



THE UNIVERSITY OF
**WESTERN
AUSTRALIA**



UWA
Public Policy
Institute

Financial Literacy in Australia: Insights from HILDA Data

Professor Alison Preston
UWA Business School
March 2020



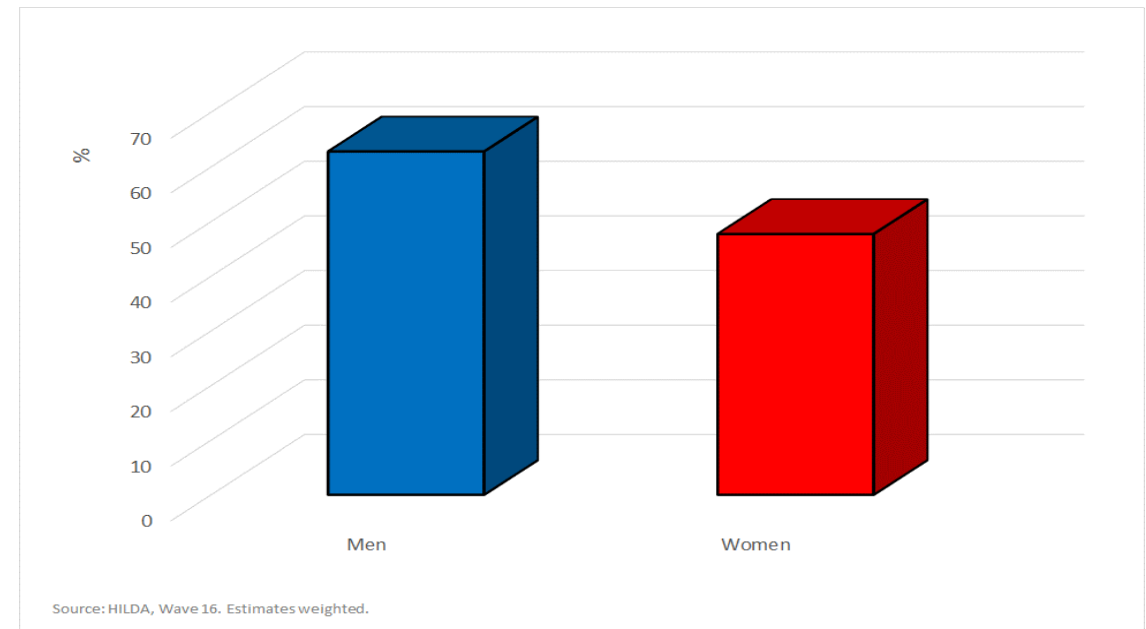
Introduction

Australia has a relatively high level of financial literacy when ranked globally. In the 2014 Standard & Poor's Ratings Services Global Financial Literacy Survey of a 140 economies, Australia, for example, ranked in the top 10 countries for financial literacy.¹ Notwithstanding this favourable global performance there is widespread financial illiteracy within Australia, particularly amongst young people. There are also large and significant gender gaps with women, on average, less financially literate than men. Within Australia 63% of men and 48% of women demonstrate an understanding of at least three basic financial literacy concepts. If understanding three basic financial literacy concepts can be considered financially literate, then these statistics suggests that around 8.5 million (or 45%) adults in Australia are financially illiterate.

Such widespread financial illiteracy is of increasing concern within the context of highly complex financial markets, high levels of personal and household indebtedness and easy access to credit opportunities (particularly from non-traditional sources as Wallet Wizard and Nimble). As a minimum individuals need to understand the concept of compound interest.

In view of these concerns, this issues paper has been prepared as a way of highlighting the level of financial literacy within and across Australia. The goal of the paper is to engender debate amongst academics, practitioners and policy makers on the issues related to financial illiteracy, identify issues in need of deeper research and contribute to thought leadership on the ways through which the problems associated with financial illiteracy may be addressed.

Figure 1: Financial literacy rates; adults; Australia



The HILDA data and the measurement of financial literacy

The analysis reported in this paper is primarily based on data gathered in 2016 via the Household, Income and Labour Dynamics in Australia (HILDA) survey. HILDA is a large, nationally representative, longitudinal survey of households. All individuals aged 15 or more within sample households are interviewed and detailed information is gathered on a range of socioeconomic characteristics, including information on wealth and financial decision making. In 2016 the HILDA survey also included a series of questions testing knowledge of basic financial literacy concepts. These data provide important insights into the financial literacy of Australians and are especially valuable on account of the nationally representative nature of the survey.

