Household Financial Stress and Financial Wellbeing in Australia

Report for UnitingCare Australia

CSRM Research Note 2/22

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Contents

Introduction

Australian households have amongst the highest incomes and wealth in the developed world [2]. In spite of being a highly educated, resource rich and wealthy nation we still have many who struggle to make ends meet and a growing homelessness problem. This report considers trends and patterns in financial stress and develops an index of financial wellbeing for Australian households using a comprehensive range of socioeconomic variables that capture those factors most likely to determine a household's financial vulnerability.

Typical analysis in Australia of household financial wellbeing focusses on the concepts of income and income poverty. While such measures are important the single focus on income may oversimplify financial wellbeing. This report considers financial wellbeing through a range of variables in addition to income, including financial wealth, housing costs and housing tenure, disability, region, education status, gender, household size and family type, age and labour force status. Consideration of a wide range of factors associated with financial wellbeing provides a more holistic and comprehensive account of financial wellbeing than income alone.

Poverty estimates based on income are binary and arbitrary by nature. In reality, being a little above or below a poverty line is unlikely to make any meaningful difference to a household's standard of living. This report shows that income alone correlates with financial wellbeing but there are many other factors that play an important role in determining financial wellbeing. Understanding that financial wellbeing is influenced by many factors is useful for policymakers in determining the type and magnitude of assistance required for different households who rely heavily on welfare payments. For example, it may be that younger people searching for work have greater financial needs than older people who are not in the labour force. It may also be that older persons are more likely to have access to greater liquid assets relative to younger people which greatly improves financial wellbeing.

The financial wellbeing index constructed in this research relies upon the ABS Survey of Income and Housing and uses the survey's range of financial stress variables (Appendix A). First we consider trends between 1998-99 and 2019-20 in financial stress for different demographic groups using simple summary measures such as the percent of the population who suffer from financial stress.

To better understand the distribution of financial stress for each demographic group we develop a regression model of financial stress relating financial stress to various demographic and economic variables. Using the model to predict financial stress for each household a distribution of the risk of

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[2] Global Wealth Report, Credit Suisse (2021).

financial stress for each demographic is calculated. The distribution of risk enables the understanding of not only the average rate of stress for each demographic but how spread that risk is. For example, it may be that couples with kids have lower stress than single parents but they have greater variability in risk. A high level of variability suggests that a single focus on the average may be quite misleading in understanding financial stress for a particular household type.

The model used to predict probability of stress for each household can also be used to estimate stress rates for hypothetical and real families. The last section compared the expected rate of stress for typical families and individuals. We compare the predicted rate of stress for typical welfare families such as those on the JobSeeker payment with individuals and families on minimum and/or average wages. This approach has been extended with the development of an app that allows anyone to predict their household risk of financial stress and to check how that risk compares to other households in Australia with a score between 1 (lowest financial wellbeing) and 100 (highest financial wellbeing).

This paper provides insights into the groups in society that are under the greatest financial pressure. The model describes the factors that correlate most closely with financial stress and provides estimates of the relative importance of each factor. This information can be used by policy makers to not only better understand who is and who isn't likely to be in stress but also to better understand which measures are more likely to help alleviate financial stress and improve financial wellbeing.

Methodology and Policy Proposal

To gain an understanding of which groups in society face the most financial disadvantage we consider their financial stress as observed in the ABS Survey of Income and Housing and Household Expenditure surveys between 1998-99 and 2019-20. These surveys include the 1998-99, 2003-03, 2009-10, 2015-16 and 2019-20 surveys. The surveys are large, nationally representative household surveys covering a wide range of social, demographic and economic variables. Since 1998 these surveys include self-reported financial stress variables.

Using these surveys we provide estimates for financial stress trends in the simple form of the percent of households reporting financial stress – any stress. For consistency through time we consider only the 9 questions that relate to financial stress and that are available in each ABS surveys. We ignore the 'missing out' questions as they are not included in the 2019-20 survey. There are also methodological concerns around the missing out questions as certain demographic groups may have varying degrees of responses based on their preferences for the various activities covered. For example, an 85 year old person may be less likely to go on a holiday for reasons that have nothing to do with financial constraints.

Appendix A shows the 14 ABS financial stress questions used in the ABS expenditure and income surveys. There are various potential metrics based on financial stress responses. Some of the more common versions include binary variables of either 'any stress' or '4 or more stress', simply summing up the number of stress responses out of a possible 14, and finally selecting some of the more serious forms of stress and developing a binary response variable for the selection (Phillips 2022).

In this paper we have simply chosen the 'any stress' option which means that a household experienced any of the 9 financial stress measures. For the financial stress regression modelling later in this paper we include all 14 possible forms of stress as the model is based only on the 2019-20 survey. This is the least restrictive option and naturally means that the overall rate of stress will be higher than other options. The least restrictive option was taken for two principal reasons, firstly to ensure a large sample size for the analysis of sometimes relatively small demographic groups and secondly, this project focuses on comparing financial wellbeing across the full spectrum of households including higher income and wealth households. It could be expected that higher income and wealth households are extremely unlikely to face the most severe forms of stress and are unlikely to respond 'yes' to a large number of stress questions. The expectation in this report is that a less restrictive stress metric will better differentiate between the financial wellbeing of high income and wealth households. In analysing financial stress and in developing a model of financial wellbeing our interest is not directed only towards lower income households but across all households.

The next section of the project involves developing a regression model to enable an understanding of not only the factors that correlate with financial stress but also the distribution or the variability of financial stress for different demographic variables. It may be, for example, that a particular demographic has a high risk of stress with little variation whereas some other group may have relatively less overall risk of stress but there is considerable variation. From a policy perspective looking at averages alone may well hide considerable variation in the risk profiles of different demographic groups. The regression approach also enables the calculation of risk of financial stress for any individual household and the relative position against all other households in Australia via an index of financial wellbeing. The index of 1 to 100 simply reflect a ranking of all households in Australia in the form of each percentile between 1 and 100 where 1 is the lowest 1 per cent of financial wellbeing (highest risk of stress) and 100 is the 100th percentile of financial wellbeing (lowest risk of stress).

The regression model is based on the 2019-20 income and housing survey. Various regression models were tested including a range of models with interaction terms with the income and wealth variables. The final model was chosen based on the model that provides the best overall fit and included only variables that were significant in their association with financial stress. Appendix B provides the

specification and regression results for the logistic regression of financial stress (any stress) against a range of economic and demographic factors[3].

The regression model is then applied to the ANU PolicyMod model of the Australian tax and transfer system. PolicyMod itself is based on the 2017-18 Survey of Income and Housing but has been updated to 2021-22 financial year using a range of inflation factors and benchmarks for important population, labour force and social security and taxation benchmarks. Two key advantages of using PolicyMod is that the demographics, economic and policy variables are updated to the latest financial year and the report analysis can be repeated in future years incorporating any changes in the responses to these variables.

Results

In the first section we consider the trends in financial stress for our major economic and demographic variables. The second section considers the distribution of financial wellbeing (risk probabilities and financial wellbeing index) and the third section provides some cameo examples of typical individuals and households to gain a better understanding of their financial wellbeing and to compare their place in the financial wellbeing distribution.

Before showing the summary financial stress results it is worth considering the differences between the financial stress measure and poverty. Overall, around 33 per cent of households have some form of financial stress compared to 12 per cent in poverty[4]. Of those in poverty, around 53 per cent are in financial stress. Of those in financial stress around 22 per cent are in poverty. 6.4 per cent of households are in both poverty and financial stress.

These results show that there is a correlation between poverty and financial stress but one does not imply the other. With nearly one half of households who are in poverty reporting no form of financial stress and nearly 4 in 5 households in stress not in poverty it is important to understand the limitations of income-based measures such as poverty. In this report we focus on financial stress measures which

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[3] The use of a logistic regression on cross-sectional data should be expected to provide useful predictions of stress for those households in the ABS survey. The model may be less useful for determining the impact of changes in explanatory variables such as income or housing costs on financial stress. It is quite likely that the model includes variables that are related to other independent variables which leads to bias in marginal effects calculations. It is also likely that important variables have been excluded that are also important in determining financial stress. Utilising the longitudinal nature of HILDA may offer better prospects of correctly identifying marginal impacts of specific variables.

[4] Poverty measured here deducts housing costs from disposable income and excludes the bottom 2 percentage points of the disposable income distribution. Disposable income was equivalised using the OECD-Modified method.

directly ask households financial stress rather than using a poverty measure which is arbitrary and solely focusses on income (sometimes with a deduction for housing costs).

Financial Stress Trends

This section considers trends in financial stress for different household types in Australia between 1998 and 2019. Estimates are developed using the ABS' Household Expenditure Survey from 1993 to 2015 and the ABS Survey of Income and Housing 2019-20.

Financial stress declined in Australia between 1998 and 2015 but then increased to 2019-20. Between 1998 and 2015 there has was considerable economic growth with real GDP per capita gains of around 28 per cent or 1.5 per cent per year. In the years between 2015 and 2019 this growth rate halved. With such strong economic growth it would be expected that households have experienced some reduction in overall financial stress. What is less clear is whether the gains of growth have been shared equally. It may be that certain groups in society have not enjoyed such strong increases in income and related to that reductions in financial stress. We know that certain social security payment groups have had no real increase in their payments through this period. We also know that certain groups such as those on JobSeeker, have had their mutual obligations increased to receive the payment. Other payment types such as the disability support pension have experienced tighter eligibility requirements.

Table 1 shows financial stress results for Australian households has trended down over the 21 years to 2019-20. Included in the table is both the 'any stress' measure. Households with any stress has lowered between 1998-99 and 2019-20 from 36.5 per cent to 32.8 per cent but was as low at 28.5 per cent in 2015-16.

Table 1: Household Financial Stress Trends

Year	Financial Stress Rate (Any) %	Financial Stress Households (000s)
1998/99	36.5%	2,538
2003/04	35.9%	2,730
2009/10	31.1%	2,555
2015/16	28.5%	2,509
2019/20	32.8%	3,100

ABS Household Expenditure Surveys, Survey of Income and Housing 1998-99 to 2019-20

Of interest beyond the broad aggregates is how these trends vary by household type? Are there particular groups in society that are doing particularly well, or bad?

## 2.1 Main Source of Income

Key findings

- In 2019-20, 79 per cent of households where allowances were the main source of income were living with some financial stress compared to only 30 per cent of those earning wages and salaries. In 1998, 80 per cent of allowance households were living with some financial stress.
- For those on working age pensions, 77 per cent were living with some financial stress by 2019. In 1998, 67 per cent of these households were in financial stress.
- In 2019-20 32 per cent of households whose main source of income was the age pension had some form of financial stress in 2019 compared to 33 per cent in 1998.

