

## 5th Australasian Housing Researchers' Conference



17-19 November 2010, University of Auckland, New Zealand

### Do Traditional Measures of Housing Stress Accurately Reflect Household Financial Wellbeing?

**Steven Rowley**

Property Studies Department,  
School of Economics and Finance  
Curtin University, [steven.rowley@cbs.curtin.edu.au](mailto:steven.rowley@cbs.curtin.edu.au)  
+61 8 9266 7721

**Rachel Ong**

Centre for Research in Applied Economics,  
School of Economics and Finance  
Curtin University, [r.ong@curtin.edu.au](mailto:r.ong@curtin.edu.au)  
+61 8 9266 2841

**Clinton McMurray**

Centre for Research in Applied Economics,  
School of Economics and Finance  
Curtin University, [c.mcmurray@curtin.edu.au](mailto:c.mcmurray@curtin.edu.au)  
+61 8 9266 3976

**Keywords:** housing stress; traditional measures; 30/40 rule; financial wellbeing.

**Acknowledgements:** This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Families, Community Services, Housing and Indigenous Affairs (FaCHSIA) and is managed by the Melbourne Institute of Applied Economic and Social Research (MIAESR). The findings and views reported in this paper, however, are those of the author and should not be attributed to either FaCHSIA or the MIAESR.

---

## **Introduction**

Quantitative measures of housing stress dominate discussions on housing affordability. However, there are serious flaws in the application of traditional housing stress measures to calculate levels of housing affordability, particularly at the household level. Most notably the measure only applies to those that have already accessed housing and not those that cannot afford to do so. As such, the measure ignores the issue of housing need. Additional measures such as price to income ratios and the extent of the deposit gap provide better measures of affordability for those seeking to access the owner occupied housing market. Surveys of housing need assess housing demand from those seeking to form a new household in an area or who are occupying inappropriate housing. A combination of these measures provides a true assessment of housing affordability at the local level. Given the importance of housing stress within policy circles it is necessary to assess the extent to which these measures achieve their primary goal; assessing the impact of housing costs on the financial wellbeing of a household. As a result, this paper describes the relationship between those households calculated to be in housing stress and their actual financial wellbeing.

The 30/40 rule, under which a household is defined as being in housing stress if housing costs exceed 30% of income and the household is in the bottom 40% of the income distribution, has been widely used to inform policy, but does not address the question of whether households classified as being in housing stress actually consider themselves as being in a position of financial hardship. Additionally those households that fall outside the 30/40 rule measure may actually be experiencing financial stress as a result of their housing costs. This paper addresses these questions by using data from the Household, Income and Labour Dynamics in Australia (HILDA) survey to analyse whether traditional measures of housing stress accurately reflect the financial wellbeing of individual households.

Our methodology uses the HILDA data to identify those households who are experiencing financial stress through questions such as the ability to pay utility bills, whether households have fallen behind in their mortgage payments and their rating of overall financial health. We calculate the housing stress measure using the 30/40 rule, and variations to this rule, and compare this measure with the household's perception of their financial wellbeing.

Using this method we calculate whether measures of housing stress accurately reflect the true financial position of a household. Do all households considered to be in stress suffer the same financial hardship or are there households that are actually prospering despite their housing cost burden? The housing stress measure makes broad assumptions about housing stress and its impact on household wellbeing i.e. all households in housing stress are suffering financial hardship. This paper tests these assumptions to determine whether such a broad approach is appropriate for policy making or a more fine grained analysis of housing affordability is required.

The paper is structured as follows. The next section provides a review of the literature. It highlights the dominance of housing cost to income ratios such as the 30/40 rule as the traditional basis for measuring housing stress. In addition, our literature search reveals the dearth of evidence on how accurately traditional measures actually reflect households' *experience* of financial stress. Next, we describe the data and method we have employed in our analysis. Key findings are then reported. The paper ends with some concluding remarks on policy implications and directions for future research.

