The dynamics of financial hardship and housing need: A longitudinal analysis using budget standards

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Abstract

Targeting assistance to those in greatest need is a prominent public policy response to the rising demand for social housing assistance in Australia, but there is limited research on the dynamics of this need over time.

This paper provides new analysis on the distribution of housing affordability and stress by applying budget standards against Centrelink’s longitudinal research dataset for the first time. The longitudinal dataset is a comprehensive administrative collection containing six years of detailed bi-weekly snapshots on low income households, making it uniquely suited to examining the impact of changes in income and housing costs.

Australia’s budget standards were developed by the University of New South Wales’ Social Policy Research Centre to provide equitable benchmarks for living standards across different household types. The original benchmarks are extended by incorporating regional pricing adjustments and adding short-term minimum budgets which exclude the cost of durable items. This provides a measure of financial hardship that is significantly more graduated than the traditional ratio measures of housing stress.

Analysis focuses on low and middle income rental households, who are more at risk of financial hardship as they are without the resources available from home ownership. The paper demonstrates that different household types and income support benefits are associated with quite different housing affordability issues over time. Such evidence supports the development of more finely tuned targeting of short and long-term government housing assistance.

Keywords: targeting, affordability, housing need, dynamics, geographical variation.

Authors: Waite, Henman, Banks, Curtis
1. Introduction

Targeting housing assistance to those in greatest need is a prominent public policy response to the rising demand for social housing assistance in Australia. Targeting is regarded as a cost effective and fair approach to the provision of limited resources. Indeed, targeting has increased as a policy response to the declining government investment in social housing over the last few decades. As a result there has been an increase in the granularity of targeting. For example Queensland has developed a multi-faceted client assessment, replacing the previous system which prioritised the majority of new allocations according to time on the waitlist.

While much research has investigated the risk factors indicative of housing stress and insecurity, there is limited research on the dynamics of housing need over time. Furthermore, the typical approach to measuring housing stress – that is housing costs as a proportion of household income – is a rather crude measurement and has the capacity to inaccurately identify the actual distribution of housing problems, particularly as they affect different household compositions.

This paper seeks to respond to both limitations in much past housing policy research by providing a longitudinal analysis of housing need using a more sensitive, residual income measure of housing stress relative to household composition. In this regard, the paper extends previous work by the authors (Waite and Henman 2006). An evidence base that more accurately assesses housing stress by household type and across time, to which this paper seeks to contribute, will assist in improving targeted housing assistance and potentially lead to improved outcomes and the best use of public resources.

The overall aim of this paper is to evaluate the comparative need of the main client groups for government housing assistance based on housing affordability. The primary research questions are to:

1. Demonstrate the usefulness of residual income measures of housing affordability;
2. Quantify and compare the relative impacts of short and long term housing hardship for different client groups;
3. Compare relative levels of rental affordability across urban, rural and remote Australia.

The most important new element used here is the longitudinal Centrelink dataset, which allows us to explore households’ experience over the longer term and to contrast this perspective with point-in-time assessment of need. Our analysis employs a residual income approach, asking if each household has enough disposable income left to purchase the goods required for a basic standard of living after paying their housing costs over a period of time. To provide a contemporary benchmark, we have updated and expanded the Australian budget standards as first developed at the Social Policy Research Centre (Saunders et al, 1998) and further developed by Henman (1998; 2001; 2005).

The combination presented here of Centrelink time-series records and enhanced budget standards benchmarks has the following advantages when evaluating household need for long term supports like social housing:

- Two-weekly continuous coverage of households for the duration of benefit support;
- A rich dataset of household demographics, earned income and government assistance;
- Relatively reliable data compared to self-reporting surveys;
- Accurate rent and rent assistance payment amounts;
- Evidenced and equitable benchmarks for each household;
- Budgets are adjusted annually for inflation, and regionally for pricing differentials; and
- Incomes are adjusted to after-tax disposable rather than gross income.

