Financial knowledge of New Zealanders

Data from the Commission for Financial Capability's Barometer Survey 2020

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Executive summary

- This survey of 3132 New Zealanders used the OECD-INFE measure of financial knowledge. Questions were included in the CFFC's Barometer survey from January to June, 2020.
- New Zealanders have a good understanding of inflation, interest and risk and return (over 90% correct responses).
- However, they struggle with understanding compound interest, risk diversification and time value of money.
- Only 22% answered all questions correctly.
- Financial knowledge increases with age; young people have the lowest financial knowledge and understanding the time value of money is where age makes the most difference.
- Women have lower financial knowledge than men; twice as many men as women answered all questions correctly.
- In the youngest age group, men and women start with the same score but men increase their financial knowledge more with age and women do not catch up.
- Women who have children have lower financial knowledge score than women without children, and single women with no children have a higher financial knowledge score than women in a relationship.
- The gender gap is largest in understanding simple and compound interest.
- The gender gap is similar across all ethnic groups.
- Self-employed and business owners have higher financial knowledge than employees.
- Those who answered the compound interest question correctly are more likely to save at least monthly. This difference in savings behaviour between those who do and do not understand compound interest is highest among those on lowest incomes.
- Among those with debt, those who buy on credit from truck shops or are paying off a car loan have the lowest financial knowledge score; those who have a mortgage have the highest score.
- The greatest gap between Māori and Pacific Peoples and the population average is on the interest and compound interest questions – only 21% of Māori and 26% of Pacific Peoples respondents answered questions about simple and compound interest correctly, compared to population average of 45%.
- These results point to groups who could benefit most from financial education, and key subject areas.

Financial knowledge and financial capability

Financial knowledge (literacy) alone is not enough to change financial behaviour, but is one of the building blocks of financial capability.[1] In particular, financial knowledge plays an important role in choosing and using financial products. A decision to, for example, borrow money to buy a car is often driven by social norms and expectations, identities, emotions, attitude towards debt, availability of financial products and other non-cognitive factors. However, after the decision to borrow money is made, financial knowledge drives the choice of a loan (by comparing interest rates) and repayment strategy (such as making only the minimum payments required, or paying it off more quickly to save interest). In the long term, these choices can make a significant difference to a person's financial situation.

Recognising the importance of measuring financial knowledge, the CFFC introduced financial knowledge questions from the OECD/INFE adult financial knowledge toolkit to its ongoing survey (the Financial Capability Barometer) in the period January to June 2020.[2] These questions, answered by 3132 survey participants, measure the understanding of basic financial concepts such as interest, inflation and risk diversification. This report analyses New Zealand's results by age, gender, ethnicity, education, employment status and personal income to identify areas of need and opportunity when targeting delivery of financial education.

1 The difference between financial capability and financial literacy approaches is outlined in more detail in the introduction to CFFC's Financial Capability Barometer findings 2018-2019, available at https://cffc-assets-prod.s3.ap-southeast-2.amazonaws.com/public/Uploads/Research-2020%2B/CFFC-Barometer-Report-2018-2019.pdf

2 The sampling and data collection methodology for this survey is the same as described in the Financial Capability Barometer report linked in footnote 1.

The results

Table 1 shows the wording of the questions and the percentage of respondents who answered them correctly.[3] The table also shows how points were assigned, with 7 being the maximum possible score.

Table 1.

Question	Response options and correct answer	Percentage of respondents who answered correctly	Question measures understanding of:	Points (added to the total score)
Imagine that five brothers are given a gift of $1,000. If the brothers have to share the money equally how much does each one get?	Introductory question, not included in the score.			0
Now imagine that the brothers have to wait for one year to get their share of the $1,000 and inflation stays at 3 percent. In one year's time, will they be able to buy:	[1] More with their share of the money than they could today [2] The same amount [3] Or, less than they could buy today [4] I'm not sure Correct answer: [3]	45%	Time value of money	1
You lend $25 to a friend one evening and he gives you $25 back the next day. How much interest has he paid on this loan?	Text entry (correct answer: 0)	95%	Interest paid on a loan	1
Suppose you put $100 into a no fee savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made?	Text entry (correct answer: 102)	74%	Simple interest calculation	1
And how much would be in the account at the end of five years, remembering there are no fees? Would it be:	[1] More than $110 [2] Exactly $110 [3] Less than $110 [4] Or is it impossible to tell from the information given Correct answer: [1]	57%	Compound Interest	0 (scored in combination with the simple interest calculation question)
	Correct answers to the two questions above	45%	Simple and compound interest	1
An investment with a higher than average return is likely to have higher than average risk	[1] True [2] False Correct answer: [1]	93%	Understanding risk and return	1
High inflation means that the cost of living is increasing rapidly.	[1] True [2] False Correct answer: [1]	90%	Understanding the definition of inflation	1
It is less likely that you will lose all of your money if you save it in more than one place	[1] True [2] False Correct answer: [1]	65%	Understanding risk diversification	1