## **Background literature**

In order to measure the size and scope of housing affordability problems, we must first define what constitutes stress and be able to measure it. Housing cost to income ratios have traditionally been used to identify those experiencing housing stress. The first and simplest of

these defines households to be in stress if they expend more than 30% of their income meeting housing costs - servicing a mortgage or paying rent. The 30% rule is in part justifiable on the grounds that this measure is often used by mortgage lenders when evaluating an applicant's ability to repay (Nepal et al 2010).

There exists other traditional housing stress based on narrower variants of the 30% rule. The first of these is the 30/40 rule, where households are deemed to be in stress if they spend more than 30% of income on meeting housing costs and fall within the bottom 40% of the income distribution. This rule attempts to exclude those who may be paying more than 30% of their income on housing costs by choice; perhaps to pay off their mortgage sooner, to live in an area more suitable for work commuting, or under the expectation of increased future earnings. Another measure is the 30/10-40 rule, which further narrows the definition to only those between the 2<sup>nd</sup> to 3<sup>rd</sup> deciles of the income distribution.

There is also the matter of the income measures itself. Marks and Sedgwick (2008), using disposable income from the HILDA survey, found 12% of Australian household to be in housing stress in 2008 based on the 30% rule. Tanton et al (2008), also using disposable income from the Australian Bureau of Statistics (ABS) Survey of Income and Housing, found that 22.5% were in housing stress in 2005-2006 under the same 30% rule. Nepal et al (2010) estimated the prevalence of housing stress using the HILDA survey using the 30%, 30/40 and 30/10-40 rule. They found that at the national and state level, housing stress prevalence is lower using gross income for all three rules (by around 5% using the 30% rule). The proportion of those in housing stress drops substantially as the housing stress definition (rule) narrows, with the proportion being highest under the 30% rule and lowest under the 30/10-40 rule. The ranking by state also changes depending on the measure used.

Dwelling price to income ratios, usually median price/median income, are also often used as a measure of housing affordability. Rowley and Haslam-Mckenzie (2009) point out that although such measures can provide a useful indicator of affordability for new buyers, they can also be also misleading. Median house prices in small mining towns in Western Australia are well above those in Perth, but because of the high median incomes in these locations, the price to income ratio ranks these towns as some of the most affordable in the state. This may mask some of the housing affordability issues facing some residents of these communities not earning high mining industry incomes, such as employees in small business and retail, police, teachers and health workers.

Another way housing stress might be defined is by the ability of the homeowner or renter to keep up with housing-related payments. Marks and Sedgwick (2008) tracked this self-reported measure from respondents to the HILDA survey from 2001-2006, a period of strong house price and rent increases, but found a decrease in the proportion of both owners and renters reporting an inability to pay. They also tracked those who were ahead, behind, and on time with housing payments over the same period and found the number ahead declined over the period, but that it was almost exactly matched by an increase in the number that were on time. This highlights the need to take a broader approach to measuring housing stress.

If housing stress is defined as arising when decisions are made that adversely affect the household members, which would not have if not in housing stress, then there are dimensions of housing stress that cannot be measured by the traditional 30%, 30/40 and 30/10-40 rules. Burke et al (2008) investigate the choices and compromises made by renters and purchasers from detailed postal surveys. They identify possible risk outcomes for households, organisations and society. These include increases in commuting time and frequency of moves for long-term renters, blocked aspirations arising from an inability to bridge the deposit gap for aspirant purchasers, and buying in more remote locations and adverse impacts on non-shelter outcomes such as family relations, health and education due to a reduction in disposable income among recent purchasers. Furthermore, the study identified that for society

as a whole, possible risk factors associated with housing stress include high mobility rates resulting in a lack of community integration and social cohesion, household withdrawal from community and increased pressure on social services.

Yates (2007) also highlights the fact that non-shelter outcomes can be affected by housing affordability problems. If households devote a large proportion of their income to meeting housing costs they may be unable to participate fully in the society in which they live, for example going without special meals or not being able to afford a week's holiday once per year. Yates utilised the ABS 2003-2004 Household Expenditure Survey (HES) to examine whether high housing costs independently contributed to financial stress, and found that the incidence of financial stress was significantly higher amongst lower income households who were also experiencing housing stress.