In this section we divide households up into their main source of income. The ABS survey data splits households into wages and salaries, business, government benefits and other sources. We further split the government benefits between working age pensions, age pensions and allowances (JobSeeker). A further group called 'Other Government Payments' is excluded as the group has only a small sample size.

Working age (adults below pension age – 66 years and under) pensions include the Disability Support Pension (DSP), Carer Payment and Parenting Payment. These payments are typically paid to persons under the age pension age but who are not expected to be in the labour market

for the immediate future. Their payments are typically higher than working age allowances (such as the JobSeeker Payment) where there is usually an expectation that persons will only be on the payment for a temporary period.

Figure 1: Any Financial Stress Trends, Main Source of Income
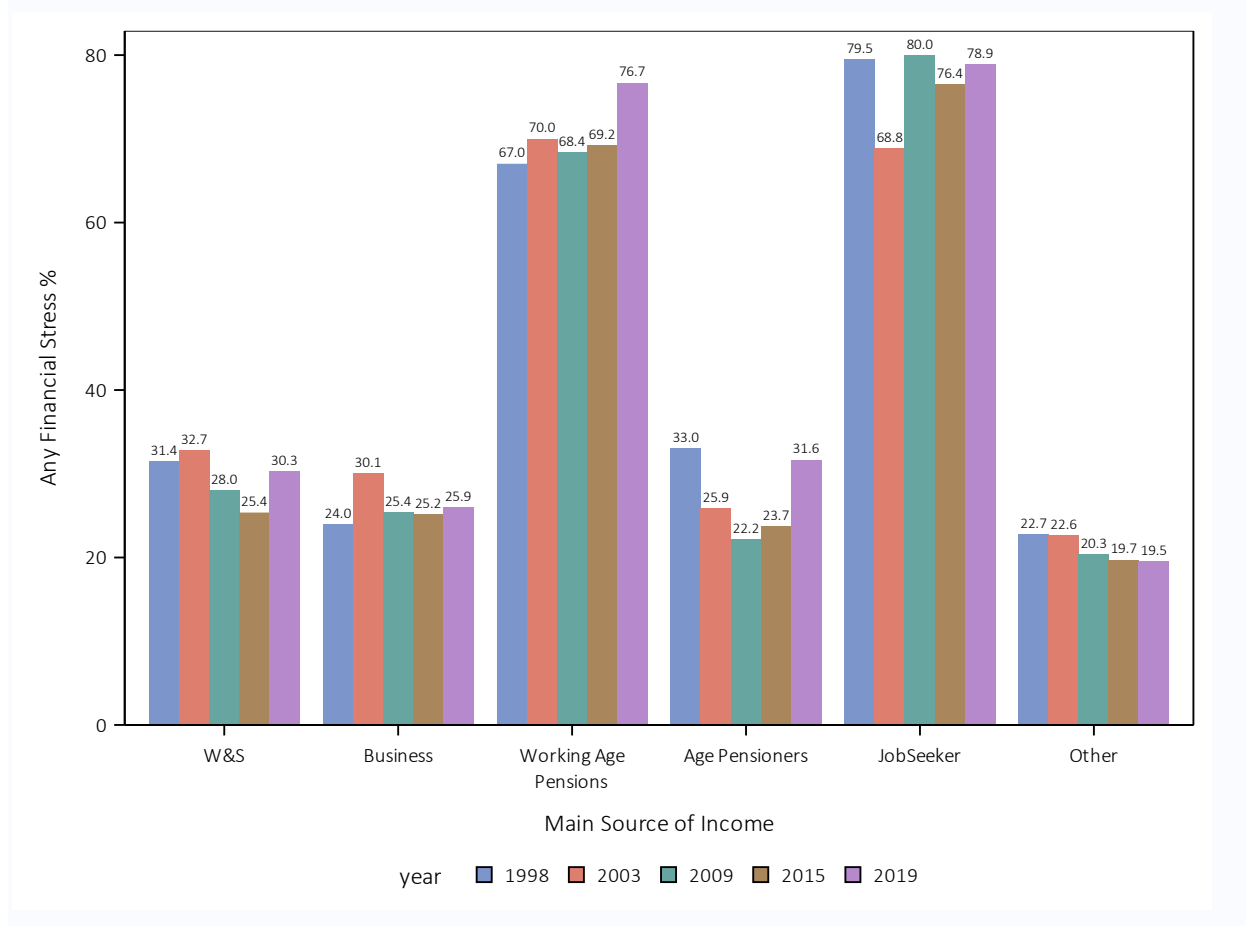
Source: ABS Household Expenditure Surveys, 1993-4 to 2015-16, Survey of Income and Housing 2019-20

Figure 1 shows the stark difference in the likelihood of financial stress by different sources of income. Wage and Salary, business, age pension and other income categories all have relatively low rates of financial stress – typically between 20 and 30 per cent of these households' experience some form of financial stress[5].

Since 1998 those households relying on working age pensions (disability, carer, and parenting payment) and JobSeeker experienced significantly higher rates of financial stress. In 2019-20, 79

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[5] 'Other' income includes all other sources such as superannuation, property income, interest, dividends, royalties, trusts and child support.

per cent of JobSeeker households were in financial stress – similar to 1998. Working age pension household financial stress rates increased from 67 per cent to 77 per cent.

2.2 Family Type

Key findings

- Financial stress rates for single parents in 2019-20 were much higher than other family types, with 63 per cent or almost 2 in 3 reporting some financial stress. This was an improvement on rates reported in 2003-04 (74 per cent).
- In contrast, couples with dependent children reported a financial stress rate of 33 per cent in 2019-20 compared with 38 per cent in 1998-99.
- Lone persons tend to have slightly higher rates of financial stress at 35 per cent in 2019-20 compared to 37 per cent in 1998-99.
- Families with younger children (under 5 years of age) have a greater rate of stress than families with older children. Single parent families with younger children have a stress rate of 81 per cent.

Figure 2 shows that single parent families consistently have the highest rates of financial stress amongst different family types. They are typically twice as likely to suffer financial stress compared to couples with children families, with 63 per cent in severe stress in 2019-20. There has been a modest reduction in stress for single parent families. Overall, couples have the lowest rates of stress (23 per cent in 2019-20), followed by couples with children. Lone persons have the second highest rates of stress.
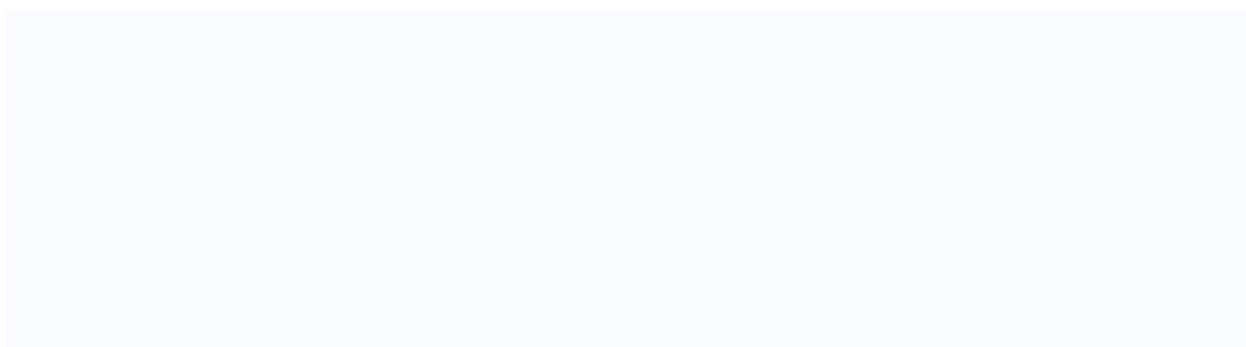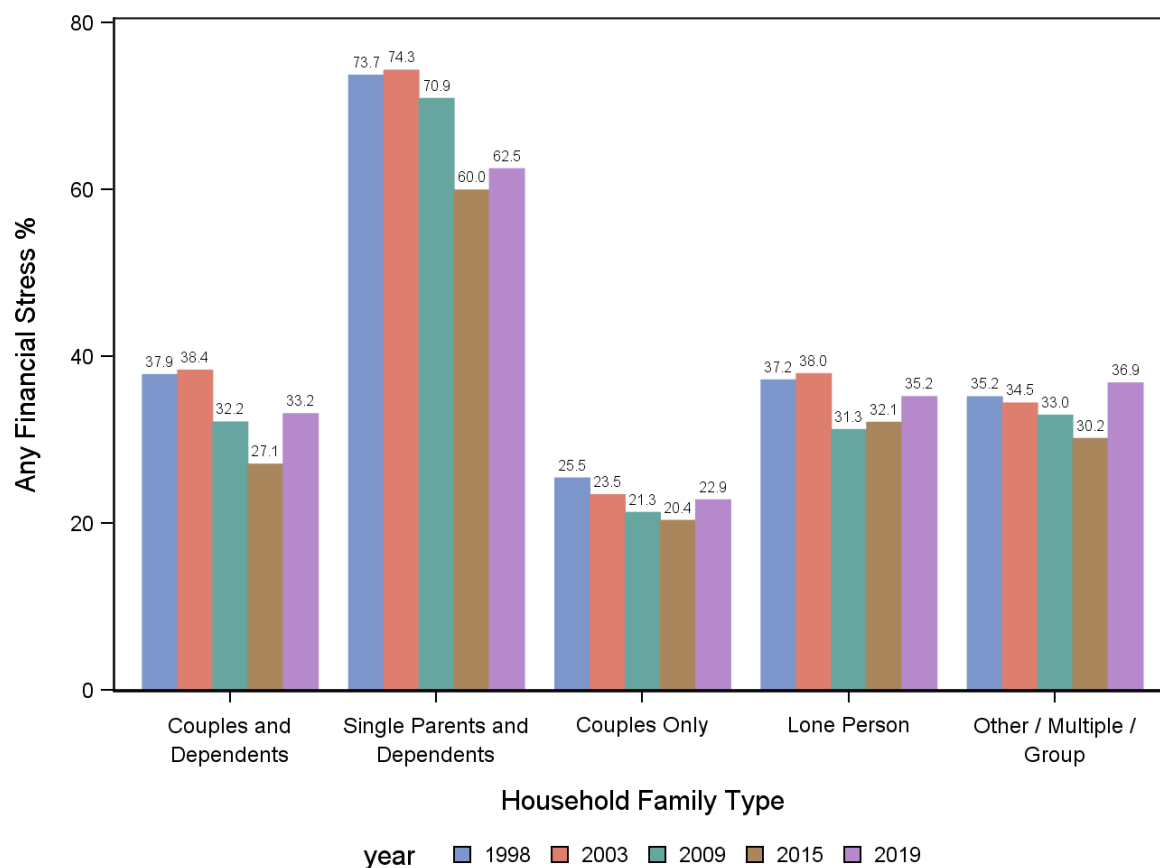
Figure 2: Any Financial Stress Trends, Family Type

Source: ABS Household Expenditure Surveys, 1993-4 to 2015-16, Survey of Income and Housing 2019-20

Financial stress rates are higher for families with younger children. Couple families with at least one child under 5 are estimated to have a rate of financial stress of 35 per cent compared to 32 per cent for the older families. Single parent families with younger children have higher rates of financial stress at 81 per cent compared to 58 per cent for those with older children in 2019-20.

