Poverty and Social Exclusion in the UK

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Measurement and Change in Deprivation and Exclusion in Australia; A report on research in progress

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Poverty and Social Exclusion in the UK
Overview

The Poverty and Social Exclusion in the UK Project is funded by the Economic, Science and Research Council (ESRC). The Project is a collaboration between the University of Bristol, University of Glasgow, Heriot Watt University, Open University, Queen's University (Belfast), University of York, the National Centre for Social Research and the Northern Ireland Statistics and Research Agency. The project commenced in April 2010 and will run for three-and-a-half years.

The primary purpose is to advance the 'state of the art' of the theory and practice of poverty and social exclusion measurement. In order to improve current measurement methodologies, the research will develop and repeat the 1999 Poverty and Social Exclusion Survey. This research will produce information of immediate and direct interest to policy makers, academics and the general public. It will provide a rigorous and detailed independent assessment on progress towards the UK Government's target of eradicating child poverty.

Objectives

This research has three main objectives:

- To improve the measurement of poverty, deprivation, social exclusion and standard of living
- To assess changes in poverty and social exclusion in the UK
- To conduct policy-relevant analyses of poverty and social exclusion

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Contents

Abstract

This paper reports some initial results from a survey of poverty and social exclusion conducted in Australia in 2010. Drawing on methods developed in earlier SPRC research conducted in 2006, and on results generated by a companion survey that was completed by a sub-set of those who responded to the 2006 survey, the research is the first of its kind to apply a deprivation approach in Australia and the first to present a comprehensive national picture of social exclusion. The analysis reported in this paper indicates that the deprivation methodology is capable of generating robust and plausible results about what constitutes the essentials of life that can be used to examine the nature of social disadvantage in Australia and who is most affected by it. Results from sensitivity analysis also suggest that there is value in applying alternative methods when estimating the incidence of deprivation as a robustness check, given the limitations of some aspects of the approach. The Australian economy has recovered strongly and quickly from the global financial crisis, and the results presented here confirm that the social impact of the crisis in Australia has also been relatively modest, with many incidences of deprivation and forms of exclusion declining between 2006 and 2010, particularly those relating to exclusion from the labour market and employment. Less progress has, however, been made in tackling deep exclusion and this is an issue that requires greater attention from researchers and a task that requires greater attention from policy makers.

Key words: Deprivation, Social Exclusion, Child deprivation

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1 Introduction

This paper reports some initial results from a survey of poverty and social exclusion conducted in Australia in mid-2010. The survey replicates many of the questions included in an earlier survey (conducted in 2006) and a companion survey was also administered to a sub-set of those who responded to the 2006 survey. The main focus of the two 2010 surveys is on examining the impact of the economic downturn (Australia did not technically experience a recession) that followed the global financial crisis. Data from all three surveys will also be used to examine the robustness of the methodologies used to identify and measure deprivation and social exclusion and, for the first time, to explore the underlying dynamics of social disadvantage in Australia. First, a word of caution: results from the two surveys conducted in 2010 have only recently become available for analysis and the results presented below should therefore be regarded as preliminary.

The research on which the analysis is based forms part of a series of projects funded by the Australian Research Council (ARC), two of which were funded under the ARC Linkage grants program.[1] Under this program, academic researchers work collaboratively with industry partners – where 'industry' is defined broadly to include government departments and relevant NGOs – who provide cash and in-kind support for the project.[2] Their direct involvement in the research has many advantages. Most important of these, it has allowed direct engagement with policy makers, community sector agency practitioners and service clients designed to ground the research in the experience of poverty and disadvantage in order to make the findings relevant to those working at the coalface of practice and policy.