There are a number of ways of measuring financial literacy. A common approach is to define a person as financially literate if they can correctly answer three questions (commonly known as the Big-3) testing knowledge related to three key financial literacy concepts. These include: (a) an understanding of interest rates, especially compound interest; (b) an understanding of inflation; and (c) an understanding of diversification.

The actual number and complexity of the financial literacy questions included in various surveys differs depending on the focus and length of the survey. As HILDA is a large and detailed survey, time only permitted the inclusion five financial literacy questions. The questions followed international best practice and were based on questions initially developed by Annamaria Lusardi and Olivia Mitchell.² The five HILDA questions were as follows:

- Q1: Interest Rate: “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?”
- Q2: Inflation: “Imagine now that the interest rate on your savings account was 1% per year and inflation was 2% per year. After one year, would you be able to buy more than today, exactly the same as today, or less than today with the money in this account?”
- Q3: Diversification: “Buying shares in a single company usually provides a safer return than buying shares in a number of different companies.” [True, False]
- Q4: Risk: “An investment with a high return is likely to be high risk.” [True, False]
- Q5: Money Illusion: “Suppose that by the year 2020 your income has doubled, but the prices of all of the things you buy have also doubled. In 2020, will you be able to buy more than today, exactly the same as today, or less than today with your income?”

Respondents also had the option of a “don’t know” response or a “refuse to answer” response.

How financially literate are adult Australians?

When assessed using the Big-3 (questions 1-3 above) the HILDA estimates show that just over half of all adult Australians (55%) are financially literate.

When disaggregated by sex it is apparent that there is a large gender gap in financial literacy. While two-third (63%) of Australian men are financially literate fewer than one in two (48%) of Australian women are financially literate (Figure 1).³ The gender gap is highly significant in a statistical sense.

Figure 2 shows the variation in financial literacy across Australia's States and Territories. When benchmarked against the observed financial literacy rates in New South Wales (NSW) it would appear that the financial literacy rates of men and women are significantly higher in Western Australia (WA) and in the Australian Capital Territory (ACT). There are nevertheless, large and significant gender gaps in financial literacy within all States and Territories (the exception being the Northern Territory where the observed gender gap is not statistically significant).