2.3 Income Level

Key findings

- Lower income families (quintile 1) are more than four times more likely to be in financial stress compared to high income families in 2019-20 with a low income household having a 56 per cent chance of stress compared to 14 per cent for a high income household (quintile 5).

- Middle income households have a 33 per cent chance of financial stress.

- Financial stress has generally declined since 1998-99 across the income distribution, however some of that decline has reduced with increases across all income groups between 2015-16 and 2019-20.

Figure 3: Any Financial Stress Trends, Income Quintiles (equivalised disposable income)
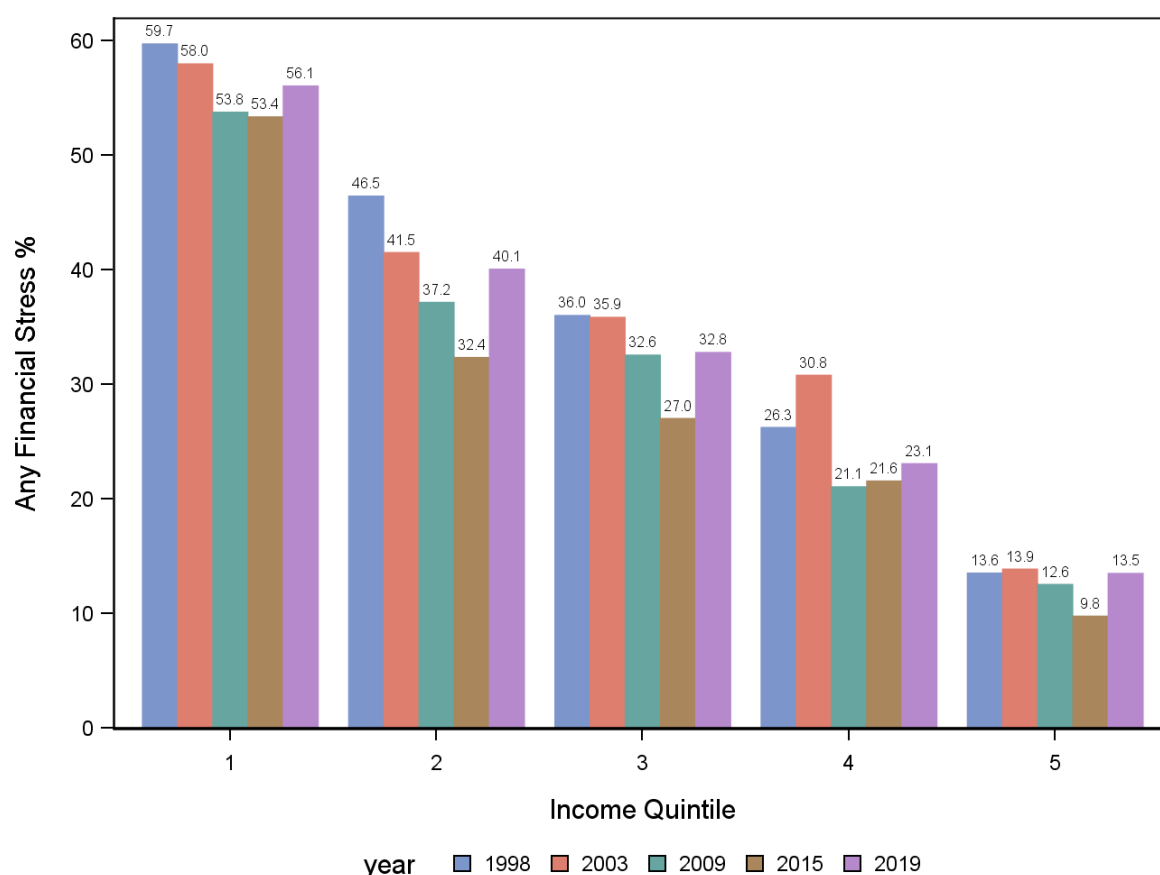
Source: ABS Household Expenditure Surveys, 1993-4 to 2015-16, Survey of Income and Housing 2019-20

Figure 3 shows a clear relationship between income and financial stress. Higher income households have a much lower risk of having any financial stress. The relationship is approximately linear but the largest decline does take place between quintile 1 (lowest income)

and quintile 2 (second lowest income) households with a 16 percentage point drop in any financial stress. This result suggests that moving from a very low to a low income household (quintile 1 to quintile 2) can improve a household's financial wellbeing significantly.

2.4 Tenure Type

Key findings

- Financial stress rates are higher for renters and lowest for those who own their house outright.
- Renter financial stress at 49 per cent is higher than purchaser stress at 28 per cent and 22 per cent for outright owners.

Financial stress rates have declined for all tenure type, most notably for renters and purchasers. Financial stress rates are considerably higher for renter households when compared to those purchasing. This would be expected due to purchaser households typically having higher incomes. Renter financial stress lowered between 1998-99 and 2019-20 (34 to 28 per cent).

Figure 4: Any Financial Stress Trends, Tenure Type
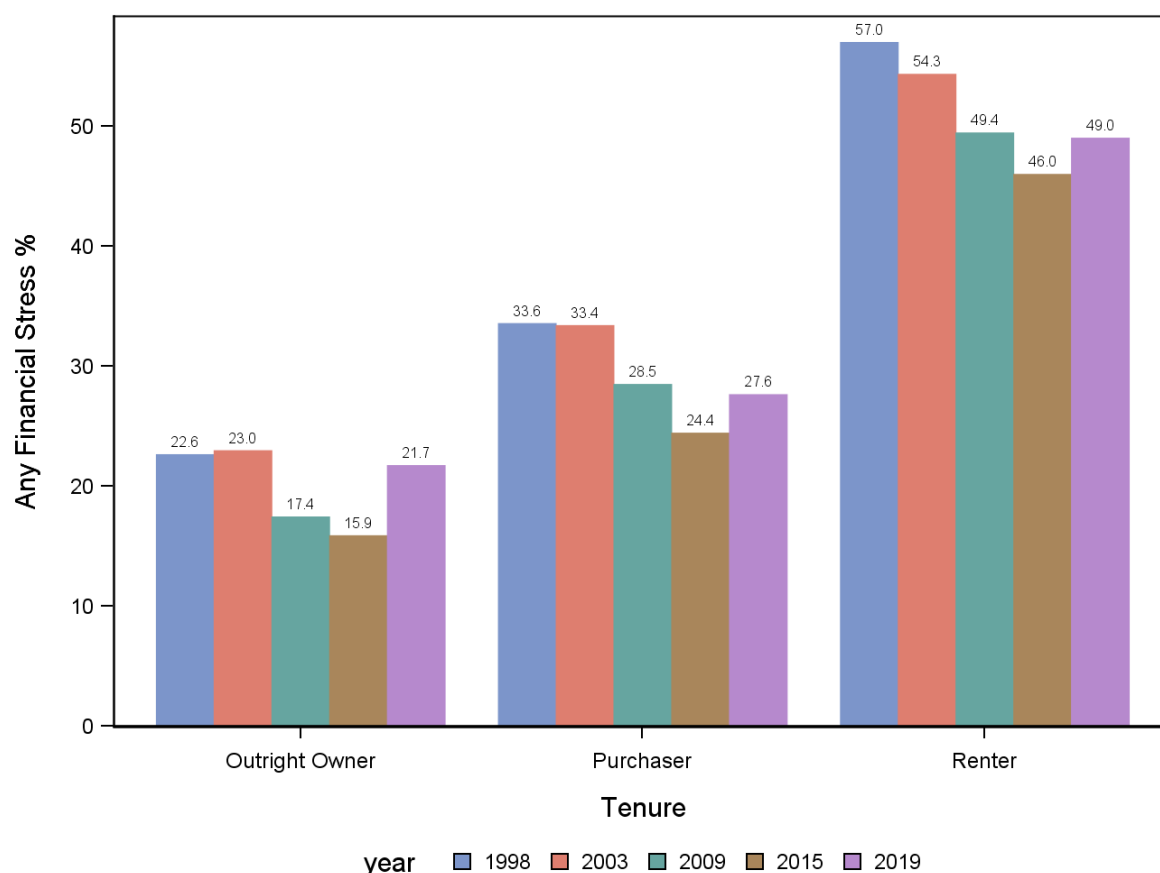
Source: ABS Household Expenditure Surveys, 1993-4 to 2015-16, Survey of Income and Housing 2019-20

2.4 Regions

Key findings

- Regional Australia tends to have moderately higher rates of financial stress when compared to capital city regions with 34 per cent in some form of financial stress compared to 28 per cent in the capital cities[6].

- There is no dramatic difference between the major states financial stress rates. The combined territories have lower rates of financial stress in recent years.

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[6] The ABS income and expenditure surveys do not sample remote areas. Remote areas in Australia often include high proportions of indigenous Australians who have in the past been found to have much higher rates of financial stress than non-indigenous Australians (Breunig 2017).

- All states and the combined territories have lower rates of financial stress in 2019-20 compared to 1998-99 although all these regions stress rates increased between 2015-16 and 2019-20.

Financial stress is relatively even between the states of Australia. The general reduction in financial stress is common to all states and territories. The territories have enjoyed the largest falls in financial stress. That the headline rate of financial stress differs little between states does not necessarily imply there are no cost of living differences between states. For example, While NSW and Queensland have similar rates of stress there are other confounding factors that may partly impact this result such as differences in income, wealth and other demographic and social factors.