Our analysis starts with low income private renters, since it is their difficulty accessing affordable private rental that drives the demand for housing assistance. We use a subset of Centrelink’s 1% national administrative data sample covering 16,806 households with validated rental records (FaHCSIA, 2009). In most cases we follow recipients from their first fortnight receiving a newly granted benefit, with some examination also of ongoing Age Pension recipients. Each household is tracked for three years (ie 72 fortnightly observations in the dataset), within the period 12 June 2002 to 8 June 2007.
To develop the argument, the paper begins by outlining the methodology used in applying budgets standards to Centrelink’s longitudinal data and illustrating the kinds of knowledge that this can result in. Section 3 compares and contrasts residual short and long-term housing stress measures for a range of household types defined by the Centrelink benefits a household receives. The extent of housing stress is quantified in Section 4, followed by a geographical analysis of the distribution of housing stress.

Based on these measured differences in long term outcomes for target groups, we can compare the proportion who, unassisted, have poor long term prospects in the general population, with the proportions who are granted assistance under current policies. This evidence can help policy-makers to tune emerging allocation systems through future policy review cycles. For example, no matter how sophisticated our client assessments become, they need to incorporate additional policy objectives such as the need for a sustainable mix of clients in social housing. The paper concludes with a brief discussion of possible policy implications for this work and future research directions.

2. Applying budget standards to Centrelink data to assess the distribution of housing affordability

A budget standard is the cost of a specified basket of goods and services required by a household type to achieve a defined standard of living. The original research of the Social Policy Research Centre (SPRC), upon which this study builds, calculated budget standards in February 1997 for a wide range of households living in Sydney (Saunders et al 1998). As an example of the care with which these standards were derived, they incorporate the very significant concessions some Centrelink beneficiaries are entitled to, providing a level of real-life accuracy well beyond alternative affordability approaches.

Since that seminal Australian work, the standards have been developed to estimate budgets for a wider range of situations, including different household types, geographical locations, and standards of living, as well as being updated over time. Our use of these budget standards involves three key developments. The authors’ previous paper (Waite and Henman, 2006) outlines our approach in detail, so this paper includes only a brief overview and an explanation of new elements.

First, the original budgets for specific household types have been expanded here to better cover all Australian households. In particular, budget standards for all ages of children from 0 to 14 have been estimated, for example by interpolating a budget for children aged eleven from published budgets for children aged ten and fourteen. Economies of scale in households with more children have also been incorporated. An example of an updated and enhanced budget for Sydney 2007 is provided in the technical appendices.

Second, the SPRC originally estimated budgets at both ‘low cost’ and ‘modest but adequate’ living standards levels. The ‘low cost’ standard, which is used in this study, defines a frugal level ‘below which it becomes increasingly difficult to maintain an acceptable living standard because of the increased risk of deprivation and disadvantage’ (Saunders et al, 1998, p. 63). Following the arguments of Whiteford and Henman (1998), this standard has been used to further derive ‘short-term low cost’ standards by excluding the depreciation costs of household durables that have a lifetime of more than one year (including furniture, cutlery and crockery, white goods, televisions, and durable clothing).

The rationale for excluding such depreciation costs is that recipients of benefits for short-term conditions – such as unemployment or sickness – do not require short-term expenditure on household durables. These purchases are typically deferred by households experiencing short term difficulties. Removing expenditure on durables reduces the low cost budget by between 11% and 13% depending on household type.

Thirdly, following Waite and Henman (2006), we have extended beyond the usual focus of budget standards for capital cities only, and have calculated regional and remote budget standards based on measured price relativities between capital cities and other areas.

The residual income – or after housing costs – approach is not usually characterised as a measure of housing affordability, since researchers usually include only normative (estimated) housing costs in budgets. Our analysis includes actual housing costs, and provides an accurate representation of the difficulties faced by each household in paying both rents and essential living costs. In essence, we consider the household budget
after payment of their actual housing costs as recorded by Centrelink, and calculate whether their remaining disposable income enables the household to meet the short-term low cost budget standard.