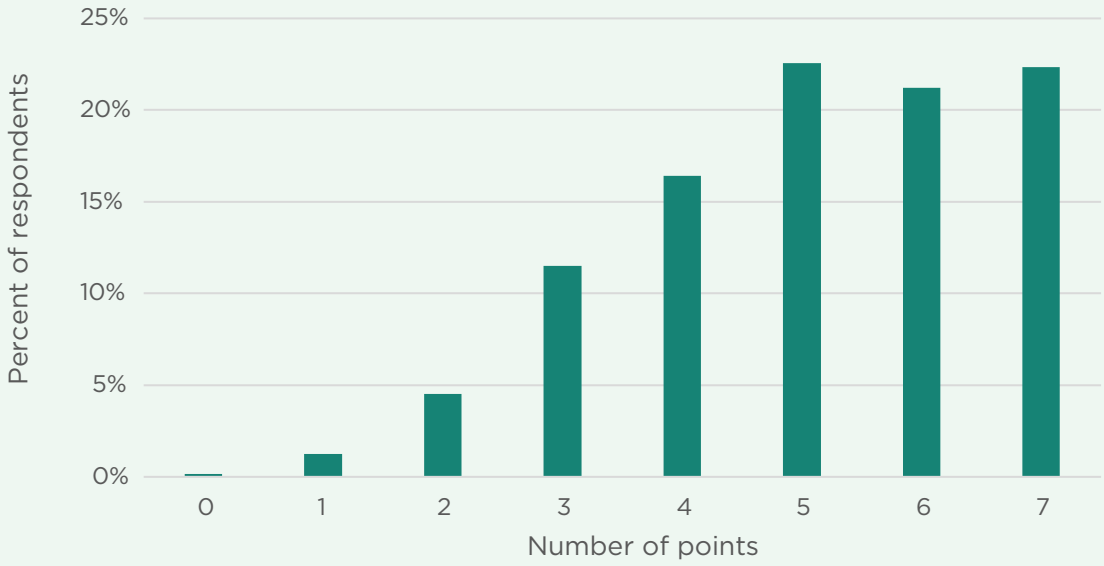
3 New Zealand did not participate in the 2020 OECD survey of adult financial knowledge, and the Financial Capability Barometer uses a different sampling method that recommended by the OECD. Therefore, caution is advised when comparing New Zealand and OECD data from other countries which is available in OECD/INFE International Survey of Adult Financial Knowledge 2020, https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-knowledge.pdf;.

Table 2 and figure 1 show the distribution of scores among respondents. The mean was 5.1 out of 7, and 66% of respondents achieved a score of at least 5, the minimum score for a financially knowledgeable person, according to OECD.

Table 2.

Score	Number of respondents	%
0	5	0%
1	39	1%
2	142	5%
3	360	11%
4	514	16%
5	707	23%
6	665	21%
7	700	22%
Total	3132	100%

Figure 1.



Results by age

As expected, financial knowledge increases with age (as measured by mean score, percent who achieved minimum target score and maximum score). People acquire financial knowledge when they make financial decisions, and this experience accumulates with age.

Table 3.