Figure 5: Any Financial Stress Trends, State
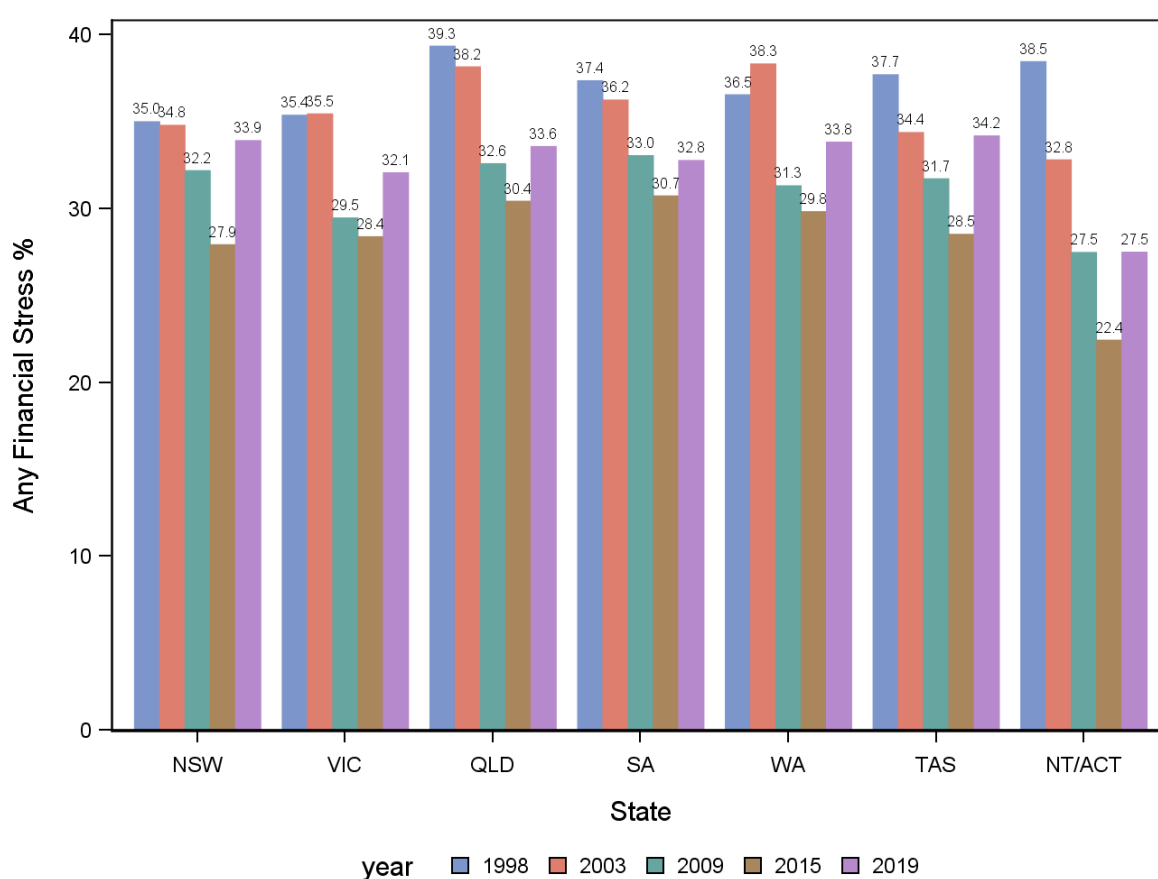
*ABS Household Expenditure Surveys, 1998-89 to 2015-16*

2.4 Age of head of household

A particularly interesting finding is that older households, in spite of typically lower incomes in retirement have, on average much lower rates of financial stress than younger households. Financial stress rates have declined across the age distribution with particularly strong declines for the youngest age group (< 35 years). The oldest age group (75+) has a financial stress rate of 22 per cent compared with 39 per cent for households headed by a person aged under 35 years.

Older Australians enjoyed a significant reduction in financial stress in the 2009-10 survey (likely assisted somewhat by the increase in the age pension rate). Some of these gains were eroded in 2015 where stress rates increased, bucking the trend for younger households.

Stress rates have increased for all age groups between 2015-16 and 2019-20.

Figure 6: Any Financial Stress Trends, Age of Head of Household
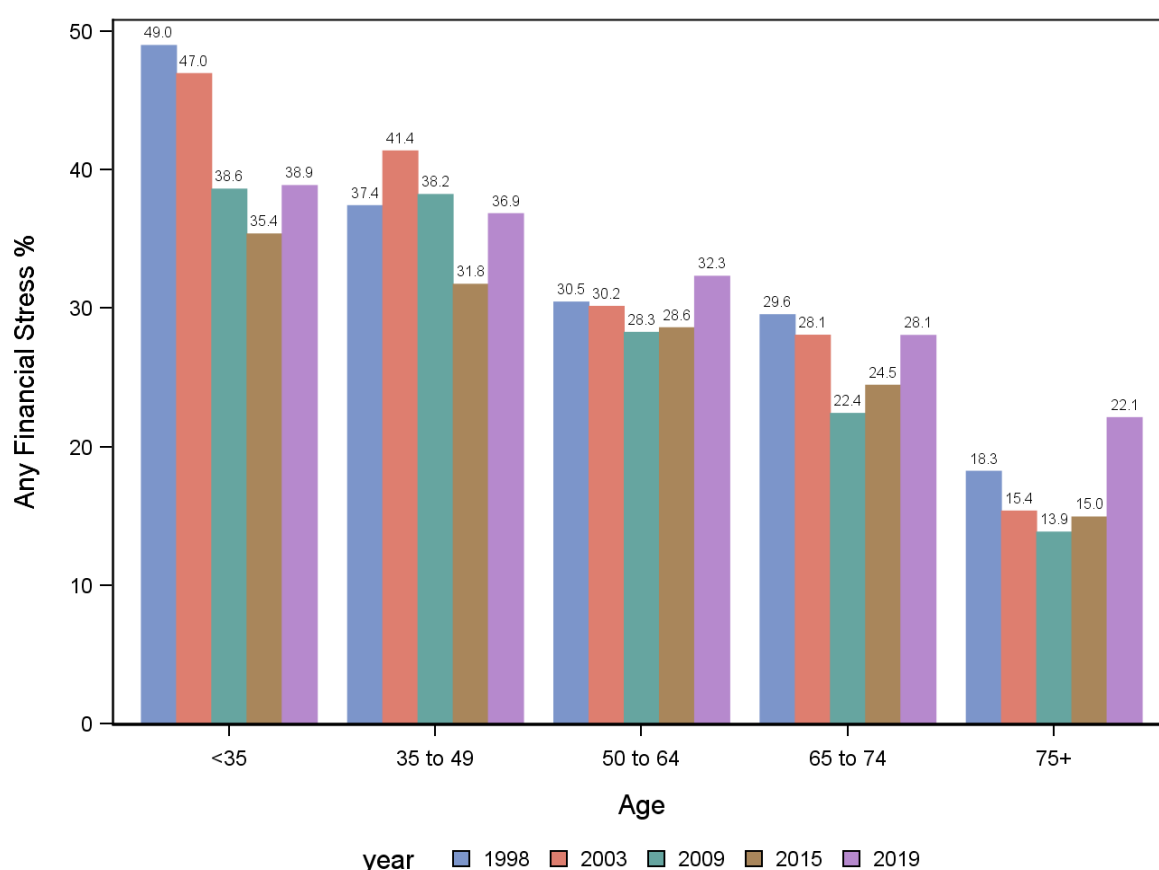
2.5 Gender

The preceding analysis focusses on the 'head of household'. For example, Section 2.4 focusses on age where age is the age of the head of the household rather than the age of individual members of the household. Head of the household is the focus as the financial stress questions relate to the household rather than the individual. The person in the ABS survey who responds to this question also may not be the head of the household so the assumption is being made that the respondent for this question is representative of the full household[7].

With these caveats in mind the 2019-20 income survey shows that households headed by a female have a 39 per cent change of financial stress compared to 33 per cent for male headed households.

2.5 Disability Status

Households with at least one person with a disability or a long term health condition would be expected to have higher living costs all other things equal. Such households, for example, may have more significant health costs, greater transport costs, special housing requirements. Such households may also have limited earning capacity due to their health or physical condition.

It is estimated that overall, such households have a rate of stress of 44 per cent compared to households without a disability or long term health condition 30 per cent. Such a finding is particularly important as the survey also estimates that a substantial number of household (39 per cent) have at least one person with either a disability or long term health condition.

Households with a disability or long term health condition tend to have lower incomes and this is likely to partly drive the finding that their financial stress rates are higher. To better understand the impact of disability Figure 7 considers stress rates by income level (quintiles of equivalised income). The result of higher financial stress for households with at least one person with a disability or long term health condition holds across the income distribution. The result is particularly clear cut for the lowest income households where the financial stress rate for those

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[7] The Melbourne Institute's HILDA Survey also asks the household a series of questions regarding financial stress and there is evidence that partners in couple households do not always agree with their financial stress responses and this can have material impacts on financial stress rates (Breunig 2004).

with such conditions have a stress rate of 65 per cent compared to 48 per cent for those that do not.