The application of budget standards to Centrelink’s longitudinal data set has many methodological and technical challenges. One obvious disadvantage of Centrelink data is that there is no record of the household once assistance ends. This is not as problematic as it seems though. For example once a Newstart recipient moves from full or partial benefit support to earned income, they will have an adequate income well above the levels of the “low cost” standard – and if they return to benefit support their records will once again be included in this longitudinal sample and connected to their first period of unemployment.

Chart I. Affordability pathways of sample Newstart recipients from benefit commencement

On the other hand, Centrelink’s extensive dataset provides possibilities for in-depth analysis of household dynamics and differentiation of household types. As an example of what is revealed, Chart I above follows twenty randomly selected Newstart recipient households over three years, plotting their fortnightly residual income after paying for housing relative to the short-term low cost budget.

Fortnight 1 commences at the left, when each household is recorded as beginning receipt of Newstart Allowance. Note that the recipients listed do not necessarily enter the system on the same date. The Y-axis is the dollar amount the household is below/above the weekly short-term low cost budget standard after paying actual housing costs.

It is notable that most of this small sample are below that standard – sitting around $40 per week below – at the beginning and for much of the 3-year period after that. This reflects the level of Newstart Allowance, as well as other variable cash benefits associated with the household (eg Family Tax Benefit for dependent children, Parenting or Newstart Allowance for partner, and Rent Assistance for private rental) and other private income, taking into account the appropriate budget standard for the household composition.

Also note that while there is significant evidence of continuity of the household’s residual income (indicated by a straight line) there is also considerable movement caused by: receipt of lumpy casual income (eg 18); exiting from system and sometimes never returning (13); returning to Centrelink support (19); as well as perhaps changes in household composition and benefit type.

To provide a clearer and aggregate picture of average long-term patterns and differences between households, we combined all the records for the major benefit categories as follows:

- “Working couple” are households with two parents and dependent children receiving Family Tax Benefits and possibility other family-related benefits, but not in receipt of income support. Given
that the income tests for these payments are set at a much higher level, this group would be expected to have greater living standards than others;

- “Low income couple” are households with two parents and dependent children, in receipt of a targeted low income family support payment (these households started with consistently lower earned incomes).
- “Single parent” are households in receipt of Parenting Payment (Single), or the old Sole Parent Pension. This benefit is paid at a higher level than Newstart Allowance;
- “Disability/Carer” households are those in receipt of Disability Support Pension and possibly also the Carers Payment or Carers Allowance;
- “Unemployment” includes households in receipt of Newstart and similar allowances;
- “Student/Youth” refers to households/individuals who are in receipt of Youth Allowance either as a young unemployed person or as a full-time tertiary student; and
- “Other” includes miscellaneous payments like drought relief.

It is important to note that due to our sampling frame, each household we examine in these groups begins in private rental, and receiving Commonwealth Rent Assistance. This is a necessary starting point technically, first because we need housing costs to calculate residual income, and Centrelink only collects private rents when they are needed to determine Commonwealth Rent Assistance. Secondly, receipt of Rent Assistance ensures the rent has been validated, and this administrative dataset can contain residual incorrect rents in other circumstances. This focus is deliberate as well as an artefact of the dataset. Private rental remains the mainstream form of housing for low income households in Australia, so understanding the capacity of households to find and sustain affordable private rental is central to the policy settings for both housing and non-housing support.

Charts II and III portray the aggregate pathway over three years for newly unemployed and disabled persons and their households, following their progress from the first fortnightly Newstart Allowance and Disability Support Pension. The charts contain aggregated percentages of households in each of the following categories:

- Below the short term low cost budget standard;
- Above the short term low cost budget standard, but below the long term low cost standard;
- Above the long term budget standard;
- Exit from private rental (purchasing, rent-free, aged care or social housing, other); and
- Exit from benefit support.

Looking first at Chart II, it is evident that when commencing on the Newstart Allowance, for unemployed people almost all households (95%) start below the short-term low-cost budget standard, but when followed for three years, only 12% of those initial households are below that same standard. This graph does not necessarily imply that of those remaining below the standard at the end have always been below that standard, as some may have had episodes above it. What is particularly significant about this chart is that the great majority (65%) of Newstart Allowance households have exited the Centrelink system three years after entering it, with 53% exiting after just three and a half months.