Score	18 to 34 years	35 to 54 years	55 to 64 years	65 years and over	Total
0	0%	0%	0%	0%	0%
1	3%	1%	0%	0%	1%
2	9%	3%	2%	2%	5%
3	18%	11%	8%	4%	11%
4	18%	18%	13%	11%	16%
5	23%	23%	22%	21%	23%
6	15%	22%	25%	27%	21%
7	14%	22%	30%	34%	22%
Total	100%	100%	100%	100%	100%
% who achieved at least the minimum target score (5 out 7)	51%	67%	76%	83%	66%
% who answered all questions correctly	14%	22%	30%	34%	22%
Mean score	4.5	5.1	5.5	5.7	5.1
Number of respondents in age group	869	1317	564	382	3132
Age group as % of the sample	28%	42%	18%	12%	100%

While the increase of financial knowledge with age is a positive trend, low financial knowledge among the youngest cohort (18 to 34 years old) is concerning. It is at this age that people make many of the financial decisions that can have a profound impact on the rest of their life, such as taking on a mortgage, taking on consumer debt and starting to invest.

A delay in starting long-term investing can have a huge impact on young people's future net worth, because they miss out on the power of compound interest. A person who, at 21, puts $5000 into a savings account with compound interest, then contributes $1000 each year until they are 30 years old and then never contributes again, will end up with more money at 65 than a person who puts in $5000 into the same account when they are 31 years old and then contributes $1000 each year until they are 65. This example, used by Sorted facilitators, never fails to surprise workshop participants. Yet, understanding simple and compound interest (along with time value of money) is where the youngest age group performs the worst when compared to the oldest age group.

Table 4.

Percentage who answered the question correctly (refer to Table 1)	18 to 34 years	35 to 54 years	55 to 64 years	65 years and over	Total
Time value of money	30%	44%	56%	63%	45%
Interest paid on a loan	89%	96%	98%	98%	95%
Simple interest calculation	65%	76%	80%	84%	74%
Simple and Compound Interest	36%	45%	52%	55%	45%
Understanding risk and return	90%	94%	95%	96%	93%
Understanding the definition of inflation	79%	93%	95%	98%	90%
Understanding risk diversification	60%	64%	70%	77%	65%

Results by gender

Women have a lower mean score than men, and twice as many men as women answered all the questions correctly (30% of men, compared to 15% of women). Women performed worse than men on five of the seven questions. The gender gap was largest for understanding simple and compound interest (16.5 percentage points; Table 6).

Table 5.

Score	Female	Male	Total
0	0%	0%	0%
1	1%	1%	1%
2	6%	3%	5%
3	12%	11%	11%
4	20%	13%	16%
5	26%	19%	23%
6	20%	23%	21%
7	15%	30%	22%
Total	100%	100%	100%
% who achieved at least the minimum target score (5 out 7)	61%	72%	66%
% who answered all questions correctly	15%	30%	22%
Mean score	4.8	5.3	5.1
Number of respondents in gender group	1570	1562	3132
Gender as % of the sample	50%	50%	100%

Table 6.

% who answered question correctly	Female	Male	Total	male-female difference statistically significant at 0.05 level?	Size of male/ female difference (percentage points)
Time value of money	36%	53%	45%	yes	16.2%
Interest paid on a loan	95%	94%	95%	no	Not significant
Simple interest calculation	70%	79%	74%	yes	9.4%
Simple and Compound Interest	37%	53%	45%	yes	16.5%
Understanding risk and return	92%	95%	93%	yes	2.9%
Understanding the definition of inflation	90%	90%	90%	no	Not significant
Understanding risk diversification	63%	68%	65%	yes	5.6%

Interestingly, in the 18-34 year old age group there is no difference between men's and women's mean score: they have the same low starting point (4.5 out of 7). The gap appears among those aged 35-54 when men's financial knowledge score increases more than women's (compared to the 18-34 age group). Both men and women's financial knowledge score increases with age, but women never catch up (Table 7).

Table 7.