Figure 7: Any Financial Stress, Disability or Long Term Health Condition Status by Household Income Quintile
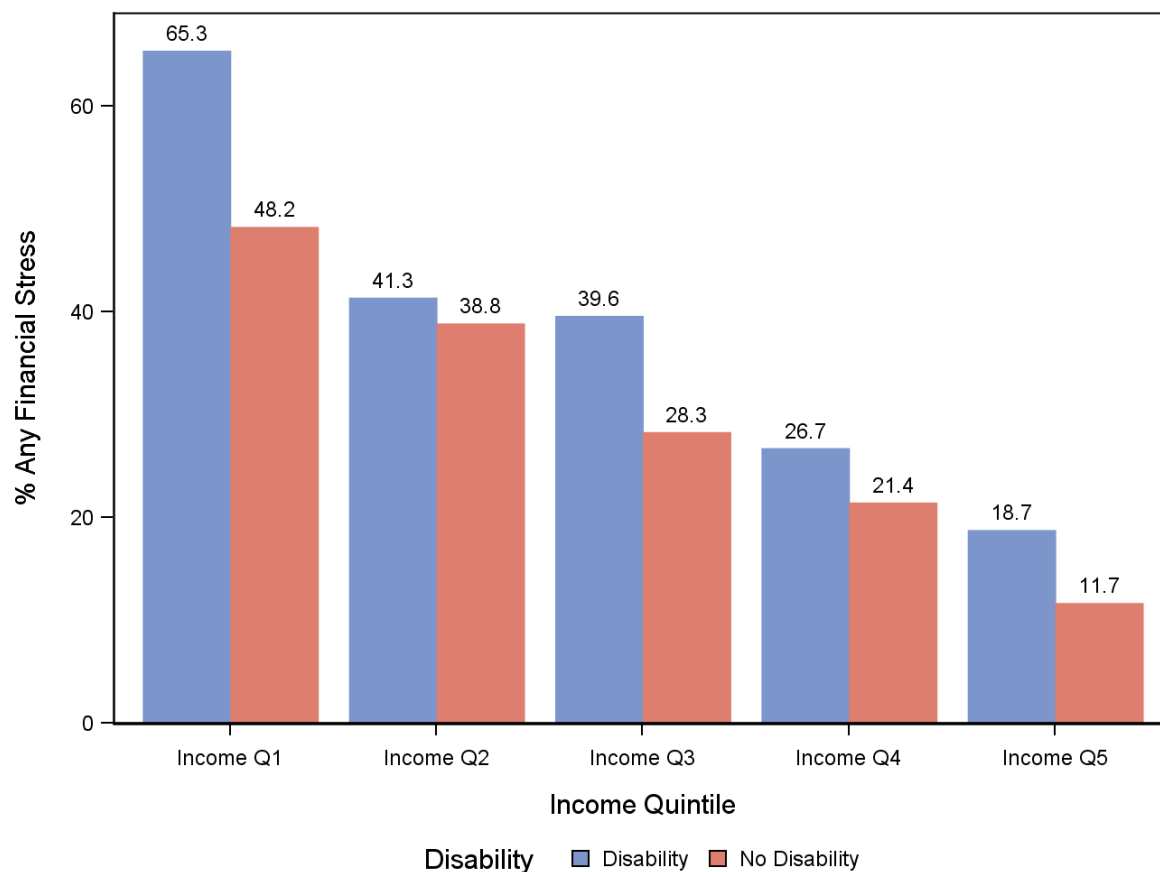
2.5 Variation in Financial Stress

In the previous section the focus was on the share of households who experienced some form of financial stress. In this section we consider the variation in financial stress for different economic and demographic groups. Variation in financial stress is important to consider as it may well be that the average rate of stress masks considerable variation in rates of stress. For example, it may be that age pensioners have a relatively low rate of stress but this masks substantially higher rates of stress for some age pensioner households. Such a finding could suggest that the low rate of stress for age pensioners does not necessarily imply that all age pensioners are financially advantaged and that from a policy perspective the group should be ignored or that current levels of financial and other support could or should be lowered.

Variation in financial stress is not directly observed from the survey data. Variation is estimated in this research using a logistic regression model that predicts the probability of financial stress for each household using a range of variables that best predict stress. For each household a probability is calculated and this probability is used to show how financial stress varies for different groups in society. This probability is ranked and provides an index value for each household which converts to a rank between 1 and 100 where 1 means the household is in the bottom 1 per cent of financial wellbeing (indicating a very high risk of financial stress) and 100 means the household is in the top 1 per cent of financial wellbeing indicating almost no risk of financial stress.

Appendix B shows the regression model used to estimate the probability of financial stress (any stress) for each household. The model was limited by the variables included in the survey. Not all variables that were considered potential candidates explained financial stress. Regional status (capital city/rest of state), age of children and child care status of the household were all excluded from the model due to not significantly adding to the explanatory power of the model.

That a variable is not significant in explaining financial stress does not imply that there are no differences in financial stress when considering that variable. For example, we don't find that age of children is significant, however it may be the case that households with younger children have different rates of financial stress to those with older children - the differences may be better explained by other factors that are significant – such as income or wealth of the household.

The predicted rates of financial stress and the resulting financial wellbeing index are derived from a model that captures many of the important factors that are expected to drive financial stress and wellbeing. However, it is not possible to fully explain financial stress and the model will miss some important variables that are not included in the ABS survey and also considerable individual variability. As an example, the modelling does not include information on whether a household member is a smoker – which would likely increase the likelihood of financial stress. Beyond what can be explained there are also many unobservable differences between individuals/households such as financial literacy and money management.

2.5.1 Variation in Financial Stress: Main Source of Income

The earlier analysis shows that financial stress is highest for working age welfare recipients – in particular the JobSeeker and Disability Support and Parenting Payments.

Figure 8 shows the distribution of the probability (or risk) of financial stress for households grouped by their main source of income. The plot shows a box and whisker chart where the middle line is the median value, the diamond is the mean (or average) and the ends of the rectangle represent the 25th and 75th percentile. The whiskers (the two ends of the plot) show the top and bottom 5 per cent of the distribution.

For JobSeeker households the average is around 83 per cent, the median is 87 per cent and the whiskers are for the top 5 per cent just under 1 and the bottom 5 per cent nearly 52 per cent. Quite clearly, Jobseeker recipients are distributed at the very top end of financial stress. In fact, more than 95 per cent of JobSeeker households are in the top 20 per cent of risky households.

Figure 8: Probability of Any Financial Stress/Financial Wellbeing Rank, Main Source of Income
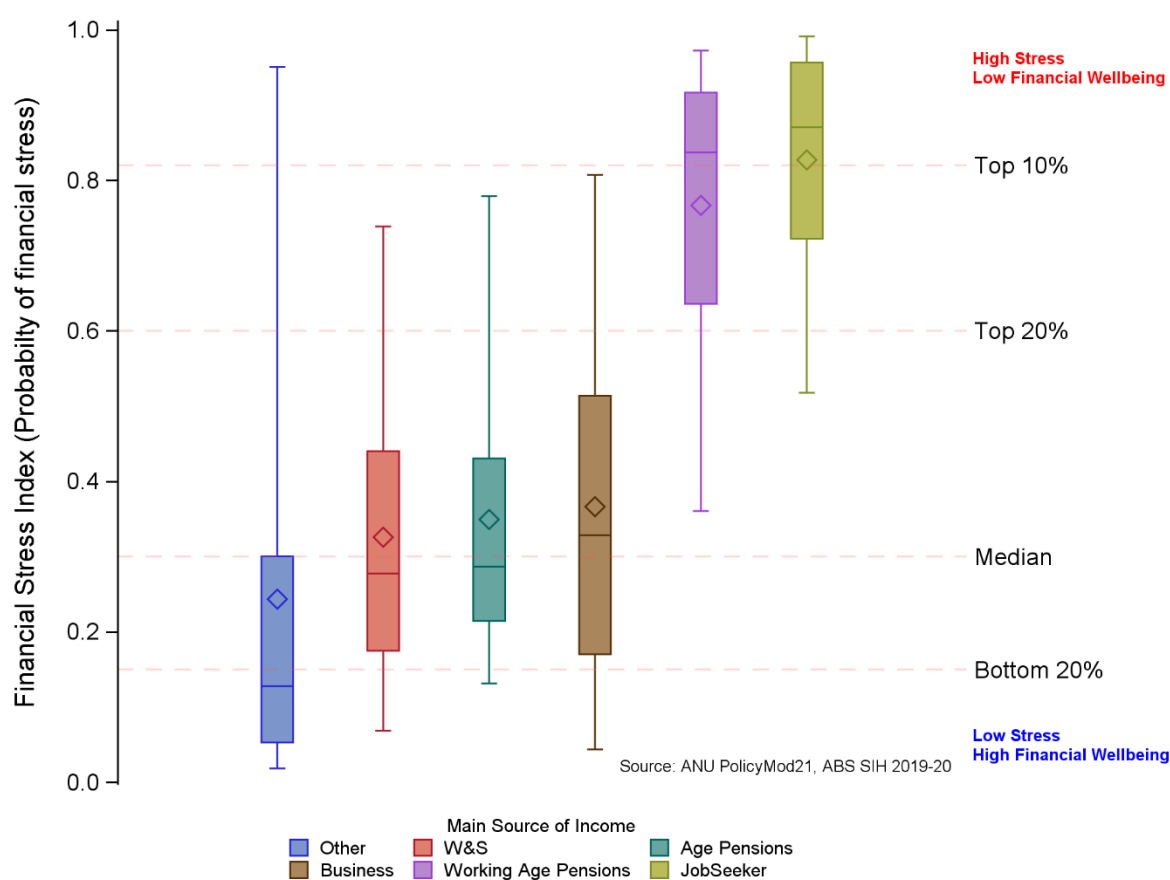
The other group that stands out for a very high rate of financial stress are those households who rely mostly on working age pensions (disability support pensioners, parenting payment single and carer payment). These households receive a pension payment without the mutual obligations of those on JobSeeker. These households are likely to have additional costs to other households through disability and/or caring responsibilities. The results are very similar to JobSeeker, albeit with slightly lower rates of financial stress. The average stress rate is 77 per cent and median stress rate is 84 per cent – again well above the average rate across all households of around 33 per cent.

At the other end of the scale households whose main source of income is 'Other' (interest, dividends etc) have the lowest rates of financial stress and relatively low variation in stress. Age pensioners and wage and salary households the next lowest rates of stress and a similar spread of stress – with most households having mid-range predicted stress rates (between the bottom and top 20 per cent. Some of these households have high rates of predicted stress but this is very rare compared to those households on working age pensions or Jobseeker payments who almost as a rule have very high predicted rates of stress. Business owners have higher average and median rates of stress and also a greater variation in predicted stress rates than those relying mostly on wages.

2.5.2 Variation in Financial Stress: Family Type

Financial wellbeing as measured by financial stress varies significantly by family type. Couples with or without children tend to have the lowest rates of financial stress (highest financial wellbeing). Couple families also tend to have less variability in terms of very few households falling into the most stressed households with only a small number of outlier households in the top 20 per cent of financial stress but the majority falling under the median level of stress.