**Chart II. Aggregate affordability trajectory of Newstart recipients over three years**
The proportion of households who successfully exit the Centrelink benefit system becomes one of the most useful measures of which client groups need which forms of government assistance, and when they need it. The simplest example of this is receipt of income support cash benefits from Centrelink. Another example is entry to long term social housing, an expensive option and one where time-limited support is inherently difficult to deliver. Quantifying which households are least likely to achieve independent and affordable private rental and why can help to guide the policy parameters for entry to social housing, as well as to alternative short-term forms of housing and non-housing assistance.

Equally important is the picture provided by the red band at the right side Chart II (ie. less than the short term budget standard), showing those households which have not made a transition to affordable private rental after three years. Section 4 explores this group further, including the relative impact of housing affordability across different benefit classes.

A further 18% of Newstart households at year three have unknown affordability (shown in white), due to their housing status changing from private rental to one of aged care or social housing, paying no rent, tenure not specified, or owning a home. These are very different groups with the former being of policy concern, the last much less so. Further breakdown of this group is provided in the next section of this paper.

Chart III. Aggregate affordability trajectory of Disability Pension recipients over three years

Chart III presents quite a different picture. When Disability Support Pension households receive their first payment, their living standards are much more varied. Only about one half (44%) are below the short-term low-cost budget standard for their household, a small 15% are above that standard but below the long-term low-cost budget standard, and 41% of households are above the low-cost standard. This reflects the greater generosity of the Disability Support Pension rate and means test relative to the Newstart Allowance.
Compared to the Newstart Allowance population, this cohort also has much greater stability in their standard of living as a whole, and it can be reasonably assumed that this stability is also the experience of most of these households individually. However, three in ten of these households changed housing tenure after three years, and a much smaller group (10% after three years) exit the Centrelink system entirely compared to Newstart Allowance households.

These differences in the long-term trajectories for different payment types suggest that when assembling evidence to compare client group need for long term government housing support, our most valid measure is their housing affordability in the third year. This overcomes two problems with point-in-time assessments of need. The first is the sampling bias inherent in data captured at the point where clients first request Centrelink or housing assistance, because households will generally present to support agencies at their time of highest need. The second is the fact that many households will overcome their short term difficulties without social housing assistance. This ability to decompose both short term and long term prospects provides valuable new information to support decisions on the level and type of housing assistance appropriate at different stages of need.

Our analysis here is restricted to financial measures, and does not extend to more complex sources of client need such drug/alcohol use or low work and life skills. Nevertheless we do indirectly capture a part of that complexity through using a long-term dataset for benefit group comparisons, since those risk factors are likely to lead to recurrent periods of Centrelink support. The Centrelink dataset also contains additional data elements which may be valuable, for example on periods when clients are “breached” with payments reduced or suspended, which could be explored at a later stage.

3. Contrasting cross-sectional and time-series measures of affordability

The housing sector typically measures housing affordability with point-in-time assessments, whether in data analysis or client interviews. In this section we contrast the results of point-of-first-assistance assessment with experience of persistent affordability stress for a range of household payment types. Persistent, or long-term, affordability problems are measured here by the household’s average weekly budget surplus (or deficit, shown as negative) relative to the higher long-term low cost budget standard, averaged across the third and final year they are monitored.

Chart IV builds on the earlier Charts by providing a fuller comparison of different Centrelink payment groups and tenure/landlord transitions. Household living standards at the first fortnight of payment (section (i)) are contrasted with three years later (ii), including housing tenure sub-categories for those who exit the private rental sector. Chart IV(i) illustrates that in the first fortnight between 60 to 80 percent of most payment categories are below the long-term low cost budget standard. Unsurprisingly, working couple families are somewhat different to other household types in receipt of a Centrelink income support payment. For this group two thirds (67%) are above the low cost budget standard.

As with the Charts II and III, Chart IV(ii) demonstrates that after three years, the living standards of many households have largely improved. Along with the better outcomes for the Working Couple Family benefit group, Student/Youth, Low Income Couple Family, Unemployment and Other have better average outcomes. Not surprisingly, the Disability/Carer and Age Pension categories do not improve as much in the long-term.