Age group	Female mean score	Male mean score	Male-female difference
18 to 34 years	4.5	4.5	0.0
35 to 54 years	4.8	5.4	0.6
55 to 64 years	5.2	5.7	0.5
65 +	5.4	5.8	0.4
Total	4.8	5.3	0.5
Understanding the definition of inflation	90%	90%	90%
Understanding risk diversification	63%	68%	65%

The gender gap is similar across all ethnic groups (Table 8) and persists across all levels of educational achievement (Table 9). The time poverty of women due to unpaid caring labour may be a factor, as well as women's lower earnings and time out of paid employment which may reduce their opportunities to gain financial experience. The survey did not explore these topics[4] and more research is needed to gain insight into the financial knowledge gender gap. Women are already at a disadvantage when saving for retirement, due to lower average lifetime earnings and longer average lifespans. Good financial decisions, made early in life, could ameliorate some of this disadvantage (although systemic changes would still be necessary to achieve equity).[5]

Table 8.

	Māori	Pacific	Asian	European	Total
Female	4.2	3.7	4.9	5.1	4.8
Male	4.6	4.3	5.3	5.6	5.3
Total	4.3	4.0	5.1	5.3	5.1
Male-female difference	0.4	0.6	0.4	0.5	0.5
Total	4.8	5.3	0.5		

4 Women with children have a lower mean financial knowledge score than those without children, which could support the time poverty hypothesis. Nonetheless, women in all family situations have a lower mean financial knowledge score than men (except for men who are single parents).

Gender	Partnered	Children*	Mean score
Male	Yes	No	5.7
Male	No	No	5.4
Male	Yes	Yes	5.3
Female	No	No	5.1
Female	Yes	No	4.9
Female	Yes	Yes	4.7
Female	No	Yes	4.6
Male	No	Yes	4.3**

* currently has dependent children
** small sample size

5 See "A Review of Gender Differences in Retirement Income", Public Policy Institute, Background paper for the Review of Retirement Income Policy 2019, https://cffc-assets-prod.s3.ap-southeast-2.amazonaws.com/public/Uploads/Retirement-Income-Policy-Review/2019-RRIP/Research-docs/The-big-picture/Ak-Uni-PPI-Gender-Pension-Gap-Report.pdf.

Table 9.

	Female	Male
No qualification	4.0	4.6
School qualification	4.5	5.2
Tertiary diploma/certificate	4.6	5.2
Bachelor's degree or higher	5.4	5.7
Total	4.8	5.3

Results by ethnic group

Māori and Pacific Peoples respondents have lower mean scores than Asian and European respondents (Table 10). The greatest gap between Māori and Pacific peoples and the population average is on the interest and compound interest questions – only 21% and 26% respectively, answered both questions correctly compared to population average of 45% (Table 11). Unlike the gender gap, the ethnic group gap in financial knowledge exists across all age groups (Table 12). One possible explanation is that lower average incomes in Māori and Pasifika communities are a barrier to acquiring financial experience, because some financial services and products are available to, or marketed to, those on higher incomes.

Table 10.

Score	Māori	Pacific	Asian	European
0	0%	0%	0%	0%
1	2%	4%	2%	1%
2	8%	14%	4%	3%
3	19%	23%	13%	8%
4	25%	19%	11%	16%
5	22%	25%	23%	23%
6	15%	9%	24%	23%
7	8%	7%	23%	26%
Total	100%	100%	100%	100%
% who achieved at least the minimum target score (5 out of 7)	45%	40%	70%	72%
% who answered all questions correctly	8%	7%	23%	26%
Mean score	4.3	4.0	5.1	5.3
Number of respondents in ethnicity group	565	257	429	2,173
Ethnicity group as % of the sample	18%	8%	14%	69%

Note: respondents could select more than one ethnicity. In that case they were counted in each of the ethnicities they selected, so the number of responses adds to more than 100% of the sample. "Other" ethnicity had a low sample size (53) and was not included as results for this groups are not representative.

Table 11.

% who answered question correctly	Māori	Pacific	Asian	European	Total
Time value of money	28%	28%	48%	48%	45%
Interest paid on a loan	92%	86%	93%	97%	95%
Simple interest calculation	56%	52%	75%	81%	74%
Simple and Compound Interest	26%	21%	52%	50%	45%
Understanding risk and return	89%	84%	93%	95%	93%
Understanding the definition of inflation	87%	79%	88%	92%	90%
Understanding risk diversification	56%	49%	65%	69%	65%

Table 12.