Some of the difficulties described above in arriving at an appropriate housing stress definition via the use of housing cost and income indicators, in addition to the fact that such definitions are unable to capture certain aspects of financial stress means that there is much scope for future research that may refine estimates of the incidence and prevalence of housing stress.

## **Method**

### **Data and sample design**

We conduct our analysis using the HILDA Survey, a nationally representative dataset that contains a comprehensive range of variables representing the socio-demographic, labour market, income and housing characteristics of Australian households. There are several unique features of this Survey which make it helpful for measuring housing affordability and financial stress. The income and housing variables are useful for generating estimates of housing stress using traditional measures based on housing cost to income ratios such as the 30/40 rule. In addition, the Survey contains a range of variables in its self-completion questionnaire that provide information on respondents' *experience* of financial stress.

Our sample comprises owner purchaser and private renter households, as these are the two key groups in the population who are likely to bear higher than average housing cost burdens. The excluded housing tenure groups are outright owners as they have paid off their mortgage loans, rent-free households as they do not pay rent or mortgages, and public renters as the income-related rents applied by State housing authorities are designed to keep the housing cost burdens of public renters at approximately 25% of income.

Housing cost and income measures can be observed on a household basis using mortgage or rental payments and household income reported in the HILDA Survey. Households with negative or zero income have to be excluded for the purposes of this analysis as it is not possible to compute housing cost to income ratios for these households. Such households are likely to be accommodated within subsidised housing.

Information on financial wellbeing are reported on an individual basis, that is, if there are two adults from the same household, each would be asked questions about his/her experience of financial stress and the two adults may report different levels of financial stress as they may perceive their financial situations differently though they are from the same household. For the preliminary analysis reported in this paper we retained the responses of all responding independent adults in each household. Hence, if a household with three responding independent adults is considered to be in housing stress according to a traditional measure such as the 30/40 rule, the responses of all three adults on financial stress are retained. This may result in some double counting but does take into account the fact that persons bearing a similar housing cost burden can have different perceptions of their financial wellbeing. We exclude multi-income unit households as it is difficult to ascertain which income unit within

the household bears the housing cost burden of the household. An income unit is defined as a group of people who share income. If, for example, there are three single unrelated adults living in a household, there are three income units in the household and it is difficult to identify the adult(s) who bear the household's housing costs.

### **Variable measurements**

We start off by generating housing cost to income ratios. The income measure we use is household disposable income. For owner purchasers, housing costs are their mortgage repayments; for private renters, their housing costs are their rental payments. Some private renters are eligible for Commonwealth Rent Assistance (CRA); however as CRA is generally paid as a cash transfer in the form of a tax-free supplementary benefit to those in receipt of income support payments, its impact on the housing cost to income ratio is taken into account as it would have been included households' disposable income estimates, that is, it increases household disposable income.

Using the above housing cost and income measures, we then generate three benchmarks of housing stress that rely on the housing cost to income ratios:

- 30/40 rule: A household is in housing stress if housing costs exceed 30% of income and the household is in the bottom 40% of the household income distribution. This defines housing stress as a product of higher housing costs and income constraints;
- 30% rule: A household is in housing stress if housing costs exceed 30% of income. Although it does not take into account income constraints it allows us to assess just how many households taking on an above average housing cost burden are suffering financial hardship as a result. This may be by choice, but some households may be forced into this position to achieve a suitable housing outcome;
- 50% rule: A household is in housing stress if housing costs exceed 50% of income. This is similar to the above, but extends the cost burden to see how many households are paying extreme proportions of their income on housing costs.

To assess the financial wellbeing of individuals in households in the HILDA Survey, we use a number of financial stress indicators. These are:

- Perception of household's level of prosperity given current needs and financial responsibilities (ranging from 'Prosperous' to 'Very poor');
- Difficulty meeting food and shelter needs, including
  - Difficulty paying utility (electricity, gas or phone) bills on time (Yes or No);
  - Difficulty paying mortgage or rent on time (Yes or No);
  - Had to go without meals (Yes or No);
- Measures required to raise finances in an emergency, including
  - Had to pawn or sell something due to shortage of money (Yes or No);
  - Had to ask for financial help from friends or family (Yes or No);
  - Had to ask for help from welfare or community organisations (Yes or No);
- Difficulty raising \$2,000 in an emergency.