Chart IV(ii) also demonstrates that many households have exited the Centrelink system, with Student/Youth, the Unemployed, and Other the benefit types where this is most likely to occur. Housing tenure also changes. Having started off with private rental tenure, three years later 21% of Working Couple Families and 24% of Low Income Couple Families have now become home owners/purchasers. Comparing groups that transition into supported housing – including both social housing and aged care – unsurprisingly Disability/Carer (10%) and Age Pensioner (8%) households are most represented, followed by Sole Parent households (6%). About five percent of all households across the benefit groups transition into rental without any rent payment record held by Centrelink. These households may be missing out on Rent Assistance, or may be reliant on family or friends for this support. A substantial number of households have transitioned to an unrecorded housing tenure (between 12% and 21%), and further investigation is required to determine if this group are of ongoing policy concern.
4. Quantifying long term affordability pressures

With budget standards, comparisons in simple human terms can be made by calculating the estimated budget shortfall for categories of clients, otherwise known as a ‘poverty gap’ measure. A continuing deficit of $10 every week for a year may translate to essentials not bought or rents not paid. For each benefit group examined above, Table I shows the average weekly amount households in that category are above (or below) their relevant long-term low cost budget standard. These are expressed as both a dollar amount and a percentage of the relevant household budget standard. The percentage surplus provides a simple means of direct comparison across the different budgets and deficits, with the proportional shortfall for students and youth highest at 33% of their required budget.
Table I. Average after-housing low cost weekly surplus ($,%) for major benefit groups

<table>
<thead>
<tr>
<th>Benefit group</th>
<th>L/t surplus ($)</th>
<th>Surplus (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working couple family</td>
<td>40.69</td>
<td>8%</td>
</tr>
<tr>
<td>Low income cple family</td>
<td>5.20</td>
<td>0%</td>
</tr>
<tr>
<td>Single parent benefit</td>
<td>-33.80</td>
<td>-7%</td>
</tr>
<tr>
<td>Age pension</td>
<td>-1.34</td>
<td>-2%</td>
</tr>
<tr>
<td>Disability / carer</td>
<td>11.33</td>
<td>0%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>-53.39</td>
<td>-26%</td>
</tr>
<tr>
<td>Student / youth</td>
<td>-68.81</td>
<td>-33%</td>
</tr>
</tbody>
</table>

These comparisons include only households remaining on Centrelink support during their third year after commencing, in order to focus on households in need of longer term support or more intensive early interventions. Again the long-term, and not the short-term, low cost budget standard has been used as the benchmark, since these households have now been in receipt of income support for part or all of three years. The full third year of client records are included in Sections 4 and 5 to ensure sufficient sample size for those groups most likely to exit Centrelink, such as unemployed households.

The three groups with significant weekly deficits are those on Parenting Payment (Single), Newstart, and on Student/Youth Allowances. Age Pension recipients also have a slight deficit compared to Disability Pension recipients, some of whom will be families with children. Further analysis using variables like duration and age would be useful.

These averages are preliminary estimates only and should be treated with some caution, since they include only periods when benefit, income and rental data is available. Some households, particularly those on short term unemployment support, will also have had periods off-benefit, typically with an unrecorded higher income lifting their true average. Note that the percent surplus/deficit is calculated for each household.

5. Urban, rural and remote differences in Australia

Comparing housing affordability along inter-State, regional and remote lines, we again focus on those receiving Centrelink support at the end of the three years, and calculate an average dollar surplus against the long-term budget standard using each household's income across their third year of benefit support.

As explained earlier, we created various regional and remote household budget standards by adjusting capital city budget standards to reflect regional pricing differentials across Australia. Queensland is the only State or Territory with a detailed survey of regional prices, so these results provided the basis for adjusting all capital city budget standards across the five Australian Bureau of Statistics categories of major urban, inner regional, outer regional, remote and very remote. In the absence of further evidence we concluded the best option was to apply the relative pricing differentials between Queensland’s major cities, and regional and remote areas to each State and Territory’s capital-city budget standard. An alternative option would have been to treat regional and remote pricing as constant in all jurisdictions, retaining distinct budgets only for capital cities.