Age group	Māori	Pacific	Asian	European	Total
18 to 34 yrs	3.9	3.5	4.8	4.7	4.5
35 to 54 yrs	4.6	4.2	5.3	5.3	5.1
55 to 64 yrs	4.8	4.5	5.8	5.6	5.5
65 +	4.6	Small sample	5.4	5.8	5.7
Total	4.3	4.0	5.1	5.3	5.1

Results by education

Skills acquired in formal education, such as numeracy and searching for information, should support improving one's financial knowledge even if financial knowledge was not taught directly. As expected, the mean score, the percentage of those who achieved the maximum score and the percentage of those who achieved a score at least 5 out of 7 all increase with the level of education (Table 13).

Only among those with a Bachelor's degree or higher was the mean score more than 5 out of 7 (the minimum score for a financially knowledgeable person, according to OECD). Also, even among those with a university degree, less than 1 in 3 answered all questions correctly. This shows that education level is correlated with financial knowledge but does not guarantee high financial knowledge. This suggests that we need to teach financial knowledge directly, rather than hope it will improve with overall educational achievement.

Table 13.

% who answered question correctly	No qualification	School qualification	Tertiary diploma/ certificate	Bachelor's degree or higher	Total
Time value of money	27%	37%	41%	57%	45%
Interest paid on a loan	92%	94%	95%	96%	95%
Simple interest calculation	55%	69%	72%	85%	74%
Simple and Compound Interest	21%	41%	40%	58%	45%
Understanding risk and return	86%	93%	93%	95%	93%
Understanding the definition of inflation	90%	88%	89%	92%	90%
Understanding risk diversification	57%	62%	63%	72%	65%
% who achieved at least the minimum target score (5 out of 7)	46%	59%	63%	79%	66%
% who answered all questions correctly	9%	18%	19%	32%	22%
Mean score	4.3	4.8	4.9	5.6	5.1
number of respondents in the education group	267	718	1,042	1,105	3,132
Education group as % of dataset	9%	23%	33%	35%	100%

Results by employment status

We could expect people in the labour force to have greater financial knowledge because they had the opportunity to accumulate more financial experience. However, the difference in financial knowledge between those in paid employment and those not in paid employment is small. Only those who are self-employed or business owners had an above average financial knowledge score (Table 14).

Table 14.

	Not in paid employment	Employed	Self-Employed or business owner	Total
Time value of money	42%	44%	55%	45%
Interest paid on a loan	95%	94%	97%	95%
Simple interest calculation	71%	75%	82%	74%
Simple and Compound Interest	40%	46%	58%	45%
Understanding risk and return	92%	94%	96%	93%
Understanding the definition of inflation	92%	88%	92%	90%
Understanding risk diversification	66%	65%	68%	65%
% who achieved at least the minimum target score (5 out of 7)	63%	66%	78%	66%
% who answered all questions correctly	21%	22%	30%	22%
Mean score	5.0	5.1	5.5	5.1
number of respondents in the employment group	972	1,927	233	3,132
Employment group as % of dataset	31%	62%	7%	100%

6 Those not in paid employment include students, retired, stay at home parents / homemakers, unemployed, not working due to illness.

Results by personal income

People with higher incomes could be expected to have higher financial knowledge based, again, on the financial experience hypothesis – those with higher incomes will have the opportunity to make more, and more complex, financial decisions. The mean score remains stable across income groups up to $69,999 per annum and jumps to 5.5 among those earning $70,000 or more. The mean score is lowest among those who did not know their income or were not comfortable sharing this information (Table 15).

Table 15.

	under 30,000	30,000 - 49,999	50,000 - 69,999	70,000 and over	Don't know /refused	Total
Time value of money	40%	42%	44%	57%	31%	45%
Interest paid on a loan	95%	94%	95%	96%	88%	95%
Simple interest calculation	70%	74%	75%	85%	54%	74%
Simple and Compound Interest	39%	43%	48%	59%	27%	45%
Understanding risk and return	91%	94%	95%	96%	88%	93%
Understanding the definition of inflation	90%	90%	88%	92%	86%	90%
Understanding risk diversification	65%	65%	64%	69%	59%	65%
% who achieved at least the minimum target score (5 out of 7)	62%	65%	68%	78%	46%	66%
% who answered all questions correctly	19%	19%	22%	33%	12%	22%
Mean score	4.9	5.0	5.1	5.5	4.3	5.1
number of respondents in the Income group	1112	526	518	761	215	3132
Income group as % of dataset	35%	17%	17%	24%	7%	100%

What has the greatest influence?