### **Key findings**

Table i outlines how the proportion of households in housing stress has changed between 2001 and 2008. It includes owner purchaser and private renter households. Interest rates were at similar levels in 2001 and 2008 making the two years ideal for affordability comparisons.

There was a slight increase in incidences of housing stress using the 30/40 rule. However, the biggest increase was in the measure of households paying above 30% of their income in housing costs (27% to 38%). This reflects house price and rental rises over this 7-year period forcing households to take on greater expenditure to secure property. Other factors such as the demand for larger houses which are inevitably more expensive play a role. There was also a big increase in the number of households paying above 50% of their income in housing costs.

A key question is whether households in housing stress according to traditional measures are being forced into stress or are making a choice to take on higher cost burdens. Examining the financial health of households over the same two years would suggest the latter. There were virtually no changes to measures of prosperity over the seven year period. 65% of all households regard themselves as being ‘reasonably comfortable’ or better. If we assume that only the bottom two ratings (‘Poor’ or ‘Very poor’) reflect households suffering financial hardship then there is a mismatch between the proportions in housing stress as defined under traditional housing stress rules and the proportions in financial stress. For example, only 5% (4.2%) of individuals perceived themselves as poor or Very poor in 2001 (2008), but much higher proportions were in housing stress under the traditional rules.

The biggest change came in the proportion having difficulty meeting food and shelter needs and raising short terms finance. Households appear to be much better off in 2008 under these measures despite many new households taking on increasing housing cost burdens. This analysis would suggest that housing stress measures are not very accurate indicators of overall levels of household prosperity. Levels of stress have increased but measures of financial wellbeing have shown an improvement. This analysis suggests the traditional housing stress measure is not an accurate reflection of how households are coping financially.

**Table i : Traditional housing stress and financial stress measures, 2001 and 2008, % by column**

**(a) Percentage of households in housing stress according to traditional measures**

Traditional housing stress measures	2001	2008
30/40 rule	16.8	18.8
30% rule	26.9	35.7
50% rule	8.9	11.2

**(b) Percentage of persons experiencing financial stress**

Financial stress measures	2001	2008
<b><i>Prosperity given current needs and financial responsibilities</i></b>		
Prosperous	1.6	1.5
Very comfortable	12.2	12.0
Reasonably comfortable	50.9	52.0
Just getting along	30.2	30.3
Poor	4.2	3.3
Very poor	0.8	0.9
<b><i>Difficulty meeting food and shelter needs</i></b>		
Could not pay electricity, gas or telephone bills on time	21.8	12.9
Could not pay the mortgage or rent on time	11.2	7.6
Went without meals	5.8	4.4
Was unable to heat home	4.0	2.5
<b><i>Measures required to raise finances due to shortage of money</i></b>		
Pawned or sold something	7.0	3.7
Asked for financial help from friends or family	18.4	14.6
Asked for help from welfare/community organisations	5.4	2.8
<b><i>Difficulty in raising \$2,000 in an emergency</i></b>		
Could easily raise \$2000	41.3	59.5
Could raise \$2000, but it would involve some sacrifices	29.4	20.9
Would have to do something drastic to raise \$2000	13.8	8.8
Couldn't raise \$2000	15.5	10.8