Figure 2: Financial literacy rates; adults; Australian States and Territories

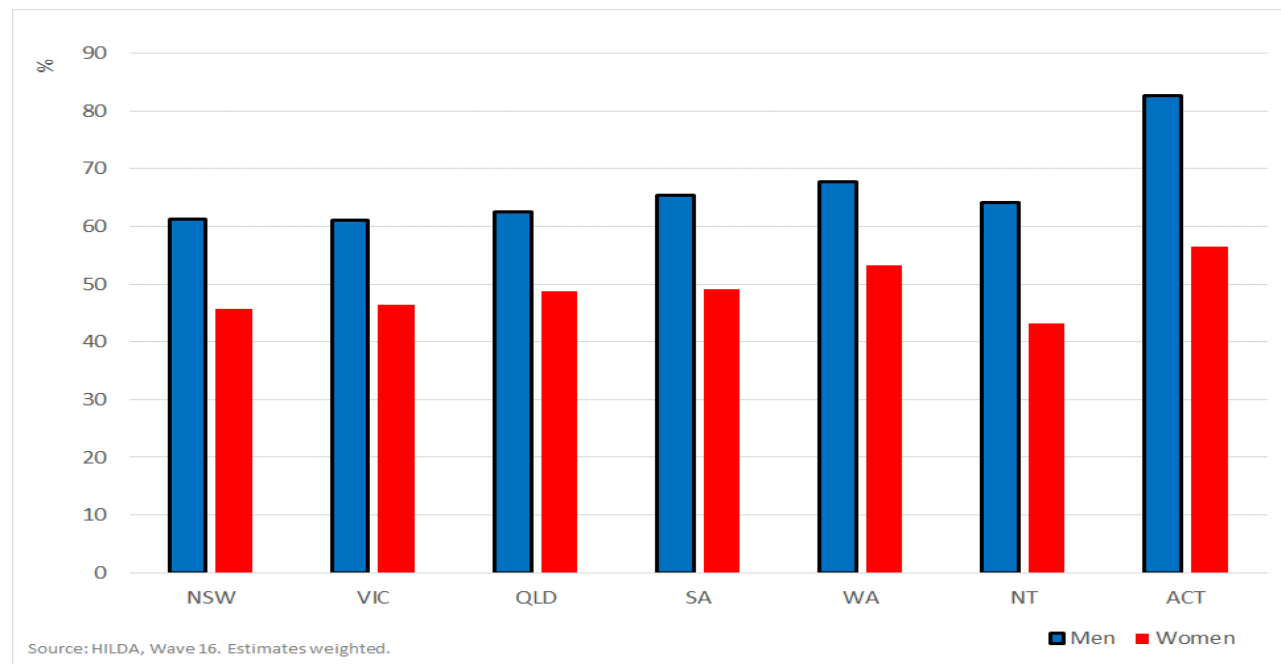
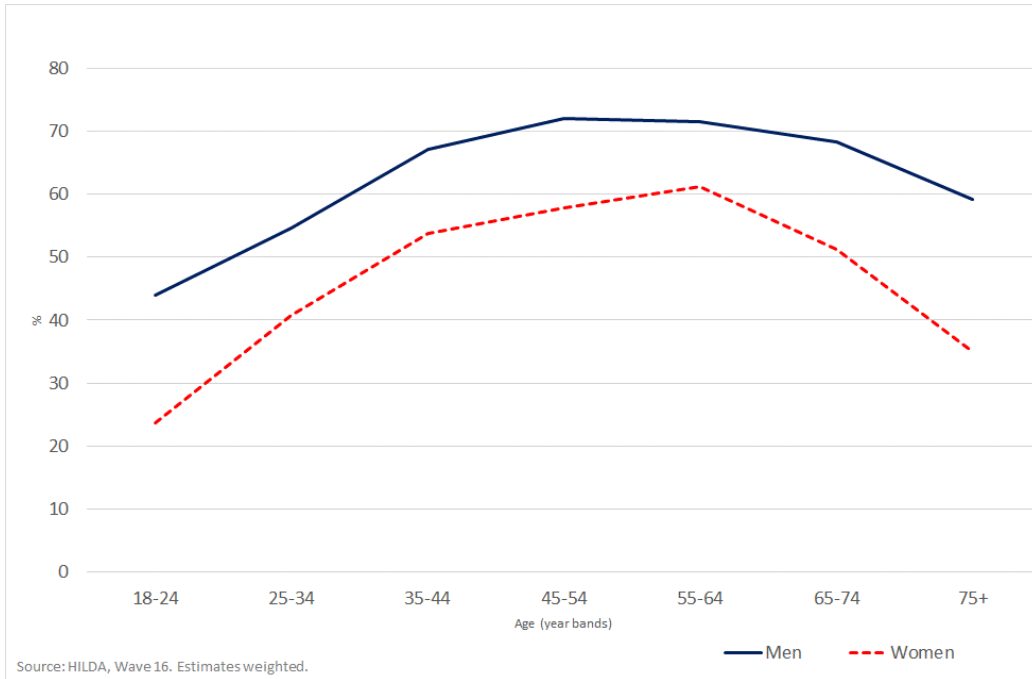


Figure 3: Financial literacy rates by age and sex, Australia



Financial literacy not only varies by sex, it also varies by age and has an inverse U-Shape; i.e. is at its lowest amongst young people, rises over the life course and then declines in older age (Figure 3). Such a pattern is found in most countries and Australia is no different in this respect. Within Australia the turning point is around 50 years of age.³ The declining financial literacy rates in older ages relates, in part, to cognition effects.

There are also significant differences in financial literacy when disaggregated by socioeconomic characteristics such as birthplace, marital status, education and employment (see Table 1). Women, for example, who are migrants from a non-English speaking background country have a financial literacy rate of 40.5%; this compares to 49.1% for Australian born women. Similarly, women whose highest level of education was Year 12 or less have a financial literacy rate of 38.3% while the rate for tertiary qualified women is 65.2%.

