

Examining new data to better understand CRA and other household assistance payments



Based on AHURI Final Report No. 351: The utility of new data in understanding housing insecurity

What this research is about

This research investigates the potential of using the Department of Social Services (DSS) DOMINO (Data Over Multiple Individual Occurrences) dataset as a fine-grained, within-year data resource for housing research, and in particular explores the capacity of the DOMINO dataset to yield new insights into patterns of CRA (Commonwealth Rent Assistance) receipt in households reliant on Newstart Allowance (NSA), pensions and Family Tax Benefit (FTB).

The context of this research

Australian housing research commonly relies on datasets offering stock data; that is annual or point-in-time income and labour force status data that do not capture changes in income within each year (or a specified time-period). Statistical investigations into questions of household financial risks in labour, housing and welfare markets therefore confront the potentially significant problem of aggregation bias.

This is the first academic study of 'flow data' from the newly available DSS DOMINO dataset to assist investigations of within-year income volatility in Australia. This very large, highly complex dataset includes, at an individual and household level, daily event-based information on all Australian social security recipients' demographics, benefits history, concessions, and housing since 2000. These DOMINO events are each a record of a change that occurred in an individual's circumstances that on a particular day which may affect their social security payment eligibility, rate or payability.

As an initial step to explore the potential relationship between income volatility and housing instability, this research examines the individual within-year and across-year patterns of CRA receipt in households reliant on Newstart Allowance (NSA), pensions and Family Tax Benefit (FTB). As such it contributes to understanding the financial experience of households receiving CRA and showcases DOMINO as a potentially rich resource for housing research.

Why is DOMINO available now?

In 2015, the Australian Government released a Public Data Policy Statement that placed new expectations on government agencies and bodies to make high-value data (including DOMINO) available for use by the public, industry and academia.

To facilitate this, the Australian Institute of Health and Welfare (AIHW) commonly functions as the interface between researchers and the Department. The AIHW manages the data requested by researchers, provides advice on applications, and organises Departmental approval of findings.

Makeup of the DOMINO dataset

DSS provided 10 separate dataset files containing selected variables and observations. Each of these data files contained a list of variables and millions of observations (the smallest data file contained over 5 million observations, while the largest contained over 1,560 million observations).

The data files included information on the type of Centrelink benefit received, the period and duration of the benefit payments, as well as some information on benefit recipients, such as: gender, age, family composition, state of residency, type of accommodation, home ownership status or type and amount of rent paid. Information was also provided on Centrelink payment types and amounts; whether they were one-off or regular payments to recipients, or payments to third parties.

The key findings

Commonwealth Rent Assistance and housing instability/affordability

CRA is a non-taxable Australian Government supplement to a social security benefit or family payment to people in the private rental market who pay above applicable rent thresholds. To receive CRA, a household must receive a primary payment, either Newstart, Disability Support Pension, Age Pension, Parenting Payment or Austudy/ Youth Allowance; or receive a Family Tax Benefit at greater than the base rate.

The amount of CRA a recipient can be paid can change if the rent paid increases or decreases, if recipients move house, if their income increases or decreases, or if their family circumstances change, for example on separation from a partner, or if the number of children in the family changes. As a result, changes in Rent Assistance may reflect the volatility of household incomes or other circumstances that can be associated with housing stress.

DOMINO data potentially allows researchers to disentangle some of these factors, including whether they move between different postcodes, whether their private earnings change upwards or downwards and whether their household composition changes. Potentially, these changes can then be linked to changes in the amount of Rent Assistance they receive and to measures of housing stress.

General findings from DOMINO

- Between January 2000 and October 2017, 11 million Australians were identified to have received a Centrelink payment. This finding offers compelling evidence that welfare is as much part of mainstream life as health and education.
- Over five million individuals received CRA during this period.
- Demand for CRA is far higher than commonly understood. The research identified nearly two million (1,967,028) households who received CRA payments during 2016.
- There is a significant churn of individuals who receive CRA that is not captured by stock data commonly used in housing policy analyses. The research found a highly fluid population relied on CRA during 2016, with 747,167 households starting to receive this payment and 505,942 ceasing receipt.
- CRA recipients received on average 3.2 instances of CRA payments; half of them receiving 2 instances of CRA payments during the period studied.
- While the number of people receiving CRA has gradually increased over time, there are fewer new CRA recipients joining each year.