Source: Authors' own calculations using the 2001 and 2008 HILDA Survey

Table ii breaks down the analysis by housing tenure and household type. Almost 72% of those in housing stress under the 30/40 rule were in the private rental sector. This is not surprising as housing stress is a much more accurate indicator of affordability in the private rental sector. Many households on low incomes that would like to access owner-occupied housing cannot do so because of inadequate finance for home purchase. These households are

forced into the private rental sector. In order to consume appropriate housing in a suitable location, households have to pay rental rates that may force them into rental stress. Low income households are also competing with higher income households that have made the choice to consume rental property. This results in the majority of those households on low income in the private rental sector in housing stress. In addition, rents tend to rise annually. Those households that may not have been in rental stress when first renting their property may have been pushed into that position with rents having risen rapidly in most capital cities. In contrast, mortgages rise with changes in interest rates. With 2008 seeing particularly low levels of interest rates there are relatively low levels of owner-occupier stress. Additionally, many low income households purchasing before the major house price increases in the early and middle part of the last decade will have taken on small mortgages by 2010 standards paying low monthly mortgage payments which will only grow if interest rates rise. Consequently, there are many households on low incomes paying a low proportion of income in housing costs due to the timing of their house purchase.

Examining the breakdown of household types we see the largest group in housing stress is lone persons, making up almost 64% of households in stress, followed by lone parents with young dependent children. There are limited spatial variations between households in stress and not in stress. A slightly greater proportion of households on low incomes in housing stress are located in outer regional areas but there are fewer in remote or very remote areas. Further research is required to unpick any variations between States.

Using the two alternative measures of housing stress which ignore the income rule we see that owner-occupied households make up a greater proportion of households paying more than 30% or 50% of their income in housing costs. Of course removing income constraints introduced a greater element of choice into the housing cost burden. Those on higher incomes can afford to pay a higher proportion of their income in housing costs and still be left with a level of income adequate for essential day to day consumption. Certainly those not in housing stress have higher household disposable income on average.

**Table ii: Profile of households in housing stress under traditional measures, 2008**

Characteristics	30/40 rule		30% rule		50% rule		All
	Not in housing stress	In housing stress	Not in housing stress	In housing stress	Not in housing stress	In housing stress	
<b>Number of households</b>	3,117	723	2,468	1,372	3,409	431	3,840
<b>Housing tenure</b>							
Owner purchaser	63.2	28.2	56.8	56.3	57.0	53.4	56.6
Private renter	36.8	71.8	43.2	43.7	43.0	46.6	43.4
<b>Mean disposable income (\$'000)</b>	82.7	24.6	81.4	54.3	75.7	40.0	71.7
<b>Household type (by column)</b>							
Couple without children	27.0	13.6	27.4	19.2	25.5	16.7	24.5
Couple with children aged <15 yrs	38.5	7.2	35.3	27.6	34.5	17.6	32.6
Couple with dependent students	5.3	0.8	6.0	1.7	4.8	2.1	4.5
Lone parent with children aged <15 yrs	5.6	13.0	5.3	10.1	6.8	8.6	7.0
Lone parent with dependent students	1.7	1.5	1.7	1.5	1.7	1.4	1.6
Lone person	21.9	63.9	24.3	39.9	26.8	53.6	29.8
<b>Area of residence (by column)</b>							
Major city	63.1	60.9	61.2	65.3	62.0	68.0	62.7
Inner regional	24.6	26.1	25.5	23.8	25.6	19.7	24.9
Outer regional	10.6	12.0	11.5	9.7	10.8	11.1	10.9
Remote or very remote	1.7	1.0	1.8	1.2	1.6	1.2	1.6

Source: Authors' own calculations using the 2008 HILDA Survey

Table iii breaks down the financial stress measures by housing stress group as measured by the 30/40 rule. Of those households falling within housing stress under this rule, 14.3% rated their level of prosperity as ‘Poor’ or ‘Very poor’. Of those in housing stress almost 40% were ‘Reasonably comfortable’ to ‘Prosperous’. There are differences when comparing the financial prosperity of households within and outside of housing stress. Those in housing stress are much more likely to be ‘Poor’ or ‘Very poor’ (14.3% compared to 2.4%). Using other measures of financial prosperity show that households in housing stress have lower levels financial wellbeing than those low income households outside housing stress. For example, 24% could not pay the electricity bill on time compared to just 10.9% of households not in stress. 26.5% of households in stress could not raise \$2,000 compared to 7.9%. This shows that housing costs do have a significant impact on a household’s level of financial prosperity. However, it is also important to note that some households not in housing stress are actually suffering financial stress. Furthermore, the majority of households within stress are not suffering financial hardship as measured by the data. Those that are suffering are the most extreme cases and further analysis should disaggregate the 40% income group to calculate what groups are most likely to be in a position of housing stress and what events have forced them into that position.

