correct answers. For financial literacy, questions 27–29 were considered (3 questions) and for superannuation literacy question 1a was considered (consisting of 9 components). The bottom quartile corresponds to the low bracket, the middle two quartiles correspond to the medium quartile and the top quartile corresponds to the high bracket.

Results of the choice experiment analysis

It is useful to consider the proportion of those within groups choosing the cheapest product offered, as both a sense check on the results and in its own right. These are presented in table 1.20, split by the demographic variables which are used for the econometric analysis.

Broadly speaking, most groups have similar rates of respondents choosing the cheapest product. This should not necessarily be interpreted as members placing low value on product features. The randomisation of product features means that in many cases the cheaper product may have had more features which appealed to respondents more than the alternative offered. Econometric analysis presented below untangles this issue.

Table 1.20   **Proportion of respondents choosing the cheapest product offered in the choice experiment**

Group	Proportion within group choosing the cheapest product (%)
Respondents in 15–34 age bracket	69.8
Respondents in the 35–54 age bracket	70.1
Respondents in the 55+ age bracket	70.0
Respondents with a 'low' super literacy	64.2
Respondents with a 'medium' super literacy	70.7
Respondents with a 'high' super literacy	72.6
Respondents with a 'low' financial literacy	65.9
Respondents with a 'medium' financial literacy	71.4
Respondents with a 'high' financial literacy	72.5
All Respondents	70.0

Source: Members survey.

The following tables (tables 1.21 to 1.32) present econometric estimates of the marginal utilities to the product features and their levels. To aid interpretability, it is standard practice to present these estimates as WTP estimates. Converting estimates of marginal utilities into estimates of WTP requires dividing the estimated coefficients by the fees coefficient and multiplying by minus one. In this analysis, the interpretation of a WTP estimate is how much is a respondent willing to pay for a product which has the same product feature levels as a 'baseline' product, except for the product feature level in question. Note that since the utility function itself is purely linear, the WTP between other product feature levels can be inferred by the differences between the two.

Further, as the demographic variables considered in the analysis are discrete groups, the estimates are also relative to the baseline demographic group. In this analysis the baseline demographic group is considered to be a respondent who is aged 35–54, with medium super literacy and medium financial literacy.

To aid interpreting the tables, consider table 1.28. In this table, for example:

- the mean marginal WTP estimate for a middle aged respondent with medium financial and super literacy is $869.18. This means that the average middled aged, medium financial and super literate respondent is willing to pay up to $869.18 for a superannuation product with the flexibility to choose underlying assets *relative* to a superannuation product without this flexibility. The standard deviation of the WTP distribution is $940.33. Since the marginal WTP distribution is normal, 68 per cent of the middled aged and medium financial and super literate population should lie between plus and minus one standard deviation from the mean estimate. This means that approximately 68 per cent of the respondent population have marginal WTP between -$71.15 (that is, you would have to pay such a respondent $71.15 for them to want to have the flexibility to choose underlying assets) and $1809.51

- the mean marginal WTP estimate for a young respondent with a medium level of financial and super literacy is $869.18 minus $88.03 which is $781.85. As the standard deviation is not allowed to vary from respondent to respondent, 68 per cent of the young aged with medium financial and super literacy population are estimated to have marginal WTP between -$158.48 and $1722.18

- the mean marginal WTP estimate for a senior respondent with a high level of financial and super literacy is $869.18 plus $438.54 plus $429.06 plus $690.56 which is $2427.34. Further, 68 per cent of the senior and highly financial and super literate population are estimated to have marginal WTP between 1487.01 and $3367.67.

Note that, as per Hensher et al. (2005), the fees coefficient is specified to be fixed across respondents. This is a restriction necessary for the model to be estimated. Note that this restriction does not mean that the response to fees must be the same for all respondents. The economically meaningful quantities are the WTP, and these vary by respondents due to variation in the product feature coefficients.

Table 1.21   **Willingness to pay for features**

Feature	Estimate	Willingness to pay	Standard error	Significance
Fees[a]	–	..	–	***
Member extra promotions	-0.15	-237.31	0.06	**
Standard deviation of member extra promotions	0.78	1 603.45	0.17	***
Member multiple financial products	0.04	90.48	0.05	
Standard deviation of member multiple financial products	0.05	97.11	0.24	

[a] The fees coefficient is estimated to be -0.00048417 with standard error 0.000032091. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level. – represents nil or rounded to zero. .. represents not applicable.