Previous sections show that age, gender, ethnicity, education, employment status and personal income are all related to financial knowledge. Some of these influences overlap. We used regression to evaluate the relative contribution of each factor to achieving 1) at least the minimum score, 2) the maximum score.

For achieving at least the minimum target score, age (65 or over) and education (Bachelor's degree or higher) matter the most (Table 16). For achieving the maximum score, education (Bachelor's degree or higher) has the most impact (Table 17). However, in both cases, controlling for age, income, education and employment status does not eliminate the impact of ethnicity and gender. This means that the ethnic and gender differences are not solely due to differences in age, education, or income between men and women, or between Māori/Pacific Peoples and non-Māori/non-Pacific Peoples.

Table 16. Note: the regression table is in Appendix 2.

someone who is / has	is that many times more/less likely to achieve the minimum target financial knowledge score (controlling for all other variables in the table)	compared to someone who is / has...
35 to 54 yrs	1.9 times more likely	18 to 34 yrs
55 to 64 yrs	3 times more likely	18 to 34 yrs
65 +	4.6 times more likely	18 to 34 yrs
Male	1.4 times more likely	Female
Māori	1.6 times less likely	non-Māori
Pacific Island	1.6 times less likely	non-Pacific
Asian	1.5 times more likely	non-Asian
European	2 times more likely	non-European
School qualification	1.8 times more likely	No qualification
Tertiary diploma/certificate	2 times more likely	No qualification
Bachelor's degree or higher	4.3 times more likely	No qualification
Employed	ns*	Not in paid employment
Self Employed	1.5 times more likely	Not in paid employment
30,000 - 49,999	ns	under 30,000
50,000 - 69,999	ns	under 30,000
70,000 and over	1.7 times more likely	under 30,000
Don't know/refused	ns	under 30,000

*ns= not significant; significant when $p<0.05$

Table 17.

someone who is / has	is that many times more/less likely to achieve the maximum financial knowledge score (controlling for all other variables in the table)	compared to someone who is / has...
35 to 54 yrs	1.6 times more likely	18 to 34 yrs
55 to 64 yrs	2.5 times more likely	18 to 34 yrs
65 +	2.6 times more likely	18 to 34 yrs
Male	2.2 times more likely	Female or Other
Māori	2 times less likely	non-Māori
Pacific Island	2.1 times less likely	non-Pacific
Asian	ns*	non-Asian
European	2.1 times more likely	non-European
School qualification	2.3 times more likely	No qualification
Tertiary diploma/certificate	2.3 times more likely	No qualification
Bachelor's degree or higher	4.8 times more likely	No qualification
Employed	ns	Not in paid employment
Self employed	ns	Not in paid employment
30,000 - 49,999	ns	under 30,000
50,000 - 69,999	ns	under 30,000
70,000 and over	1.7 times more likely	under 30,000
Don't know/refused	ns	under 30,000

Ns= not significant; significant **when p<0.05**

Links between financial knowledge and behaviour and attitudes

Savings

Survey data shows several correlations between financial knowledge and financially capable behaviour. For example, those who answered the compound interest question correctly exhibit better saving and borrowing behaviours than those who answered it incorrectly. At every income level, those who answered the compound interest question correctly were more likely to save at least monthly (Table 18). The difference in savings behaviour is highest among those on lowest incomes, whereas those earning $70,000 per annum or over differ little in their saving behaviour regardless of how they answered the compound interest question. A possible explanation is that understanding how compound interest works increases the motivation to save because long-term benefits of saving are clearer. This motivation is more important at lower levels of income where saving requires more sacrifice.

Table 18.