Figure 9: Probability of Any Financial Stress/Financial Wellbeing Rank, Household Type
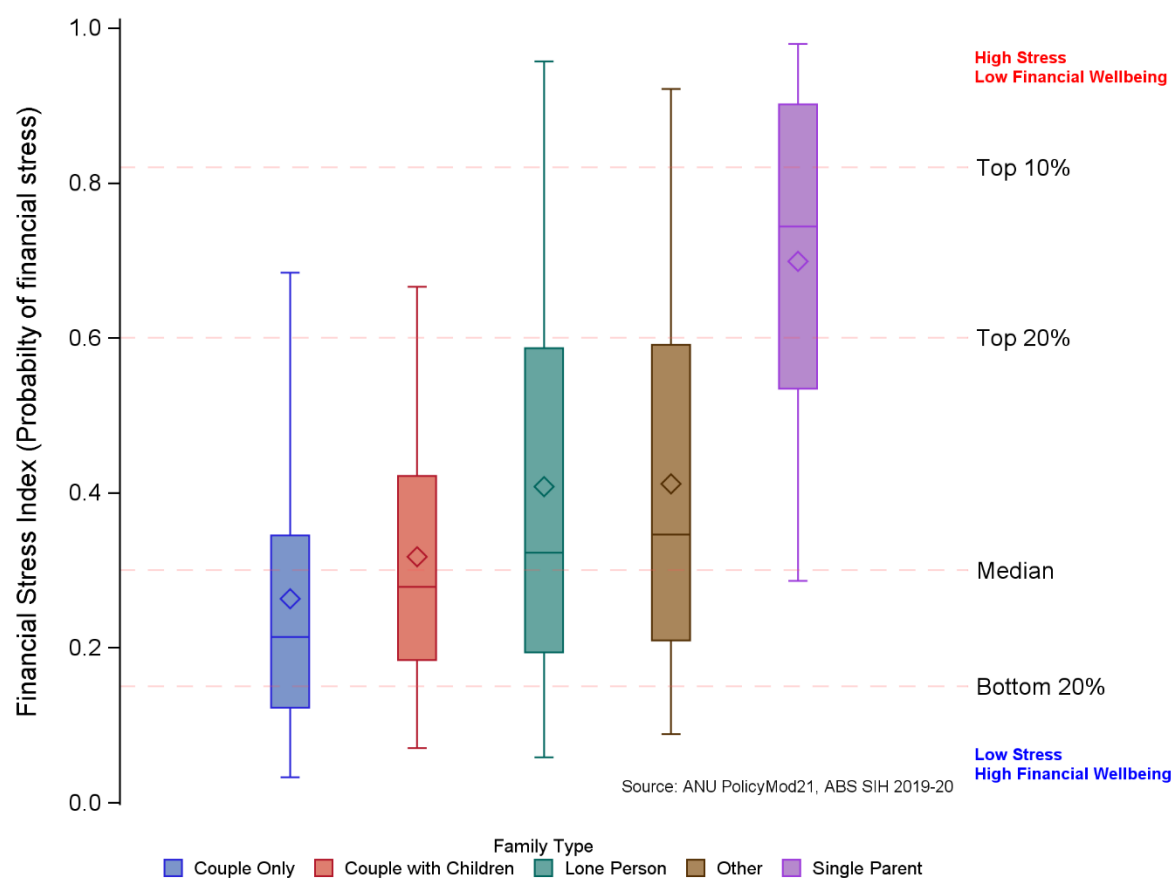
Single adult households, in particular, those with children (single parents) typically have much higher rates of stress. Single parent households have close to three-quarters of households in the top 20 per cent of most stressed households. The box plots show that single parent households mostly have stress rates between 50 per cent and 90 per cent. This compares poorly to couples with children that typically vary between 10 and 50 per cent. 'Other' households are typically group households and they have a similar distribution of financial stress distribution to the broader population of households.

## 2.5.3 Variation in Financial Stress: Income

Figure 10: Probability of Any Financial Stress/Financial Wellbeing Rank, Income Quintile
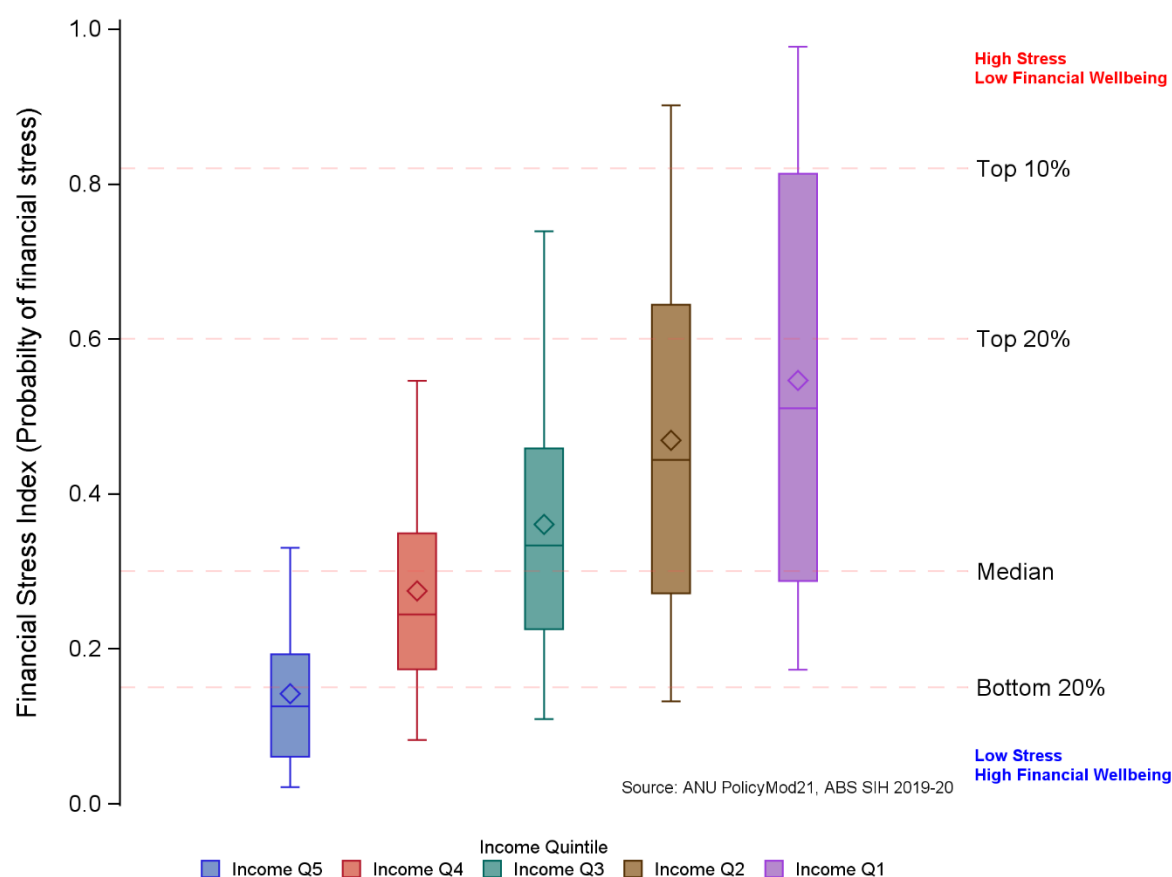
Income has a strong linear relationship with financial stress. Higher income households (quintiles) are expected to have much lower rates of stress. Those in the top income quintile (Quintile 5) mostly sit between 5 and 20 per cent chance of any form of financial stress. This compares the lowest income households (Income Q1) with stress rates typically between 20 per cent and 90 per cent. It is important to note that the lower income households have much greater variability in predicted stress rates. Some households, in spite of low income, have quite low predicted stress rates while others have very high predicted stress rates. The expected reasons for this relate to all the other factors that determine financial stress and wellbeing such as age, wealth, home ownership. Many low income families in the survey may report quite a low income but have significant wealth, or have low housing costs as they own a house outright or they may just be headed by an older person that typically has lower consumption needs.

2.5.4 Variation in Financial Stress: Wealth

Figure 11: Probability of Any Financial Stress/Financial Wellbeing Rank, Wealth
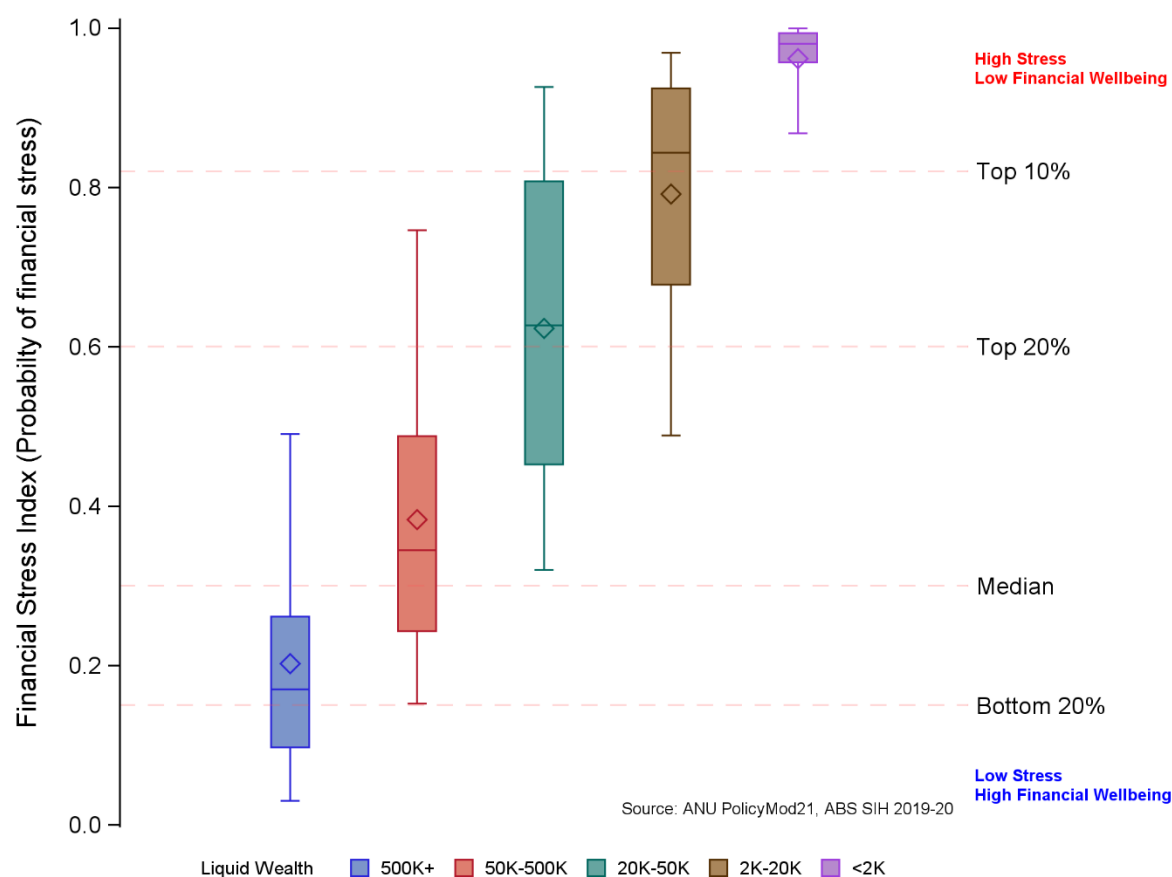
As for income, wealth is strongly correlated with financial stress. Higher wealth households have much lower predicted rates of financial stress and therefore expected to have much higher financial wellbeing. Households with less than $2000 in net wealth have, on average, financial stress rates nearly 5 times that of the highest category ($500K+).