**Table iii: Comparisons of financial stress with housing stress under the 30/40 rule, 2008, % by column**

Financial stress measure	Not in housing stress	In housing stress
<b><i>Prosperity given current needs and financial responsibilities</i></b>		
Prosperous	1.6	0.8
Very comfortable	13.2	5.7
Reasonably comfortable	55.6	33.3
Just getting along	27.3	45.9
Poor	1.9	11.1
Very poor	0.5	3.2
<b><i>Difficulty meeting food and shelter needs</i></b>		
Could not pay electricity, gas or telephone bills on time	10.9	24.1
Could not pay the mortgage or rent on time	6.0	16.0
Went without meals	2.7	13.2
Was unable to heat home	1.6	7.3
<b><i>Measures required to raise finances due to shortage of money</i></b>		
Pawned or sold something	2.8	9.0
Asked for financial help from friends or family	12.3	26.5
Asked for help from welfare/community organisations	1.6	9.5
<b><i>Difficulty in raising \$2,000 in an emergency</i></b>		
Could easily raise \$2000	63.4	38.5
Could raise \$2000, but it would involve some sacrifices	20.6	23.0
Would have to do something drastic to raise \$2000	8.2	12.0
Couldn't raise \$2000	7.9	26.5

Source: Authors’ own calculations using the 2008 HILDA Survey



In table iv we discount income as a criterion and examine the financial position of all households paying over 30% of their income on housing costs. 35.7% of all households pay over 30% of income in housing costs but only 4.2% of these members of these households rate themselves as ‘Poor’ or ‘Very poor’ (see table 1). Of those households considered to be in housing stress only 7.5% rate themselves as ‘Poor’ or ‘Very poor’. These are likely to be the very low income households. 30% of households not in housing stress were ‘Just getting along’ or worse compared to 43% in stress households. Once again households in stress are suffering worse financial outcomes than those not in stress, but a household does not have to be in housing stress to be struggling financially; although they are more likely to be in such a position. Further research will compare the financial wellbeing of households that have recently purchased with those that purchased before the peak of the housing boom. This would provide evidence of whether more and more households are being forced to spend more than 30% of their income to consume suitable housing and whether this is having a significant effect on financial wellbeing.

**Table iv: Comparisons of financial stress with housing stress under the 30% rule, 2008, % by column**

Financial stress measure	Not in housing stress	In housing stress
<b><i>Prosperity given current needs and financial responsibilities</i></b>		
Prosperous	1.5	1.3
Very comfortable	13.5	8.7
Reasonably comfortable	54.9	45.7
Just getting along	27.7	35.9
Poor	1.8	6.6
Very poor	0.4	1.9
<b><i>Difficulty meeting food and shelter needs</i></b>		
Could not pay electricity, gas or telephone bills on time	10.4	18.5
Could not pay the mortgage or rent on time	5.6	11.9
Went without meals	3.0	7.5
Was unable to heat home	1.9	4.0
<b><i>Measures required to raise finances due to shortage of money</i></b>		
Pawned or sold something	2.7	6.0
Asked for financial help from friends or family	12.4	19.4
Asked for help from welfare/community organisations	1.6	5.5
<b><i>Difficulty in raising \$2,000 in an emergency</i></b>		
Could easily raise \$2000	63.1	51.7
Could raise \$2000, but it would involve some sacrifices	19.8	23.5
Would have to do something drastic to raise \$2000	8.4	9.7
Couldn't raise \$2000	8.8	15.2

Source: Authors' own calculations using the 2008 HILDA Survey

Table v examines the financial position of those households paying over 50% of their income in housing costs. Only 11.2% of households fall within this category. These are more likely to be households that have chosen to spend this proportion of their income to consume housing they consider appropriate for their needs. However, there could also be mid and low income and households forced into this position in order to access appropriate housing, particularly in the private rental sector. Further disaggregation is required for a more accurate picture. Examining the figures in more detail it appears just over 50% of those spending over 50% of their income in housing costs still consider themselves to be 'Reasonably comfortable' or better. Only 9.8% are 'Poor' or 'Very poor' compared to 3.6% of households spending less than 50%. Those households choosing to spend over 50% on housing costs do not appear to be suffering financially given the fairly low levels of financial stress evident from table v. Again further research is required but it is likely those in financial stress are lower income households forced into this position in order to consume housing appropriate to their needs.