Table 1: Financial literacy rates by select characteristics

	Married	Never married	Australian born	Migrant from a non-English speaking background	High School or less	Tertiary qualified	Employed	Not in the labour market
Men	69.1%	50.0%	63.5%	55.4%	48.2%	81.8%	65.7%	58.5%
Women	53.8%	34.9%	49.1%	40.5%	38.3%	65.2%	51.9%	42.5%
Difference: Men-Women (%-point)	15.3	15.0	14.4	15.0	9.9	16.6	13.9	16.0

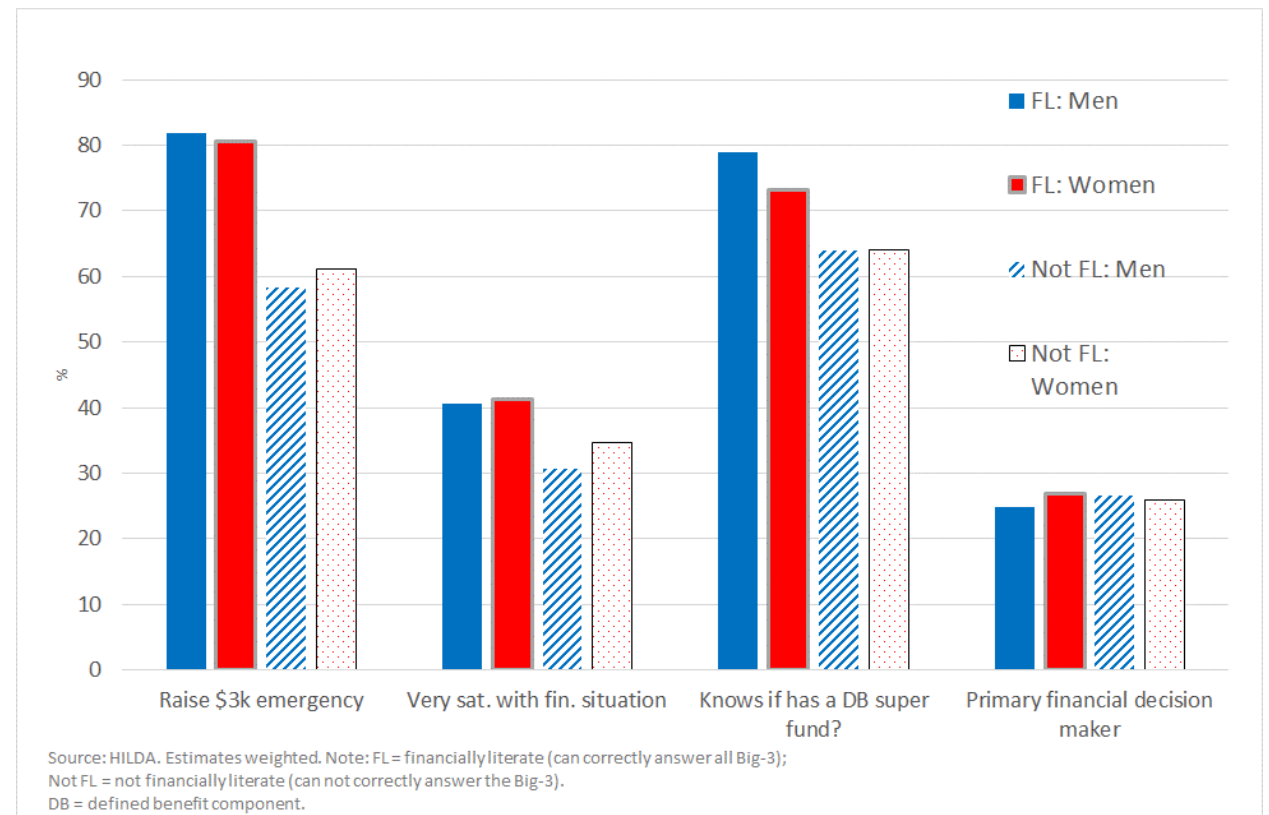
Source: HILDA.

Does being financially literate matter?