The research is the first of its kind to apply a deprivation approach in Australia and was the first to present a comprehensive national picture of social exclusion. Previous studies have focused on measuring poverty on the basis of income (e.g. Harding, Lloyd and Greenwell, 2001; Wilkins, 2008; Saunders and Hill, 2008), using a poverty line set at 50 per cent of median income, with sensitivity analysis conducted to check the robustness of the estimates. This has shown that the estimates are sensitive to small shifts in the poverty line, particularly for those whose income is mainly derived from social security payments. Many Australian benefits are close to the poverty line and the flat-rate, income-tested nature of the Australian social security system leads to a bunching of incomes – particularly for groups like the aged (Tanton *et al*., 2009). There has also been concern about the reliability of the income data

[1] The authors acknowledge the financial support provided under ARC Linkage projects LP0560797 and LP100100562 and Discovery project DP0452562.

[2] The most recent project (which forms the basis of the results presented here) includes as industry partners one federal government agency, two state government agencies and five NGOs from the community sector.

reported in surveys, even those conducted by the Australian Bureau of Statistics (ABS, 2002a; 2003) and this has thrown further doubt on the value of estimating poverty on the basis of income alone.[3]

Despite the growing chorus of criticism directed at poverty line studies, no effort has yet been made to apply a deprivation approach in Australia. This is despite the Department of Social Security (DSS) concluding almost two decades ago that such research had the potential to contribute to improved understanding of the adequacy of social security payments (DSS, 1995). The Department funded a pilot deprivation project on a small sample of its clients, and although it demonstrated that the approach was viable and should be applied more generally, this was not taken up (Travers and Robertson, 1996). It did, however, result in a series of questions about different forms of financial stress being included in the *Household Expenditure Survey* conducted since 1998-99 (ABS, 2002b; Bray, 2001).

A sub-set of these questions have also been included along with several others in the *Household Income and Labour Dynamics in Australia* (HILDA) survey that commenced in 2000 (Marks, 2007; Hahn and Wilkins, 2008). Although the financial stress questions do not measure deprivation as such, they have been used to validate that those with low incomes are experiencing the kinds of financial difficulties associated with poverty. However, a degree of caution must been applied to the financial stress data because studies reveal that the reported incidence of financial stress is not restricted to those with incomes near or below the poverty line – even though the questions identify a shortage of money as the underlying cause (Saunders and Adelman, 2006; Harmer, 2009).

These factors in part explain why poverty research has failed to convince policy makers of the need for action, although this situation has been exacerbated by debates over the measurement of poverty (led in part by “the other Peter Saunders”) and by the unwillingness of the Coalition Government in office between 1996 and 2007 to acknowledge the existence of poverty. There are signs that this situation is beginning to change. The Labor Government elected in 2007 has made social inclusion the focus of its social policy agenda and has established bureaucratic and advisory mechanisms to assist its policy development. It has released a statement of its social inclusion priorities (Australian Government, 2009) and a new Australian Social Inclusion Board has produced a set of indicators that is being used to monitor performance and compare it with that achieved in selected EU countries (Australian Social Inclusion Board, 2009a). The indicators include at-risk of-poverty rates based on poverty lines set at 40, 50 and 60 per cent of median income, as well as measures of the severity and persistence of poverty. A

[3] Although much has been made of the sensitivity of poverty rates to where the poverty line is set, less attention has been paid to the fact that they are equally sensitive to reporting errors in the data used to estimate median (and hence set the poverty line).

module on social inclusion has also been included in the 2010 General Social Survey and that will produce important new data that will be used to identify social exclusion and monitor progress achieved by the social inclusion agenda.

Although there is concern that the government is placing too much emphasis on rhetoric and too little on action, there is no doubt that the prospects for getting issues of poverty and social disadvantage back onto the policy agenda are better now than at any time since the mid-1990s. Against this background, the research described below has the potential to have an impact, not only on how issues like poverty and exclusion are conceived, measured and acknowledged as policy issues, but also on the shape of the policy responses introduced to address them.

The paper is organised as follows: Section 2 provides a brief overview of how the surveys were designed and conducted and the methods used to generate the main findings. Section 3 presents some initial results on deprivation in 2010 and how it has changed since 2006, focusing for illustrative purposes on some of the underlying methodological and empirical issues. Section 4 reviews the indicators of social exclusion and examines how social exclusion has changed, while Section 5 provides a summary of the main conclusions.