Source: Members survey.

Table 1.22 Willingness to pay for communication — Option 5[a,b]

'Over the phone, email, online website including real time online support and smartphone app'

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.44	904.10	0.20	**
Young	-0.18	-377.16	0.21	
Senior	-0.23	-477.66	0.21	
Low super literacy	0.16	338.74	0.23	
High super literacy	0.07	138.07	0.19	
Low financial literacy	-0.04	-89.50	0.21	
High financial literacy	-0.22	-460.33	0.21	
Standard deviation	0.41	843.98	0.37	

a All options are described relative to 'Option 1': 'Over the phone and email'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.23 Willingness to pay for communication — Option 4[a,b,c]

'Over the phone, email, online website and smartphone app'

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.49	1 020.16	0.20	**
Young	-0.23	-482.70	0.20	
Senior	-0.15	-319.95	0.20	
Low super literacy	0.44	907.45	0.22	*
High super literacy	0.01	25.58	0.19	
Low financial literacy	-0.11	-234.30	0.20	
High financial literacy	-0.29	-590.72	0.21	
Standard deviation	0.04	78.86	0.37	

a All options are described relative to 'Option 1': 'Over the phone and email'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.24   **Willingness to pay for communication — Option 3[a,b]**

'Over the phone, email, online website including real time online support'

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.13	267.01	0.20	
Young	0.13	262.12	0.20	
Senior	0.05	100.73	0.20	
Low super literacy	0.25	511.47	0.22	
High super literacy	0.21	425.92	0.19	
Low financial literacy	0.03	54.97	0.20	
High financial literacy	-0.21	-436.13	0.20	
Standard deviation	0.01	20.98	0.38	

a All options are described relative to 'Option 1': 'Over the phone and email'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.25   **Willingness to pay for communication — Option 2[a,b]**

'Over the phone, email and online website'

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.51	1 049.63	0.20	**
Young	-0.04	-75.02	0.21	
Senior	-0.26	-540.84	0.21	
Low super literacy	-0.14	-297.44	0.23	
High super literacy	-0.09	-184.71	0.19	
Low financial literacy	-0.01	-24.93	0.21	
High financial literacy	-0.18	-367.16	0.21	
Standard deviation	0.47	973.52	0.34	

a All options are described relative to 'Option 1': 'Over the phone and email'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.26   **Willingness to pay for engagement — Option 3**[a,b]

Engagement in the form of statements of account balances, obligated engagements, newsletters, surveys about members, education seminars and presence of local offices

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.29	598.86	0.15	*
Young	-0.25	-512.07	0.16	
Senior	-0.04	-84.04	0.16	
Low super literacy	0.05	95.27	0.18	
High super literacy	-0.16	-329.72	0.15	
Low financial literacy	-0.07	-144.03	0.16	
High financial literacy	0.03	65.36	0.16	
Standard deviation	0.01	29.16	0.19	

a All options are described relative to 'Option 1': 'Only statements of account balances and obligated engagements'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.27   **Willingness to pay for engagement — Option 2**[a,b]

Engagement in the form of statements of account balances, obligated engagements, newsletters and surveys about members

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.17	340.83	0.15	
Young	0.00	8.27	0.16	
Senior	-0.14	-294.32	0.16	
Low super literacy	0.13	260.86	0.17	
High super literacy	-0.21	-430.20	0.15	
Low financial literacy	-0.18	-374.91	0.16	
High financial literacy	0.11	225.71	0.16	
Standard deviation	0.25	521.12	0.37	

a All options are described relative to 'Option 1': 'Only statements of account balances and obligated engagements'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.28   **Willingness to pay for asset control — Option 3[a,b]**

Flexibility to choose underlying assets

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.42	869.18	0.15	***
Young	-0.04	-88.03	0.16	
Senior	0.21	438.54	0.16	
Low super literacy	-0.26	-529.07	0.18	
High super literacy	0.21	429.06	0.15	
Low financial literacy	-0.03	-72.13	0.16	
High financial literacy	0.33	690.56	0.16	**
Standard deviation	0.46	940.33	0.27	*

a All options are described relative to 'Option 1': 'No control over investments'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.29   **Willingness to pay for asset control — Option 2[a,b]**