% of people in this income bracket who are saving money at least monthly	% of respondents who answered the compound interest question incorrectly who are saving money at least monthly	% of respondents who answered the compound interest question correctly who are saving money at least monthly	50,000 - 69,999	70,000 and over	Don't know / refused	Total
under 30,000	35%	44%	44%	57%	31%	45%
30,000 - 49,999	46%	54%	95%	96%	88%	95%
50,000 - 69,999	52%	61%	75%	85%	54%	74%
70,000 and over	68%	70%	48%	59%	27%	45%

Emergency fund

Those who have a 3-month emergency fund have the highest mean financial knowledge score. Among those with less than 3 months' worth of income in their emergency fund, there is no gradual increase of the score as the size of emergency fund grows - respondents with two months' worth of income in their emergency fund have the same mean score as those with 1 months' worth (Table 19). This suggests that those with higher financial knowledge tend to follow the popular personal finance recommendation of having a 3-month emergency fund.

Table 19.

If there was an emergency or an unexpected large expense, what is the maximum amount of income that you could access from your savings or available cash?	Mean financial knowledge score	number of respondents	percent of respondents
Less than 1 months' worth of income	4.9	1011	32%
1 months' worth of income	4.9	485	15%
2 months' worth of income	4.9	416	13%
3 months' worth of income	5.7	891	28%
Unsure	4.3	329	11%
Total	5.1	3132	100%

Borrowing behaviour

Those who have a loan to a payday lender or truck shop, or who are currently paying off a loan for a car or car repair have the lowest mean financial knowledge scores. Truck shops and payday lenders have high interest rates, and it is recommended to avoid borrowing money for depreciating assets (like cars). While many people use such lenders, or borrow money to buy cars, out of necessity and due to the lack of other options, the low knowledge scores suggest that some of them may not fully understand the financial consequences of their borrowing decisions. Mortgages are associated with the highest mean score. A degree of financial knowledge is required to get a mortgage, and feedback from sorted.org.nz users suggests that buying a house often motivates people to learn about compound interest and budgeting.

Table 20.

Who do you or have you owed money to at any time in the last year?	Mean financial knowledge score	number of respondents	percent of respondents
To a bank for a personal loan	4.8	523	17%
To a bank for a mortgage	5.5	957	31%
To a hire purchase company to buy something from a shop	4.6	318	10%
To a finance company such as Instant Finance, GE Money, GEM Finance, Cash Converters	4.8	700	22%
To a truckshop or mobile trader	3.7	71	2%
To a payday lender such as Moola, Need Cash Today	4.2	142	5%
To a friend, family member or work mate or partner	4.8	486	16%
Are you currently paying off a loan you took out for a car or car repair?	4.5	184	17%
Total	5.1	1063	100%

Other behaviours and attitudes

In financial behaviour and attitude questions, such as paying bills on time, keeping close watch on one's finances, setting long-term goals and preferring saving for the future over spending money now, those who gave more financially capable responses tended to have higher financial knowledge scores (Table 20-23).

Table 21.

I pay my bills on time	Mean financial knowledge score	number of respondents	percent of respondents
Completely Disagree	4.1	30	1%
Disagree	4.3	126	4%
Neither Disagree or Agree	4.2	355	11%
Agree	4.9	1006	32%
Completely Agree	5.4	1615	52%
Total	5.1	3132	100%

Table 22.

I keep a close personal watch on my financial affairs	Mean financial knowledge score	number of respondents	percent of respondents
Completely Disagree	3.9	39	1%
Disagree	4.5	122	4%
Neither Disagree or Agree	4.5	455	15%
Agree	5.1	1289	41%
Completely Agree	5.4	1227	39%
Total	5.1	3132	100%

Table 23.

I set long term financial goals and strive to achieve them	Mean financial knowledge score	number of respondents	percent of respondents
Completely Disagree	4.8	110	4%
Disagree	5.0	341	11%
Neither Disagree or Agree	5.0	970	31%
Agree	5.2	1147	37%
Completely Agree	5.2	564	18%
Total	5.1	3132	100%

Table 24.