2 Survey Design and Sample Characteristics

The *Community Understanding of Poverty and Social Exclusion* (CUPSE) survey was distributed by mail to 6,000 adult Australians randomly selected from the electoral rolls in April 2006.[4] It generated 2,704 responses, equivalent to a response rate of 46.9 per cent – somewhat higher than that achieved by other similar social surveys conducted around that time.[5] The detailed comparisons reported by Saunders, Naidoo and Griffiths (2007: Table A.3) indicate that the CUPSE sample is broadly representative of the general population, although the following groups are under-represented: males; those who have never been married; those who live alone; Indigenous Australians; those with lower levels of education; those in private rental accommodation; and those with incomes between $1,000 and $2,000 a week. Some of these

[4] Voting is compulsory in Australia and the vast majority of those eligible to vote (aged 18 and over) are included on the electoral rolls.

[5] A truncated version of the CUPSE questionnaire focusing on deprivation and exclusion indicators was also distributed to the clients of selected welfare services for completion when they accessed services and this process was repeated on a broader range of services in 2008. Results from both surveys are presented and analysed in Saunders, Naidoo and Griffiths, 2007 and Saunders and Wong, 2009).

differences are inter-related, while others may reflect the difficulty involved in conducting a mail survey.

One area where the difference between the sample and the adult population was most pronounced is in relation to age structure. As is common for mail surveys, older people (aged 50 and over) are over-represented relative to younger people (particularly those aged under 30) among the respondents. This age-related bias can affect key aspects of the survey results (e.g. when identifying whether an item attracts majority support for being essential) and in these instances, population-based weights have been applied to the raw data before drawing any conclusions. Aside from this, the unweighted data are used in the following analysis, in part because previous analysis indicates that the results are relatively unchanged when (age-based) weights are applied, but also because weights have not yet been fully developed for the 2010 survey.[6]

The *Poverty and Exclusion in Modern Australia* (PEMA) survey was distributed to a new sample of 6,000 adults in May 2010 and generated 2,644 responses by the end of July, a response rate of 46.1 per cent. The PEMA survey was accompanied by a follow-up survey of 1,000 of those who responded to the 2006 CUPSE survey. The follow-up survey attracted 533 responses, equivalent to a response rate of 60.1 per cent.[7] Both surveys contained the same questions as CUPSE, aside from the removal of some questions about attitudes to poverty and inequality and the addition of questions relating to community participation and location, and the impact of the GFC. No changes were made to the questions used to identify deprivation.