Flexibility to choose investment strategy

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.63	1 302.93	0.16	***
Young	-0.26	-537.41	0.16	
Senior	0.14	283.02	0.16	
Low super literacy	-0.36	-742.38	0.18	**
High super literacy	0.25	518.29	0.15	*
Low financial literacy	-0.22	-450.92	0.16	
High financial literacy	0.07	134.36	0.16	
Standard deviation	0.04	72.92	0.32	

a All options are described relative to 'Option 1': 'No control over investments'. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Although the Commission set out life and total and permanent disability (TPD) insurance and income protection (IP) insurance as separate product features in the members survey, the econometric analysis suggests that respondents did not distinguish between life and TPD and IP insurance. This is due to the model being unable to identify the separate WTP (that is, the model encountered multicollinearity issues when both were included). For this reason, IP insurance is omitted from the model, and there are no tables on IP insurance.

Table 1.30　Willingness to pay for bundles of life and TPD insurance[a,b]
High cover ($500 000)

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.02	44.42	0.23	
Young	-0.14	-282.40	0.24	
Senior	-0.09	-192.33	0.23	
Low super literacy	0.31	631.29	0.27	
High super literacy	0.07	151.21	0.21	
Low financial literacy	0.86	1 775.82	0.24	***
High financial literacy	0.01	26.10	0.23	
Standard deviation	1.83	3 778.22	0.21	***

a All options are described relative to no cover. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.31　Willingness to pay for bundles of life and TPD insurance[a,b]
Medium cover ($200 000)

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	0.07	142.78	0.18	
Young	-0.13	-259.33	0.19	
Senior	-0.08	-165.72	0.18	
Low super literacy	0.22	457.75	0.21	
High super literacy	-0.11	-218.72	0.18	
Low financial literacy	0.52	1 075.88	0.19	***
High financial literacy	0.07	145.85	0.19	
Standard deviation	0.83	1 716.65	0.20	***

a All options are described relative to no cover. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Table 1.32 Willingness to pay for bundles of life and TPD insurance[a,b]
Low cover ($90 000)

Group	Estimate	Willingness to pay	Standard error	Significance
Baseline	-0.12	-241.46	0.16	
Young	0.04	75.23	0.17	
Senior	-0.09	-176.91	0.17	
Low super literacy	0.12	250.28	0.19	
High super literacy	0.32	650.70	0.16	**
Low financial literacy	0.36	753.23	0.17	**
High financial literacy	0.15	303.80	0.17	
Standard deviation	0.20	407.32	0.42	

a All options are described relative to no cover. **b** The baseline respondent is someone who is middle aged and with a medium financial and super literacy. *** represents significance at the 99 per cent level, ** represents significance at the 95 per cent level, * represents significance at the 90 per cent level.

Source: Members survey.

Comments on robustness and how the results should be interpreted

The Commission has tested the model using a number of different specifications. This includes:

- testing for different distributional assumptions on the product-feature coefficients, in particular for the triangular and uniform distributions

- conducting the analysis using subsets of demographics and product features in the analysis

- relaxing the independently and identically distributed assumption, by allowing for choices made by the same respondent to be correlated, and thus coefficients to be correlated

- ensuring that an appropriate number of simulation draws are used for computing the likelihood function, by estimating using different numbers of simulation draws.

- The Commission settled on a specification using:

- normally distributed product feature coefficients

- all product features (except IP insurance), age, super and financial literacy demographics

- coefficients which are uncorrelated, for simplicity in the model

- 500 simulation draws.

Overall, the Commission's assessment of the econometric analysis is that the broad results are informative. The signs and relative magnitudes of the mean WTP estimates are robust to different specifications. However, the dispersion (or standard deviation) estimates are less

robust and can vary substantially. This assessment is reflected in the discussion within the draft inquiry report, which focused on the estimates of the mean WTP coefficients.

That said, while many of the mean WTP estimates achieved statistical significance, some did not. This result is likely due to an insufficient sample size for the rich model considered. Further, this suggests that, while not all these estimates can be generalised outside of the choice experiment, the estimates are still a good representation of what happened in the context of the Commission's choice experiment and many seem consistent with the broader body of evidence presented in chapter 4.

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