I find it more satisfying to spend money than to save it for the long term	Mean financial knowledge score	number of respondents	percent of respondents
Completely Disagree	5.2	486	16%
Disagree	5.4	915	29%
Neither Disagree or Agree	4.9	982	31%
Agree	4.9	599	19%
Completely Agree	4.3	150	5%
Total	5.1	3132	100%

Recommendations: priority areas

The results indicate that the areas to be addressed as a priority are the understanding of simple and compound interest and time value of money. In these areas, the gap between younger and older people, women and men and Māori and Pacific Peoples and Europeans is most pronounced. Understanding of simple and compound interest is particularly important for consumers choosing and using savings and credit products. When choosing credit products, sub-optimal choices can increase the risk of financial hardship or exacerbate existing financial hardship. Young people should be the priority for increasing the understanding of compound interest because they can reap the greatest benefits from compounding interest on savings or investments over a long period of time.

The inequalities in understanding risk diversification are not as pronounced as for understanding compound interest, but the overall results for that measure (65% answered the question correctly) are relatively low compared to measures of understanding the definition of inflation (90%) or risk and return (93%). In the current low-interest rate environment where many may look for alternatives to term deposits, understanding risk diversification is important.

Appendix 1. Regression tables

Minimum target score.

	B	S.E.	Wald	DF	SIG.	EXP(B)
18 to 34 yrs			111.267	3	0.000	
35 to 54 yrs	0.619	0.099	39.428	1	0.000	1.856
55 to 64 yrs	1.119	0.133	71.244	1	0.000	3.062
65 +	1.519	0.178	72.890	1	0.000	4.567
Male	0.346	0.088	15.345	1	0.000	1.413
Māori	-0.445	0.124	12.829	1	0.000	0.641
Pacific peoples	-0.490	0.172	8.082	1	0.004	0.612
Asian	0.419	0.175	5.724	1	0.017	1.520
European	0.685	0.135	25.625	1	0.000	1.984
No qualification			96.365	3	0.000	
School qualification	0.608	0.160	14.421	1	0.000	1.837
Tertiary diploma/certificate	0.674	0.154	19.080	1	0.000	1.961
Bachelor's degree or higher	1.462	0.167	77.086	1	0.000	4.315
Not in paid employment			7.646	2	0.022	
Employed	-0.085	0.117	0.532	1	0.466	0.918
Self Employed	0.412	0.192	4.579	1	0.032	1.509
Income under 30,000			25.753	4	0.000	
Income 30,000 - 49,999	0.185	0.128	2.077	1	0.150	1.203
Income 50,000 - 69,999	0.210	0.136	2.389	1	0.122	1.234
Income 70,000 and over	0.558	0.133	17.453	1	0.000	1.746
Don't know/refused	-0.318	0.168	3.595	1	0.058	0.727
Constant	-1.475	0.222	44.188	1	0.000	0.229

Cox & Snell R2 = .165; Nagelkerke R2 = .229

Maximum score.

	B	S.E.	Wald	DF	SIG.	EXP(B)
18 to 34 yrs			44.685	3	0.000	
35 to 54 yrs	0.490	0.127	14.830	1	0.000	1.632
55 to 64 yrs	0.915	0.148	37.971	1	0.000	2.496
65 +	0.944	0.179	27.939	1	0.000	2.571
Male	0.796	0.100	63.148	1	0.000	2.216
Māori	-0.710	0.183	15.096	1	0.000	0.491
Pacific Island	-0.743	0.289	6.628	1	0.010	0.476
Asian	0.371	0.225	2.708	1	0.100	1.449
European	0.744	0.200	13.839	1	0.000	2.104
No qualification			75.647	3	0.000	
School qualification	0.849	0.245	11.949	1	0.001	2.336
Tertiary diploma/certificate	0.827	0.239	12.022	1	0.001	2.287
Bachelor's degree or higher	1.575	0.239	43.366	1	0.000	4.832
Not in paid employment			5.303	2	0.071	
Employed	-0.220	0.143	2.358	1	0.125	0.803
Self Employed	0.128	0.189	0.462	1	0.497	1.137
Income under 30,000			18.935	4	0.001	
Income 30,000 - 49,999	0.024	0.152	0.025	1	0.874	1.024
Income 50,000 - 69,999	0.142	0.158	0.817	1	0.366	1.153
Income 70,000 and over	0.511	0.143	12.786	1	0.000	1.667
Don't know/refused	-0.209	0.241	0.750	1	0.386	0.812
Constant	-3.822	0.333	131.536	1	0.000	0.022

Cox & Snell R2 = .126; Nagelkerke R2 = .193