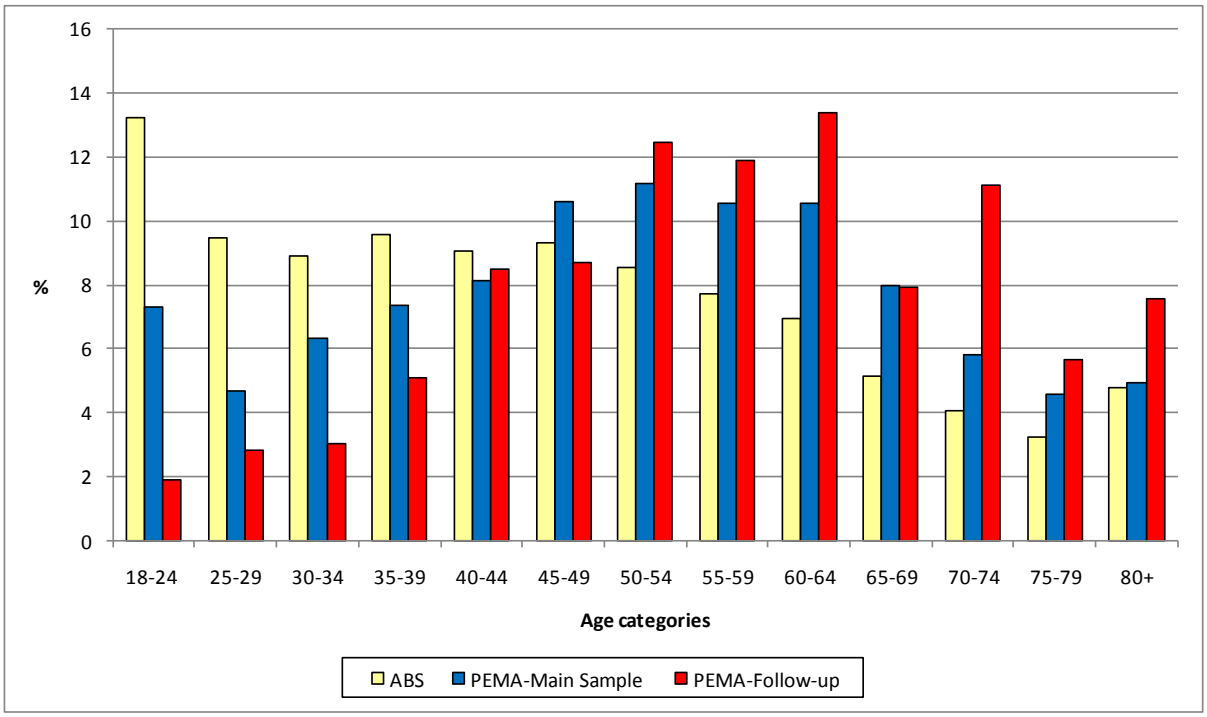
The over-representation of older people in the CUPSE (and PEMA) samples was magnified in the PEMA follow-up because the sampling frame itself contained an over-representation of older people. Although this can be corrected by applying weights to the raw follow-up data, this presents a greater challenge when the data are longitudinal and re-weighting the follow-up sample has not yet been attempted. For the purposes of this paper, the potential bias in the follow-up sample in particular is an issue that needs to be kept in mind when reviewing the results presented later. Figure 1 compares the age structure of the population (derived from official sources) with that of the PEMA main and follow-up samples. The age bias in the main PEMA sample is similar to that obtained in 2006 and is exaggerated in the follow-up

[6] It is likely that a more sophisticated weighting system will be developed for 2010, although this will require application of the same system to the 2006 data when making comparisons.

[7] Response rates have been calculated after removing returned surveys indicating that the address was incorrect. This affected a larger proportion of the follow-up sample (102 returns, or 10.2 per cent of the mail-out) compared with 259 wrong address returns (4.3 per cent) in the case of the main PEMA survey. In principle, the electoral rolls in mid-2010 should have been accurate as the government's term in office was about to expire (there is a maximum three-year term in Australia) and a federal election was due by the end of the year.

sample because the sampling frame in that case already contains a disproportionate number of older people.

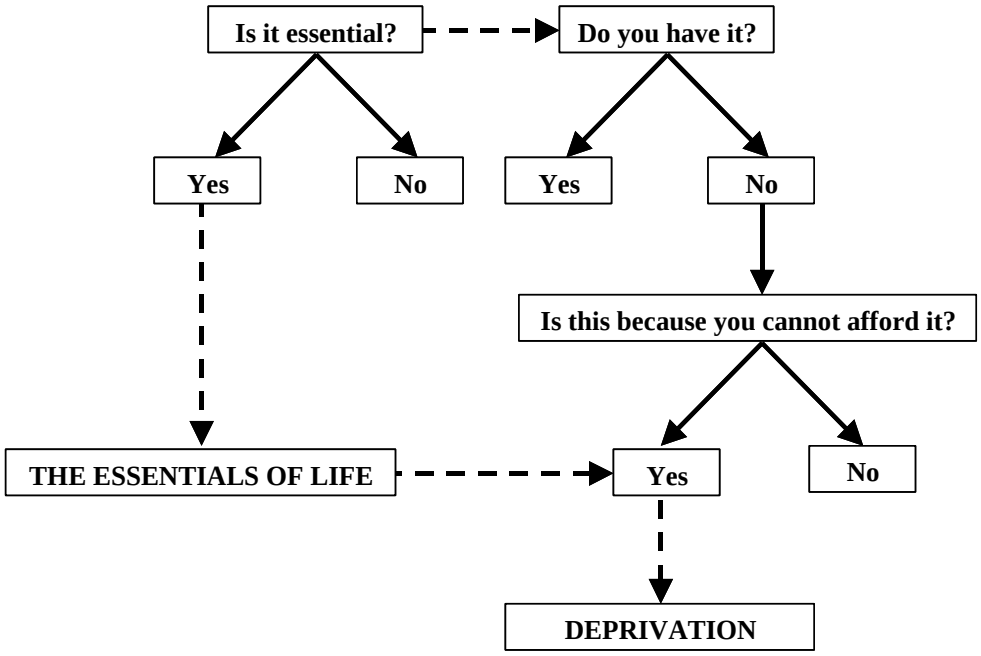
Figure 1: The Age Structure of the Population and the Two 2010 Samples