**Table v: Comparisons of financial stress with housing stress under the 50% rule, 2008, % by column**

Financial stress measure	Not in housing stress	In housing stress
<b><i>Prosperity given current needs and financial responsibilities</i></b>		
Prosperous	1.4	1.6
Very comfortable	12.4	8.7
Reasonably comfortable	53.3	40.6
Just getting along	29.3	39.3
Poor	2.9	6.9
Very poor	0.7	2.9
<b><i>Difficulty meeting food and shelter needs</i></b>		
Could not pay electricity, gas or telephone bills on time	12.3	18.8
Could not pay the mortgage or rent on time	6.9	13.9
Went without meals	3.9	9.0
Was unable to heat home	2.2	5.8
<b><i>Measures required to raise finances due to shortage of money</i></b>		
Pawned or sold something	3.3	7.6
Asked for financial help from friends or family	13.8	21.6
Asked for help from welfare/community organisations	2.5	5.2
<b><i>Difficulty in raising \$2,000 in an emergency</i></b>		
Could easily raise \$2000	60.2	53.2
Could raise \$2000, but it would involve some sacrifices	20.3	26.7
Would have to do something drastic to raise \$2000	9.1	5.9
Couldn't raise \$2000	10.4	14.2

Source: Authors' own calculations using the 2008 HILDA Survey

The findings show little relationship between housing stress and financial wellbeing. Although there are greater proportions of households in housing stress rating their prosperity as 'Poor' or 'Very poor' the proportion of households falling within these two ratings is much lower than would be expected if housing stress was an accurate measure of financial wellbeing. The 40% income level appears too high to really assess the financial impact of spending over 30% of income on housing costs. Consequently we decided to run the analysis for the lowest 20% of income earners. The '30/20' rule was adopted to analyse whether housing stress has a much greater impact on the lowest income earners. Table vi provides the results. 74% of those in the bottom 20% income group are in housing stress. Comparing the financial prosperity of those within and outside housing stress we can see a big difference at the top and bottom end of the scale. 19.8% of those in stress are within the 'Poor' 'Very poor' category compared with 2.7% for those households not in housing stress. Therefore we can conclude that housing stress has a bigger impact on financial prosperity for lower income groups (14.3% were 'Poor' or 'Very poor' under the 30/40 rule). Using other measures of financial prosperity it is clear that those households in housing stress are more likely to have trouble paying bills, the mortgage or raising money but the figures show it is a minority of households in each case suffering financial hardship.

**Table vi: Comparisons of financial stress with housing stress under the 30/20 rule, 2008, % by column**

Financial stress measure	Not in housing stress	In housing stress
<b><i>Prosperity given current needs and financial responsibilities</i></b>		
Prosperous	1.5	0.6
Very comfortable	12.6	5.6
Reasonably comfortable	54.3	29.0
Just getting along	28.8	45.0
Poor	2.2	15.1
Very poor	0.5	4.7
<b><i>Difficulty meeting food and shelter needs</i></b>		
Could not pay electricity, gas or telephone bills on time	11.9	24.1
Could not pay the mortgage or rent on time	6.8	16.1
Went without meals	3.2	17.1
Was unable to heat home	1.9	9.6
<b><i>Measures required to raise finances due to shortage of money</i></b>		
Pawned or sold something	3.0	11.5
Asked for financial help from friends or family	13.0	30.5
Asked for help from welfare/community organisations	1.9	12.2
<b><i>Difficulty in raising \$2,000 in an emergency</i></b>		
Could easily raise \$2000	62.0	34.0
Could raise \$2000, but it would involve some sacrifices	21.0	20.5
Would have to do something drastic to raise \$2000	8.5	11.4
Couldn't raise \$2000	8.5	34.0