Table II. Comparison of Australian affordability ($ budget surplus) by remoteness

<table>
<thead>
<tr>
<th>Remoteness</th>
<th>Major urban</th>
<th>Inner region</th>
<th>Outer region</th>
<th>Remote</th>
<th>Very remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working couple family</td>
<td>107.85</td>
<td>147.38</td>
<td>161.52</td>
<td>60.27</td>
<td>149.40</td>
</tr>
<tr>
<td>Low income cple family</td>
<td>-94.21</td>
<td>-36.21</td>
<td>-46.72</td>
<td>-187.23</td>
<td>-30.23</td>
</tr>
<tr>
<td>Single parent</td>
<td>-85.23</td>
<td>-47.77</td>
<td>-39.50</td>
<td>-52.43</td>
<td>75.06</td>
</tr>
<tr>
<td>Age pension</td>
<td>-23.82</td>
<td>-11.56</td>
<td>-10.43</td>
<td>-26.81</td>
<td>-6.46</td>
</tr>
<tr>
<td>Disability / carer</td>
<td>-23.90</td>
<td>-14.10</td>
<td>0.15</td>
<td>5.16</td>
<td>32.16</td>
</tr>
<tr>
<td>Unemployment</td>
<td>-95.51</td>
<td>-81.57</td>
<td>-75.67</td>
<td>-81.32</td>
<td>-139.37</td>
</tr>
<tr>
<td>Student / youth</td>
<td>-67.83</td>
<td>-77.47</td>
<td>-96.69</td>
<td>-138.08</td>
<td>-110.32</td>
</tr>
</tbody>
</table>

The general pattern in Table II is towards increasing housing affordability as household location moves from major urban to regional Australia. For example, for single parent households the weekly after housing
disposable income below the relevant long-term, low-cost budget standard declines from a $65 per week deficit in major urban areas to a $39 per week deficit in outer regions. Clearly, a significant contribution to this overall finding is the general trend towards average lower private rents when moving away from the major urban areas. However, the student/youth group shows a declining living standard moving from major urban to outer regional centres. The results for remote and very remote areas should be treated with caution as sample sizes are smaller, with some less than 100 households.

Comparing across States and Territories in Table III, there are clearly marked differences. Households in Queensland, South and West Australia, Tasmania and Victoria generally fare better than the equivalent group in New South Wales and the ACT. The Northern Territory has been excluded here, due to relatively low household numbers. Subsequent research could examine the relative impact of rental and income differentials in these differences, though rental differences could be expected to be a significant factor.

Table III. Comparison of Australian affordability ($ budget surplus) by State and Territory

<table>
<thead>
<tr>
<th>State / Territory</th>
<th>ACT</th>
<th>NSW</th>
<th>Qld</th>
<th>SA</th>
<th>Tas</th>
<th>Vic</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working couple family</td>
<td>22.23</td>
<td>99.40</td>
<td>143.50</td>
<td>123.15</td>
<td>120.15</td>
<td>124.37</td>
<td>137.33</td>
</tr>
<tr>
<td>Low income cple family</td>
<td>-154.35</td>
<td>-108.70</td>
<td>-67.47</td>
<td>2.95</td>
<td>-31.60</td>
<td>-65.46</td>
<td>-55.15</td>
</tr>
<tr>
<td>Single parent</td>
<td>-101.32</td>
<td>-76.43</td>
<td>-50.99</td>
<td>-52.97</td>
<td>-46.16</td>
<td>-43.71</td>
<td>-42.47</td>
</tr>
<tr>
<td>Age pension</td>
<td>-46.47</td>
<td>-30.26</td>
<td>-10.06</td>
<td>0.62</td>
<td>-0.05</td>
<td>-28.30</td>
<td>-1.15</td>
</tr>
<tr>
<td>Unemployment</td>
<td>-102.64</td>
<td>-103.85</td>
<td>-81.10</td>
<td>-85.85</td>
<td>-81.82</td>
<td>-86.48</td>
<td>-81.19</td>
</tr>
<tr>
<td>Student / youth</td>
<td>-60.49</td>
<td>-95.52</td>
<td>-63.96</td>
<td>-57.12</td>
<td>-59.29</td>
<td>-63.14</td>
<td>-62.68</td>
</tr>
</tbody>
</table>