The survey questionnaires included a series of items (61 in the case of CUPSE, slightly more in PEMA), some of which had been identified as necessary to achieve a decent standard of living by participants in a series of focus groups with clients of selected welfare services (see Saunders and Sutherland, 2006). Other items were drawn from overseas deprivation studies conducted in New Zealand, Ireland and Britain and included those used to identify hardship or financial stress in other Australian surveys (Bray, 2001; McColl, Pietsch and Gatenby, 2001; Breunig and Cobb-Clark, 2006; Hahn and Wilkins, 2008).[8] Survey respondents were asked to provide a 'Yes' or 'No' answer to three questions about each item: Is it essential? Do you have it? And, if not, Is this because you cannot afford it? Figure 2 shows how the responses to these three questions are used to identify deprivation.

[8] Some of these latter questions were modified in light of comments about their relevance and usefulness provided during the focus group discussions with low-income Australians.

Figure 2: Identifying the Essentials of Life and Deprivation: Survey Structure



The key word 'essential' was defined in the survey as referring to 'things that no-one in Australia should have to go without today'. The items themselves were grouped into an initial list of 25 everyday items that included such things as a substantial meal at least once a day, a car, a television and up to $500 in savings for an emergency, followed by sets of items arranged into a series of domains covering: accommodation and housing; location and transport; health and health care; social and community participation; care and support; and employment, education and skills. Identification of the domains, as well several of the specific items included, reflected the focus group discussion with low-income Australians referred to earlier (Saunders, Naidoo and Griffiths, 2007; 2008).[9]

Following international practice (see Gordon, 2006; Pantazis, Gordon and Townsend, 2006), those among the 61 items that attracted majority support for being essential in the 2006 survey constituted 'the essentials of life' and deprivation was then identified as existing when people did not have and could not afford each of these items.[10] A total of 26 items satisfied these conditions, although one of these (the television) was subsequently dropped after conducting reliability and validity tests (see Saunders and Naidoo, 2009).

[9] There was some minor re-organisation of the domains in 2010 and additional items were included in the transport and location and social and community participation domains.

[10] The number of items was increased to 73 in the 2010 survey.

Social exclusion was identified as existing in three broad domains: social disengagement; service exclusion; and economic exclusion using 27 indicators (Saunders, Naidoo and Griffiths, 2007; Saunders, 2008). Some of the exclusion indicators overlap those used to identify deprivation, although a number of new indicators were also introduced (see Section 4 below for details). Responses to the affordability question were not used as a filter when identifying social exclusion because it may exist for reasons that are not related to financial circumstances. Exclusion was thus identified as covering things that people *do not do*, whereas deprivation refers to things that people *cannot afford*. This paper uses the indicators derived from the 2006 survey to estimate deprivation and exclusion in both 2006 and 2010. Although it will become apparent that the results would be much the same if the indicators were derived separately from the data for each year, it makes sense to estimate change over a relatively short period using the same indicators.