Empirical research shows that financial literacy is an important determinant of, and correlates with, a range of outcomes including wealth accumulation and planning for retirement, superannuation savings, and women's economic empowerment and domestic violence.⁴ Figure 4 and 5 describe select characteristics of adult men and women in Australia disaggregated by whether or not they are financially literate. The purpose of the exercise is to show that financial literacy correlates with important outcomes such as savings and satisfaction with one's financial situation (an important predictor of well-being).

The first two columns in Figure 4 show that around 80% of men and women who are financially literate are able to easily raise \$3,000 in an emergency. This compares to 60% for men and women who are not financially literate. The second set of estimates pertains to 'satisfaction with financial situation'. Here we can see that around 40% of men and women who are financially literate consider themselves to be very satisfied with their financial situation. A significantly smaller share of financially illiterate men and women consider themselves to be very satisfied with their financial situation.

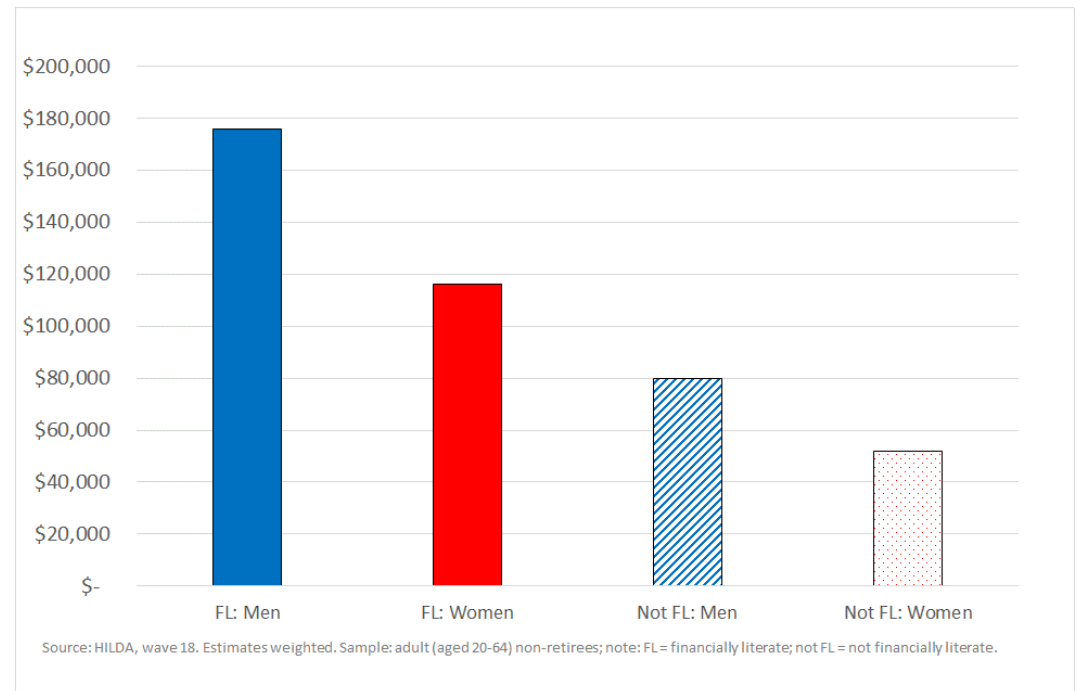
Figure 4: Financial literacy by select characteristics



In the third set of estimates in Figure 4 the focus is on the type of superannuation account that the respondent has. Australia is one of the few countries in the world that requires employers to make a compulsory contribution into a retirement savings account (known as a superannuation fund in Australia). The arrangement has led to widespread superannuation coverage, however, a large portion of those with superannuation do not understand how superannuation works. The 2018 HILDA survey included a special module on wealth and superannuation savings. Respondents with a superannuation account were asked about the type of superannuation account they had (i.e. whether or not they had a defined benefit (DB) component) and also asked about the balance in their account. An analysis of the responses for adult non-retirees (aged 20-64) shows that only 79% and 73% of financially literate males and females, respectively, knew whether or not they had a DB component. The corresponding shares amongst financially illiterate non-retirees was 64% and 60%, respectively. Financially illiterate males and females were also more likely to state that they did not know the balance in their superannuation account.