6. Conclusion

The key components of the methodology outlined in this paper are:
- After-housing budget standards created to cover all household types
- Inclusion of actual housing costs for low income renters
- Regional and remote adjustment of budget standards for pricing differentials of goods and services
- Addition of a short-term low cost budget standard to measure short-term hardship
- Access to the longitudinal Centrelink 1% sample file
- Charting of three year affordability trajectories following major benefit classes
- Calculation of dollar budget surplus/deficit for benefit classes and regions

This combination of longitudinal Centrelink data and budget standards has produced a surprisingly rich analytic tool. The resulting data model provides important new evidence on the duration and type of need experienced by various categories of low income renters, which in turn supports policy development around the timing and nature of government support needed by various groups.

For example, the aggregate affordability trajectory of Newstart recipients confirms that most exit Centrelink benefits in a relatively short time. But secondary analysis also uncovers the proportion who experience recurrent need for income support, as well as the high level of budget shortfall they face compared to other benefit classes. This provides further evidence to support recently developed cross-agency initiatives like targeted early interventions to increase skills and access employment, or assistance to access private rental, rather than simply waitlisting for an expensive long-term support like social housing.

While recent targeting initiatives have emphasised clients with complex needs, this paper also provides evidence for assistance to traditional priority groups like aged and disability pensioners. Future policy reviews may need to develop a framework which accommodates both types of need, within the wider context of ensuring a sustainable tenant mix. Other policy developments could seek to address geographical differences in housing stress. For example, a regionally adjusted Rent Assistance might help to reduce the larger shortfalls generally experienced by households in major urban and inner regional localities.
Establishing a large data model with 1.27 million fortnightly client records and 12,000 adjusted budget components takes some time, but once completed any subsequent analysis is straightforward. Other promising options to extend analysis of this dataset could include:

- Decompose regional and inter-State differentials to quantify the relative contribution of rent and earned income variations;
- Extend analysis of client groups by disaggregating household types, for example, considering small and large families, age pension recipients aged under and over 75, age pension singles and couples; and indigenous and non-indigenous households; and
- Analyse longitudinal Centrelink data alongside client social housing assessment data on complex client needs, to complement the focus here on purely economic factors (long term income and costs).

Developing evidenced-based housing social policy requires a strong and rigorous research base. It is hoped that this paper demonstrates what residual measures of housing affordability can contribute to housing policy analysis and development, particularly as a more finely attuned measure of housing stress between household types than the standard ratio approach. The paper’s longitudinal analysis is also an important development that has great policy research potential. We look forward to seeing further developments in both these aspects of housing affordability.

References

Department of Families, Housing, Community Services and Indigenous Affairs, Documentation for Longitudinal Data Set 1% Sample, 2009.
Technical Appendices