3 Deprivation: Measurement and Change

Measurement Issues

The first step in identifying deprivation has generally involved identifying those items that receive majority support for being essential (or necessary). For this purpose, population-based weights were applied to the raw data in order to ensure that the results reflect *community* opinion not just that of the sample. Some have argued that the implied distinction between necessities and non-necessities is flawed on both conceptual and practical grounds – the former because of the diverse nature of individual needs and preferences, the latter because the use of a 50 per cent cut-off is arbitrary and because the evidence appears inconsistent with the idea that necessities should by definition be acquired before other items (see Van den Bosch, 2001; McKay, 2004; Berthould and Bryan, 2008).

One response to such criticism has been to identify items that group together using factor analysis, but this approach has also been criticised because it is not theoretically informed and is subject to measurement errors (Tomlinson, Walker and Williams, 2008). Against this, it has been argued by Gordon (2006) that reliance on majority opinion to identify essential items, whatever the limitations, gives the approach validity in a way that is easily understood by ordinary people. Whatever approach is used, one would expect the identification of essential items to be stable if the method used to identify items is capable of generating sensible and robust results. Items identified as essential in 2006 should remain so in 2010 unless there are strong grounds to expect a change.

Deprivation exists when people do not have and cannot afford essential items.

The first step in this process (identifying who does not have each item) is unproblematic, although adjustment lags can create a divergence between what people actually have at any point in time and what they need. However, greater concern has been expressed about the second step, which relies on responses to the question asking those who do not have the item whether or not this is because they cannot afford it. Economists would argue that such a question is incapable of distinguishing between choice and constraint in observed patterns of consumption and ownership, with the result that the responses will capture the effects of both and thus be in part subjective and not entirely objective (Berthoud and Bryan, 2008; Brewer *et al*., 2008). One response has been to ignore the information on affordability altogether and rely solely on lack of ownership when identifying deprivation (see Van den Bosch, 2004). This approach is problematic because it fails to acknowledge the role of a lack of resources that is one of the central features of poverty that the deprivation approach is seeking to identify. Whatever the limitations of the 'Can you afford it?' question, dispensing with it altogether seems a rather radical step.

There is, however, another way of responding to the limitations of the approach that does not rely on response to the 'Is this because you cannot afford it?' question whilst recognising that those who choose to forego specific items cannot genuinely be described as deprived. This involves relying on responses to the 'Is it essential?' question to infer whether or not the absence of an essential item reflects a lack of resources. If an individual who does not have an item that has been identified as essential by the community also regards that item as essential, then it can be inferred that their lack of the item is enforced and hence represents deprivation. If instead, the individual does not regard the item as essential then its absence can be inferred to reflect a choice to forego it rather than an imposed deprivation. We call this alternative approach 'inferred deprivation' and compare the results it produces with those produced using the conventional (don't have and can't afford) and alternative (don't have) approaches.

As noted above, the definition of essential that underlies the deprivation approach relates to items that are essential for people generally, not items that each individual regards as essential for themselves. This is an important distinction that seeks to distinguish general from individual needs, and needs in general from wants, thereby grounding the identification of deprivation in the community norms and customary activities that Townsend emphasised in his original specification (Townsend, 1979). However, some needs are both universal and contingent – universal in the sense that they apply to all individuals, but contingent in the sense that they may only relevant to those individuals in specific circumstances at a point in time.

Consider the needs of children.[11] When asked if an item that relates to the

[11] The following discussion is based on information provided by adults about the items that are identified as essential to meet the needs of children. We acknowledge that ideally, children

needs of children (e.g. a separate bed for each child, or children's participation in school outings and activities) is essential *for everyone*, most respondents presumably will (and, in practice, do) base their answer on the importance of the item itself, not on whether or not there is a child present in the household. If they themselves do not have children living with them they should then answer 'No' when asked if they have the item, and 'No' again when asked if they lack it because they cannot afford it (because their lack of the item reflects the absence of children, not a lack of affordability).[12] They will thus be identified as not deprived of the item (even though they lack it) when applying the logic of the deprivation methodology as set out in Figure 2.