Figure 5 summarises the mean superannuation balance (savings) disaggregated by financial literacy knowledge. As may be seen, men and women who are financially literate have significantly higher superannuation balances. It is, of course, entirely possible that having higher superannuation balances incentivises individuals to become more financially literate. In other words, while there is a correlation, without deeper analysis we are unable to state whether or not there is a causation (ie. financial literacy leads to higher superannuation savings).⁵

Figure 5: Financial literacy and superannuation balances, 2018

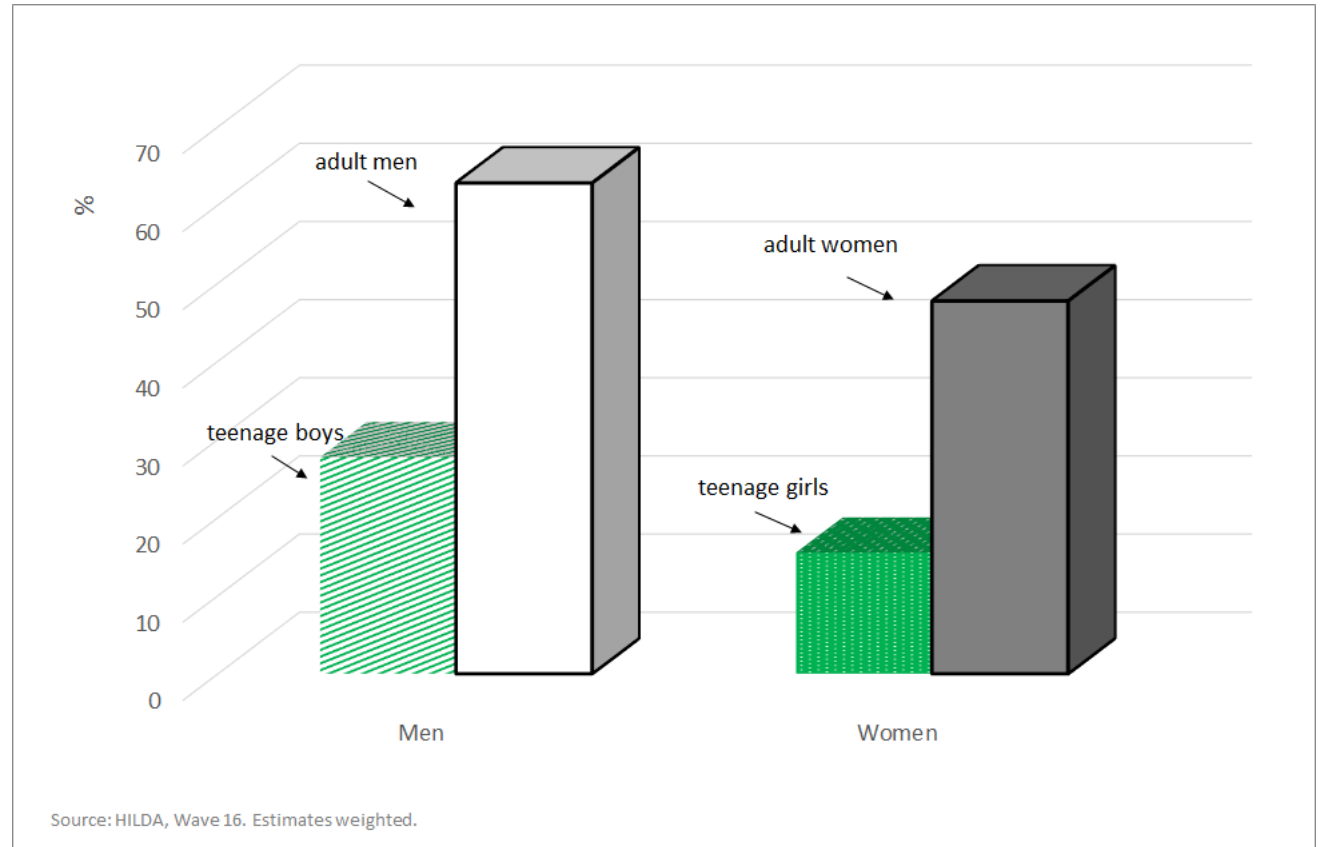


How financially literate are teenagers?