Source: Authors' own calculations using the 2008 HILDA Survey

## Conclusions

This paper outlines the findings of a preliminary study designed to assess whether traditional measures of housing stress accurately reflect the financial wellbeing of Australian households. The early findings reported in this paper have important policy implications. Our analysis shows that the housing stress measure is far too broad to provide a reliable indicator of the actual financial position of individual households. The measure categorises all households in the bottom 40% of income earners and paying over 30% of their income in housing costs as being in housing stress. This implies that these households are suffering financial hardship. The analysis presented in this paper shows this not to be the case with over 50% of households considered to be in housing stress under the traditional 30/40 rule actually rating their financial prosperity as “Reasonably comfortable” or better. Only 14.3% of those in stress rated their financial prosperity as ‘Poor’ or ‘Very poor’. The analysis shows that households in housing stress are generally in a worse financial position than households in same income grouping outside housing stress. Housing costs do have an impact on financial wellbeing but it is not possible to categorise all households in stress as being under the same financial pressures, which the housing stress measure does.

Examining all households paying above 30% and 50% of their income in housing costs shows just over 50% in both categories are “Reasonably comfortable” or better. A minority has financial difficulties and further research is necessary to determine whether there are differences between those households that have purchased in recent years and those that entered ownership before the property boom. Further work is also necessary to disaggregate the results between owner occupied and rental tenures.

We have shown that traditional housing stress measures are not very good indicators of the financial wellbeing of a household even at the very bottom of the income scale. These traditional measures are also a poor indicator of housing need. This paper’s preliminary results highlights a much wider scope to examine all aspects of the correlation between housing affordability and various dimensions of household wellbeing, including financial, health, social participation and satisfaction with neighbourhood quality.

Future research aims to use the HILDA data to dig deeper into housing affordability and wellbeing to assess the characteristics of households that are most likely to be under financial strain and to examine the role that housing plays in promoting wellbeing. In particular, our future research aims to examine:

- Housing cost differences by tenure, data of purchase, broad geographic location (urban, regional, remote),
- Impact of life events on housing affordability and wellbeing e.g. family breakup
- The dimensions of wellbeing (financial, social, health, neighbourhood conditions) adversely affected by housing stress,
- A longitudinal analysis of changing affordability and wellbeing,
- Impact of neighbourhood/community quality on wellbeing.

Overall, our proposed future research directions will provide a more fine grained analysis of the impact of housing costs on household wellbeing.

## Reference list

- Burke, T, Pinnegar, S, Phibbs, P, Neske, C, Gabriel, M, Ralston, L & Ruming, K 2008, *Experiencing the Housing Affordability Problem: Blocked Aspirations, Trade-Offs and Financial Hardships*, National Research Venture 3: Housing Affordability for Lower Income Australians: Research paper 9, AHURI
- Marks, GN & Sedgwick, ST 2008, 'Is There a Housing Crisis? The Incidence and Persistence of Housing Stress 2001–2006', *Australian Economic Review*, vol. 41, no. 2, pp. 215-221.
- Nepal, B, Tanton, R & Harding, A 2010, 'Measuring Housing Stress: How Much Do Definitions Matter?', *Urban Policy and Research*, vol. 28, no. 2, pp. 211-224.
- Rowley, S & Haslam-McKenzie, F 2009, 'Housing Markets in Regional Western Australia: Boom and Bust?', in *4th Australasian Housing Researchers Conference*, eds. B Randolph, T Burke, K Hulse & V Milligan.
- Tanton, R, Nepal, B, Harding, A, AMP Limited, University of Canberra. National Centre for Social & Economic Modelling 2008, *Wherever I Lay My Debt, That's My Home: Trends in Housing Affordability and Housing Stress: 1995-96 to 2005-06*, AMP Limited.
- Yates, J 2007, *Housing Affordability and Financial Stress*, Research Venture 3: Housing Affordability for lower income Australians: Research Paper No. 6, AHURI.