Households with net wealth lower than $2000 have the lowest financial wellbeing of any household type in this research. With regard to variability it is possible to have relatively high wealth and still have some moderate risk of financial stress. Households with low wealth, however, are extremely likely to have high rates of financial stress and are unlikely to have low rates of financial stress. While other factors such as high income may help to lower the risk of stress, it would seem that most households with very low wealth are unlikely to also have very high income.

An important finding is that even a modest amount of wealth appears to have a protective effect on household financial stress. Households with between $20,000 and $50,000 in net wealth have an

expected stress rate of 62 per cent compared with 96 per cent for those with less than $2,000. Financial stress is almost guaranteed for the lowest wealth category households..

2.5.5 Variation in Financial Stress: Tenure Type

Figure 12: Probability of Any Financial Stress/Financial Wellbeing Rank, Tenure Type
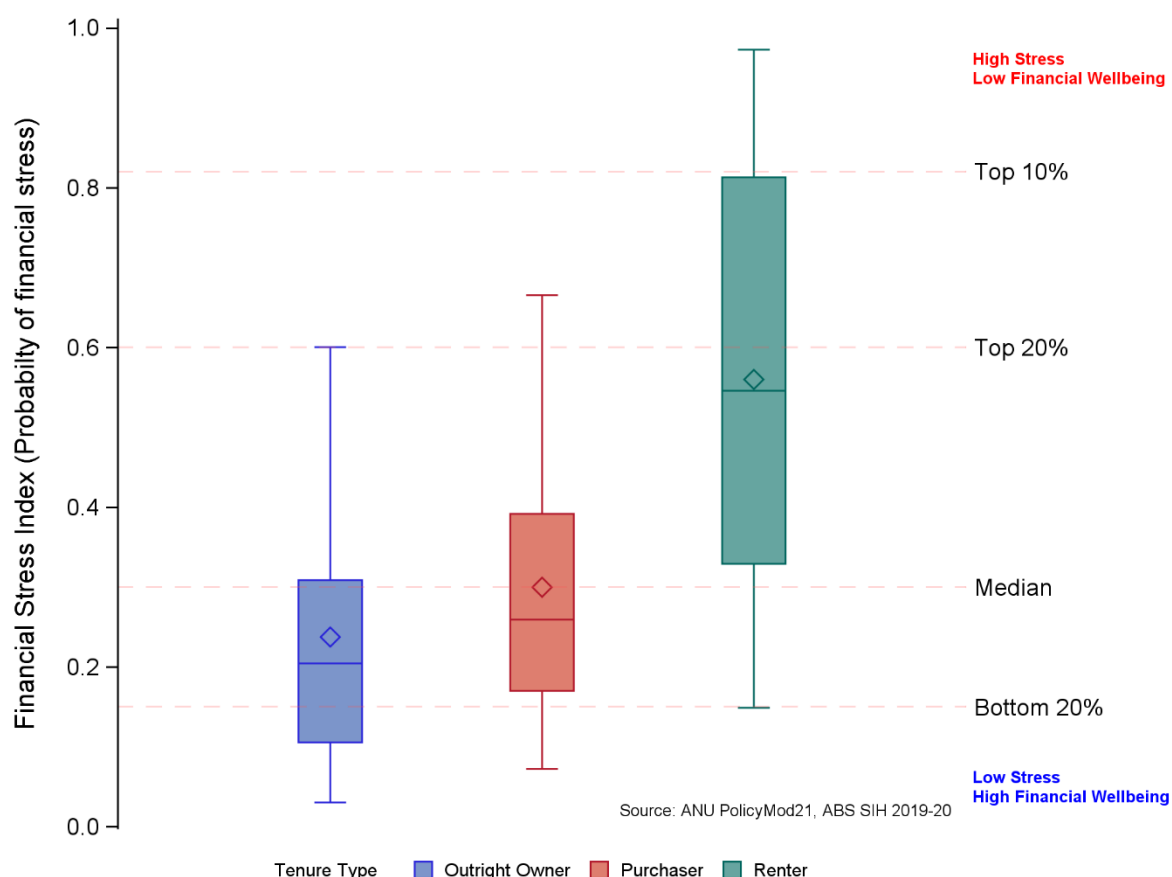
Financial stress is much higher for renters than it is for outright owners and those who are purchasing a house. It also is the case that renters' predicted financial stress rates are more variable with 90 per cent of renter households' predicted financial stress between about the bottom 20% of stress rates and close to 100 per cent.

Very few home owners (those who own outright and those with a mortgage) have predicted financial stress rates in the top 20 per cent of financially stressed households. The analysis for tenure type shows that home owners tend to have much higher and less variable financial wellbeing than renters. Renter households tend to have much lower financial wellbeing and at much greater risk of being a

household with high financial stress and low financial wellbeing. Only around 20 per cent of renter households have predicted stress rates below the all households median stress rate.

2.5.6 Variation in Financial Stress: How well does income correlate with financial wellbeing?

Figure 13: Financial Stress Probability Rank and Household Income Rank
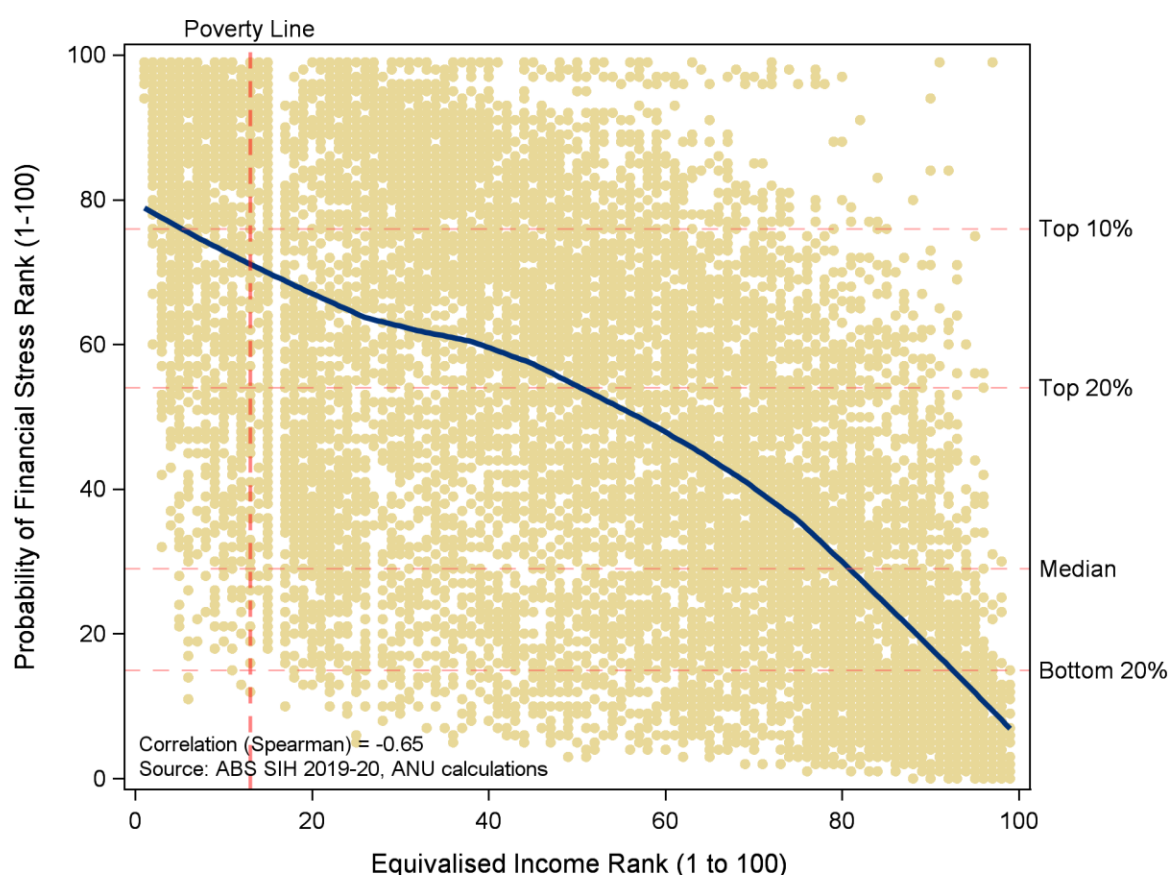
A finding throughout this paper is that income, while very important for lowering financial risk and ensuring financial wellbeing, is not always sufficient to ensure financial wellbeing. The Figure 13 shows the relationship between estimated financial stress and income (equivalised) with regard to percentile rank. As expected, those households with very low income (or a low income rank) tend to have higher rates of financial stress and therefore lower financial wellbeing. Conversely, Figure 13 shows that higher ranked households by income tend to have much lower predicted rates of financial stress. While this is expected perhaps what is surprising is the degree of variation. Many high income households have relatively high rates of financial stress and many low income households have low rates of financial stress. This demonstrates that income alone is not necessarily a guarantee of low financial stress and high financial wellbeing.

Households defined as being in income (after housing costs are deducted from income) poverty do have a much higher rate of financial stress, however, roughly 40 per cent don't record any form of financial stress compared to 70 per cent of households not in poverty.

The chart above shows that there are many households who are defined as in poverty that have both high and low risks of financial stress, reinforcing the conclusion that financial wellbeing is multifactorial in nature.

2.5.7 Calculating a financial wellbeing index for typical families and individuals

In this section we apply the modelling approach in the previous section to understand the financial stress and financial wellbeing position of a range of typical family types in Australia. The emphasis is placed on lower income and families dependent upon social security. Some families with higher income and wealth are included to provide perspective on relativities between lower income families and those in a stronger financial position.

The logistic regression model for financial stress/financial wellbeing allows the calculation of the probability of stress for a given household. From this probability an index of financial wellbeing can be constructed. Households with a low score have low financial wellbeing and those with a high score have high financial wellbeing.

Included in the analysis is a deeper form of stress where a household responds to at least 4 forms of financial stress – deep stress. Across all households the probability of deep stress is 8.3 per cent compared to 34.2 per cent for any form of stress.