- 70 per cent of those who received CRA between January 2000 and October 2017 received less than three years total accrued CRA payments; 51 per cent of recipients most recently received this payment for less than a year. Fewer than one in five (19.7%) had most recently been receiving CRA for over two years.
- Most CRA recipients appear to have received at least once a one-off irregular CRA payment, suggesting within-year income volatility.
- The average amount of one-off CRA payments across the cohorts was significant (\$78.50 to \$100). Potentially more significant is the far wider spread of amounts typically paid as one-off payments that may (or may not) be highly disruptive to a household's income stability, with a standard deviation from the average of between \$283.80 and \$462.10.
- A scoping analysis of records found that 54.7 per cent were associated with women, suggesting that women are more likely to receive CRA than men.
- Newstart recipients were far more likely to have most recently (77%) received a spell of CRA shorter than a year—reflecting the policy design of this payment. In contrast 72.6 per cent of the most recent CRA spells linked to FTB payments were for more than a year—also reflecting the longer term needs of families with dependent children.

Comparing DOMINO with previous datasets

In a recent research paper titled *Vulnerable Private Renters: Evidence and Options*, the Productivity Commission states that CRA is 'a targeted payment reaching over 1.3 million recipients in 2016–17 at a cost of over \$4 billion per year. However, this is not accurate. The AIHW report referenced by the Productivity Commission made no comment on the number of people who received CRA in the 2016–17 financial year. Instead, the AIHW drew on DSS stock statistics to make the more specific and narrow observation that on 30 June 2017 there were 1.34 million households receiving CRA.

At first glance, the quarterly stock of CRA recipients may appear to suggest fairly stable numbers. DSS has only published CRA demographic data since March 2017. On 31 March 2017 a similar number of households (1,339,398) was recorded to be receiving CRA. An inference could be drawn—as was apparently done by the Productivity Commission—that approximately 1.3 million individuals received CRA in 2016–17.

However, using DOMINO, this research identified nearly 2 million (1,967,028) households to be receiving CRA payments for some period of time during 2016. Further, this research found a highly fluid population relied on CRA, with 747,167 households starting to receive this payment during the year and 505,942 ceasing receipt that year.

Income volatility

Emerging research from the US finds that it is false to assume a person's annual income is closely correlated to the actual income she or he may receive on a particular month. A JPMorgan Chase study of 1 million randomly selected bank customers found that a majority (55%) experienced month-to-month income fluctuations of more than 30 per cent, with labour market earnings the major contributor for this volatility.

The prevalence and persistence of within-year household income variation in Australia has been barely explored. A recent qualitative study of 70 low- and moderate-income households found that over half the participants had highly erratic (> 25%) fortnightly incomes.

International studies have found that households whose incomes fluctuate by more than 25 per cent from pay to pay experience sharply higher risks of emotional conflict, housing instability and financial hardship.

Using DOMINO to study CRA

One of the central aims of the research is to identify the periods of time—or spells—that a person received CRA. Researchers split the DOMINO sample into CRA recipients receiving payments into different time periods, and also into three cohorts:

- Cohort 1: Persons who were currently not receiving any CRA benefit and have received CRA benefit payment for the period between January 2000 and October 2017 (inclusive). Cohort 1 comprised over 3.5 million individuals. The number of people receiving CRA payments per year has increased over time, but this is mainly due to individuals still receiving the payments over time, with fewer newer CRA recipients joining every year.
- Cohort 2: Persons who were currently receiving CRA benefit and have their first CRA benefit payment between the years 2000 and 2017 (inclusive).
- Cohort 3: Persons who currently may or may not be receiving any payments and had their first benefit payment prior to year 2000.

In general, the majority (57.3%) of CRA payment records are linked to recipients of Newstart Allowance, with Family Tax Benefit (22.3%) and Pensions (19.7%) the other major payments, with Rent Assistance Parenting (0.4%) and Rent Assistance Abstudy (0.3%) a small minority.

Cohort observations

Cohort 1 comprises the highest proportion of records in the sample (66.5%). CRA payment records in Cohort 1 are also more strongly connected with individuals receiving Newstart Allowance (63.4%) than Cohort 2 (38.3%) or Cohort 3 (55.4%). It is likely that the main reason for this disproportionately high association of CRA payment records with Newstart in Cohort 1 is due to greater payment volatility.

Cohort 2 shows a higher than average proportion of CRA records linked to the more stable Family Tax Benefit (32.2%) and Pension payments (28.6%). Again, this is unsurprising given that CRA records for this cohort is less likely to exhibit the greater, longer-run CRA record generation of more sporadic payments such as Newstart.

Cohort 3 has the highest rate of Pension related CRA records (38%) which is also expected given that this cohort has historical data with age determining this cohort.

What this research means for policy makers

The researchers found that a deeper understanding of the database's complex variables and values—and their historically- and policy-inscribed relationships—is required for more detailed research. Once these issues are resolved, DOMINO offers a unique and powerful resource for housing and welfare research that moves beyond the initial descriptive statistics presented in this paper. Regressions, time-series analyses and other modeling techniques are likely to yield important findings for a wide range of academic disciplines.

To cite the AHURI research, please refer to:

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