1. Reference tables for short term and long term low cost budgets for adults

<table>
<thead>
<tr>
<th>Household type &amp; employment</th>
<th>short term ($pw)</th>
<th>low cost ($pw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Couple+children full time</td>
<td>310.12</td>
<td>354.78</td>
</tr>
<tr>
<td>Couple+children part time</td>
<td>296.10</td>
<td>338.74</td>
</tr>
<tr>
<td>Couple+children not working</td>
<td>289.60</td>
<td>331.30</td>
</tr>
<tr>
<td>Single parent full time</td>
<td>197.20</td>
<td>225.60</td>
</tr>
<tr>
<td>Single parent part time</td>
<td>185.08</td>
<td>211.74</td>
</tr>
<tr>
<td>Single parent not working</td>
<td>172.97</td>
<td>197.87</td>
</tr>
<tr>
<td>Couple full time work</td>
<td>317.63</td>
<td>363.37</td>
</tr>
<tr>
<td>Couple part time work</td>
<td>303.61</td>
<td>347.33</td>
</tr>
<tr>
<td>Couple not working</td>
<td>297.11</td>
<td>339.89</td>
</tr>
<tr>
<td>Single full time work</td>
<td>211.26</td>
<td>241.68</td>
</tr>
<tr>
<td>Single part time work</td>
<td>199.14</td>
<td>227.82</td>
</tr>
<tr>
<td>Single not working</td>
<td>195.49</td>
<td>223.64</td>
</tr>
<tr>
<td>Single sharer full time work</td>
<td>199.31</td>
<td>228.01</td>
</tr>
<tr>
<td>Single sharer part time work</td>
<td>187.19</td>
<td>214.14</td>
</tr>
<tr>
<td>Single sharer not working</td>
<td>183.54</td>
<td>209.97</td>
</tr>
<tr>
<td>Couple retired</td>
<td>261.32</td>
<td>298.95</td>
</tr>
<tr>
<td>Single retired</td>
<td>158.97</td>
<td>181.86</td>
</tr>
<tr>
<td>Single sharer retired</td>
<td>154.58</td>
<td>176.84</td>
</tr>
</tbody>
</table>

Notes:
Sydney 2007 example tables. Adjusted budget standards were created for all states and territories, levels of remoteness, and years.

2. Reference tables for short term and long term low cost budgets for children varied by age of child and number of children in a household

<table>
<thead>
<tr>
<th>Child age</th>
<th>short term ($pw)</th>
<th>low cost ($pw)</th>
<th>Children (num)</th>
<th>Scalar</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>87.80</td>
<td>100.09</td>
<td>1</td>
<td>1.00</td>
</tr>
<tr>
<td>1</td>
<td>87.80</td>
<td>100.09</td>
<td>2</td>
<td>0.99</td>
</tr>
<tr>
<td>2</td>
<td>69.72</td>
<td>79.48</td>
<td>3</td>
<td>0.95</td>
</tr>
<tr>
<td>3</td>
<td>51.65</td>
<td>58.88</td>
<td>4</td>
<td>0.91</td>
</tr>
<tr>
<td>4</td>
<td>59.55</td>
<td>67.89</td>
<td>5</td>
<td>0.88</td>
</tr>
<tr>
<td>5</td>
<td>67.46</td>
<td>76.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Total cost of all children in a household is adjusted downwards to allow for economies of scale, based on a generalised approach to differences identified in the original SPRC budget standards.

3. Reference tables for remoteness adjustments of capital city budgets

<table>
<thead>
<tr>
<th>Remoteness</th>
<th>Food</th>
<th>Alcohol</th>
<th>Clothing</th>
<th>Housing</th>
<th>Services</th>
<th>Health</th>
<th>Transport</th>
<th>Recreation</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major urban</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Inner regional</td>
<td>106.0</td>
<td>99.0</td>
<td>98.0</td>
<td>87.0</td>
<td>98.0</td>
<td>100.0</td>
<td>98.0</td>
<td>99.0</td>
<td>96.0</td>
</tr>
<tr>
<td>Outer regional</td>
<td>104.0</td>
<td>99.0</td>
<td>98.0</td>
<td>90.0</td>
<td>99.0</td>
<td>101.0</td>
<td>99.0</td>
<td>101.0</td>
<td>98.0</td>
</tr>
<tr>
<td>Remote</td>
<td>106.2</td>
<td>103.7</td>
<td>88.8</td>
<td>97.3</td>
<td>102.8</td>
<td>102.1</td>
<td>104.4</td>
<td>107.4</td>
<td>96.2</td>
</tr>
<tr>
<td>Very remote</td>
<td>106.0</td>
<td>104.0</td>
<td>114.0</td>
<td>63.0</td>
<td>107.0</td>
<td>102.0</td>
<td>107.0</td>
<td>102.0</td>
<td>97.0</td>
</tr>
</tbody>
</table>

Notes:
Derived from results for twenty-six local government areas in Queensland, using the Index of Retail Prices in Regional Centres, Office of Economic and Statistical Research 2006.