A few typical families and individuals of interest include the following:

Jobseeker living alone and renting: Jerome is a 30 year old unemployed man living alone and renting in public housing in NSW at $125pw. His annual income is sourced solely from JobSeeker and is around $320 pw. He has $7,000 in net wealth including a small amount of cash in the bank, a 10 year old car and some basic furniture. He has no disability or long term health condition.

Jerome's chance of some form of financial stress is 93 per cent which ranks him in the bottom 5 per cent of financial wellbeing. Jerome's chance of deep financial stress is 31 per cent.

Single unemployed parent with 1 child and renting: Sally is a 35 year old single mother living with her 8 year old daughter Jess. Sally is unemployed and receives around $620 per week in JobSeeker and family payments which includes some rent assistance. She has around $12,000 in net wealth including

a 10 year old car, some furniture, a small amount of cash in the bank and some debt on a credit card. Her housing costs for her 2 bedroom unit in Western Sydney are $400 pw.

Sally's probability of financial stress is 96 per cent, ranking her family in the bottom 4 per cent of financial wellbeing. Sally's chance of deep stress is 40 per cent.

Age pensioner couple homeowner: Gerry and Liz are couple age pensioners (part-rate) in their early 70's who own a house outright in regional NSW. Their combined income from their part pension and drawdown from superannuation is $750 pw and they pay rates of $40 per week as their only housing costs. They have combined net assets of $840,000 which mostly includes a house valued at $550,000 and superannuation valued at $250,000.

Their chance of financial stress is 34 per cent, ranking them at 43 out of 100 in financial wellbeing. Their chance of deep stress is 2.8 per cent.

Age pensioner single renter: Mike is an age pensioner in his early 70's who rents a house in regional NSW. His income from his age pension and rent assistance is $570 pw and his rent is $300 per week. Mike has net assets of $10,000 which mostly includes a 10 year old car and some cash in a savings account.

His chance of financial stress is 74 per cent, ranking them at 12 out of 100 in financial wellbeing. Their chance of deep stress is 8.7 per cent.

Single minimum wage renter: John is a worker on a minimum wage of $812 per week who receives no social security benefits and lives in a rented apartment in western Sydney at $300 pw. He has $20,000 in net assets and is 35 years of age with no disabilities or long term health conditions.

His chance of some financial stress is 63 per cent and this ranks him in the bottom 17th percentile of financial wellbeing in Australia. His chance of deep financial stress is 10 per cent.

Average weekly earner couple who rents: Janet and Peter earn the average wage in Australia with Janet working 2.5 days a week the couple have a combined income of $2,700 pw. They rent in regional NSW at $500 pw and the family has no disabilities or long term health conditions.

Their chance of some financial stress is 31 per cent which ranks them at the 49th percentile for financial wellbeing in Australia. They have a 4.3 per cent chance of deep financial stress.

Disability Support Pensioner who rents: Sam is on the disability support pension and rents a small unit in Orange, NSW for $250 pw. Her weekly income from the DSP and rent assistance is $570 pw. Sam has $10,000 in net wealth mostly through a small savings account and some basic furniture.

Her chance of some form of financial stress is 93 per cent which ranks her in the bottom 5 per cent of financial wellbeing. Her chance of deep financial stress is 43 per cent or around 5 times that of the national average.

High income couple home owner: Erin and Steve are both 45 and are a couple with two children and they have a combined income of $250,000 mostly from their full-time jobs. They have a mortgage with repayments of $400 pw. They have net wealth of one million dollars mostly in their family home and superannuation accounts. Nobody in the family has a disability or long term health condition.

They have a chance of some financial stress of 14 per cent placing them in the top 17 per cent of financial wellbeing in Australia. They have a 2.5 per cent chance of deep financial stress – less than a third of the national average.

Self-Funded Retiree Couple: Terry and Kath are a retired couple both aged 75 years who own their house outright and have $1 million in superannuation. Through investment returns and drawing down on super they have an income of $2000 pw and net assets of $2.5 million. Neither has a disability or long term health condition.

Their chance of some financial stress is 7 per cent which places them in the top 7 per cent of financial wellbeing in Australia. They have a 0.3 per cent chance of deep financial stress – about one 30th of the national average.

Low income couple with two children: Toby and Erin are both 35 and have two children in primary school and they have a $400 pw rental in regional NSW. They have a weekly income of $1500 which includes a small amount of family payments and rent assistance on top of their minimum wage jobs where Toby works 3 days per week and Erin works full time. They have net wealth of $40,000 with some money in a savings account, a car and household furniture and modest superannuation balances each.

They have a chance of some financial stress of 60 per cent (nearly double the average for Australia) placing them in the bottom 17 per cent of financial wellbeing. They have a 11.6 per cent chance of deep financial stress.

2.5.7 Conclusion and Policy

The research shows that financial stress in Australian households declined between 1998-99 and 2015-16 but has increased to 2019-20. Overall, financial stress has, for most household types in

Australia improved moderately. This is a good outcome and likely related to a long period of economic growth which has seen living standards increase.

While financial stress may not have increased it remains the case that significant differences exist within Australia for different household types. Key household types that typically suffer higher rates of financial stress include single parents, younger households, those households with a disability or long term health condition, renter households, households headed by an unemployed person.

The research uncovers dramatic differences in rates of financial stress for households who rely on social security payments. Of particular concern is that households who mostly rely on working age social security payments have a much higher rate of financial stress than other households. Age pensioner households have financial stress rates much more in line with the rest of the community.

Those on the JobSeeker payment are doing very badly with around 80 per cent in some form of financial stress. Those on working age pensions (DSP, Carer and Parenting Payment Single) are just under 80 per cent while most other households have financial stress rates around 30 per cent.

Persons with a disability or long term health condition also have considerably higher financial stress rates at nearly 50 per cent higher rates (44 per cent) compared to 30 per cent for other households.

A particularly strong finding was that households with very low net wealth (less than $2,000) are almost certain to have financial stress. This is an important finding highlighting the importance of wealth in determining a household's financial wellbeing and stress.

A logistic regression model was used to understand not just estimates of the rate of stress for different households but also how variable predicted rates of financial stress can be for different household types. An important finding here is that there is considerable variation in predicted financial stress rates by income. The analysis shows that low income households can have high or low predicted rates of stress. What this implies is that other factors, such as wealth, education levels, housing tenure, age and family type can also determine financial stress.

The variation in the predicted rate of financial stress tended to be quite significant for most household types. For example, an age pensioner household can potentially have low, moderate or high rates of stress depending on many other factors. It's quite clear that high income households do tend to not only have lower rates of stress but also much less variation around their predicted rate of stress. Lower income households do have much higher rates of stress but there is considerable variation due to the impact of important other factors such as wealth and disability status or education level. A near certainty (which was unusual in this analysis) is that households whose main source of income was a working age pension (DSP, Carer or Parenting) or JobKeeper dependent

household would have some form of financial stress. Other factors that may be at play in these households were a high likelihood of having both low income and low wealth. Those households with less than $2,000 in net wealth had high rates of predicted stress with almost no variability around that high rate.

The take home message from this analysis for social security policy is that current payment rates for recipients of a working age payment are very low and are associated with a very high rate of financial stress for those households dependent upon them. Age pensioners (in particular those with some net wealth and/or own their home outright) are much less likely to be in financial stress. Age pensioners are often protected by home ownership and they typically have much higher net wealth. Additional protection in retirement comes from older persons having lower financial stress (all other things equal). One can speculate on the reasons but it would make sense that older households have lower financial requirements with older age.

The final section shows a series of cameo families with an emphasis on lower income households and those dependent upon various social security payments. This analysis shows that those households dependent on social security have very high expected rates of stress and rank very poorly in terms of their financial wellbeing with most in the bottom 10 per cent across all households. Increasing social security payments for those of working age would appear to be a priority. With that said, many of these families even with modest increases in their income will remain low income and significantly more likely to be in financial stress due to all the other factors that tend to work against these households – such as low wealth, renting, single parents and higher likelihood of disabilities or longer term health conditions.

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Appendix A

Measures of Financial Stress – ABS Survey of Income and Housing 2019-20
1. Assistance sought from welfare/community organisations due to shortage of money
2. Pawned or sold something due to shortage of money
3. Sought financial help from friends/family due to a shortage of money
4. Unable to heat home due to shortage of money
5. Went without meals due to shortage of money
6. Whether could not pay gas/electricity/telephone bill on time due to shortage of money
7. Whether could not pay registration/insurance on time due to shortage of money
8. Could not raise $2000 within a week
9. Could not raise $500 within a week
10. Spend more money than we get
11. Could not make minimum repayment on credit card
12. Went without dental treatment due to shortage of money
13. Could not pay mortgage or rent on time due to shortage of money
14. Could not pay home or contents insurance due to shortage of money

Appendix B – Financial Stress Regression Results

Variable	Parameter	PR>ChiSq
Intercept	12.26	<.0001
Disposable Income (pw, log)	-0.96	<.0001
Wealth (log)	-0.43	<.0001
2 Adults	-0.36	<.0001
3 Adults	0.17	0.0212
4 Adults	0.58	<.0001
1 Child	-0.05	0.3975
2 Children	0.16	0.0121
3 Children	0.35	0.0001
Employed FT (Head)	-0.31	<.0001
Employed PT (Head)	-0.21	0.0046
Unemployed	0.80	<.0001
Age (<35) (Head)	-1.00	0.0214
Age (35 to 49)	1.27	0.0017
Age (50 to 64)	1.85	<.0001
Age (65 to 74)	-0.12	0.7882
Couple with children	-0.10	0.3677
Single Parents	0.41	<.0001
Couple Only	-0.07	0.3608
Lone Person	-0.30	0.049
NSW	0.21	<.0001
VIC	0.16	0.0021
QLD	-0.05	0.4306
SA	-0.13	0.0187
WA	-0.13	0.019
TAS	-0.13	0.0607
NT	-0.03	0.7409
Own Outright	-0.13	0.0353
Mortgage	0.14	0.0007
Wealth (log)*Age (<35)	0.09	0.01
Wealth (log)*Age (35 to 49)	-0.08	0.0119
Wealth (log)*Age (50 to 64)	-0.11	0.0006
Wealth (log)*Age (65 to 74)	0.00	0.9888
Housing Costs (pw, log)	0.08	0.0256
Degree or higher (Head)	-0.23	<.0001
Male (Head)	-0.05	0.0569
Disability/Long Term Health	0.33	<.0001

*All variables (grouped where categorical) significant at 5% level, 'Male' at 10% level