Figure 6 shows the extent of financial illiteracy amongst teenagers (aged 15-17) in Australia (comparisons are also made with adults). There are no statistically significant differences in the financial literacy rates of teenage males and females across Australia's States and Territories. In 2016 only 28% of teenage males and 15% of teenage females were able to correctly answer all of the Big-3 financial literacy questions. This is significantly less than the mean share for adults (the non-patterned bars). There is also a large gender gap. The low level of financial literacy amongst young people is particularly concerning given the range of financial decisions that young people are increasingly required to make, including decisions about investing in education, saving, credit cards etc.

It is clear from the above that the observed gender gap in financial literacy in adulthood stems from gender gaps in financial literacy that have emerged during the teen and pre-teen years. Interventions to increase the financial literacy of young people could, therefore, be expected to raise the financial literacy of people in adulthood. Understanding the determinants of financial literacy amongst young people is, therefore, an important research priority. Studies that have and are investigating this suggests that there is an important household transmission effect, particularly between mothers and daughters.⁶

Figure 6: Financial literacy rates; teenagers and adults



Where to from here?

Within and across Australia there is widespread financial illiteracy. Nationally one in three adult men and one in two adult women do not understand key basic financial literacy concepts such as interest rates, inflation and risk diversification. These are concerning shares, particularly in the context of rising household debt, increased individual responsibility for saving for retirement and easy access to credit. The costs of financial illiteracy to the society, the economy and individuals are substantial. From a macroeconomic perspective it financial literacy is central to the stability of the financial system⁷ and from an individual and societal perspective it matters for overall wellbeing.

At a national level the Australian Securities and Investment Commission (ASIC) is developing a roadmap or strategy to develop the financial capabilities of all Austalians.⁸ The UWA Public Policy Institute (PPI) seeks to contribute to the strategy and policy making process and, to this end, seeks your views and input. Key questions include:

1. What focus areas should be considered / prioritised?
2. What research is needed to better inform strategy and policy making?
3. What policies should we consider / prioritise?
4. What would you see as central to any financial capabilities strategy?

Endnotes

1. Hasler, A. and Lusardi, A., 2017. The gender gap in financial literacy: a global perspective. Global Financial Literacy Excellence Centre. The George Washington University School of Business.
2. Lusardi, A. and Mitchell, O., 2011. 'Financial literacy around the world: an overview', *Journal of Pension Economics and Finance*, 10(4): 497-508.
3. Preston, A. and Wright, R.E., 2019. 'Understanding the gender gap in financial literacy: evidence from Australia', *Economic Record*, 95: 1-29.
4. Van Rooij, M., Lusardi, A. and Alessie, R., 2012. 'Financial literacy, retirement planning and household wealth', *Economic Journal*, 122: 449-478.; Lusardi, A., and Mitchell, O., 2007. 'Baby boomer retirement security: the roles of planning, financial literacy and household wealth', *Journal of Monetary Economics* 54(1): 205-224; Postmus J. et al., 2013. 'Financial literacy: building economic empowerment with survivors of violence', *Journal of Family Economic Issues*, 34: 275-284.
5. For a more detailed analysis of the relationship between financial literacy and the superannuation savings of men and women see: Preston, A. and Wright, R.E., 2020. 'The impact of financial literacy on the superannuation (pension) savings of men and women', in Preston, A. (ed) *Financial Literacy and Superannuation (Pension) Savings for Retirement: Submission to the Australian Government Retirement Income Review* <https://treasury.gov.au/sites/default/files/2020-02/preston030220.pdf>
6. Bottazzi, L. and Lusardi, A. 2016. 'Gender differences in financial literacy: evidence from PISA data in Italy' <https://institute.eib.org/wp-content/uploads/2016/10/gender-diff.pdf>
7. Hall, K., 2008. 'The importance of financial literacy', *Reserve Bank of Australia Bulletin*, September: 13-18.
8. ASIC and RMIT, 2019. 'Research Summit: Building Financial Capabilities Together. Summary Report. <https://financialcapability.gov.au/files/summary-report-building-financial-capabilities-together-research-summit.pdf>

Disclaimer

Disclaimer: The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the author and should not be attributed to either the DSS or the Melbourne Institute.