However, some respondents without children may indicate that they cannot afford an item that relates to the needs of children even though they do not have any children living with them. Such a response is also consistent with the logic shown in Figure 2 in the sense that they cannot afford the item if they needed it, but this implies that these respondents will be identified as deprived of an item that they do not, by definition, need. This problem could be avoided by asking about the child items only of those who have children, but if this approach is adopted, should it also apply when deciding whether the items themselves are essential or not? Results from the CUPSE survey indicate that views about whether or not child items are essential are virtually the same, irrespective of whether or not there is a child in the household (Saunders, Naidoo and Griffiths, 2007: Figure 4.D), and it is important to use everyone's views whenever possible to identify essential items, not just those of a sub-set of the community.

However children's items are treated, the maximum deprivation scores will be higher for those with children than for those without children, introducing an element of non-comparability that can distort the findings: households with children may show up as more deprived simply because more essential items are relevant to them than to households without children unless children's items are separately identified. Although it is possible to experiment with alternative presentations in order to get a handle on the extent of these complexities, there are other items where similar problems arise, but where it is not possible to make such adjustments. For example, one item included in the CUPSE and PEMA (and many other) surveys is a roof and gutters that do not leak. Some respondents will not have this item because they live in a flat that has neither a roof nor guttering, but if they indicate that they cannot afford the item, they will also be identified as deprived of an item that they do not need. In this case, however, since information on their dwelling has not been collected, it is not possible to adjust for this, as can be done for the child-

themselves should have an input into the identification of these items, but have not yet conducted a survey that seeks information directly from children

[12] Children are identified for this purpose as being under 18 years of age and living in the parental home. Many survey respondents identified as 'childless' on this definition have grown-up children who are no longer living with them.

related items. One could try to exclude all items that do not strictly apply to everyone, or qualify the item so that its specificity is more explicit and apparent (e.g. access to medical/dental treatment *when needed*). We will illustrate the impact of these issues in the case of children's items, but the wider application of the underlying principles should also be kept in mind.

Identifying Essential Items

Table 1 identifies 40 of the items included in all three surveys and shows the percentage support for each item being essential.[13] The items are ranked according to the percentage support for them being essential in the latest (2010) survey. Results from the two main surveys are shown in raw (unweighted) and adjusted (age-weighted) forms, where the latter involves applying weights based on official population statistics. As indicated earlier, estimates based on the linked panel data are presented in unweighted form only. It is clear that Australian views on the essentials of life were remarkably stable over the period. This is true for the two cross-sectional samples in 2006 and 2010, and for the follow-up sample (which is a two-observation balanced panel), even though the follow-up sample contains a greater proportion of older people than the full sample in 2010 (see Figure 1).

Table 1: Support for Items Being Essential in 2006 and 2010 (percentages)

Item	2006		2010		Linked Panel (Unwtd.)	
	Unwtd.	Wtd.	Unwtd.	Wtd.	2006	2010
Warm clothes and bedding, if it's cold	99.8	99.8	99.9	99.9	100.0	99.8
Medical treatment if needed	99.9	99.9	99.9	99.9	99.8	99.6
Able to buy medicines prescribed by a doctor	99.4	99.3	99.5	99.5	99.2	99.4
A substantial meal at least once a day	99.6	99.6	99.3	99.4	99.8	99.8
Dental treatment if needed	98.6	98.5	98.6	98.4	99.0	98.6
A decent and secure home	97.3	97.3	96.8	97.1	96.9	97.7
Children can participate in school activities & outings	94.8	94.7	95.8	95.8	93.9	95.4
A yearly dental check-up for children	94.7	94.3	95.2	94.9	94.3	96.6
A hobby or leisure activity for children	92.5	92.5	93.0	92.7	92.6	92.6
Up to date schoolbooks and new school clothes	89.0	88.5	92.9	92.8	88.6	94.3
A roof and gutters that do not leak	92.3	91.5	92.2	91.3	91.9	93.6
Secure locks on doors and windows	91.8	91.6	92.2	92.4	90.2	92.8
Regular social contact with other people	92.3	92.5	91.4	91.6	91.7	91.7
Furniture in reasonable condition	91.2	89.3	91.0	89.0	93.2	95.2

[13] Items in the full list of 61have been excluded from Table 1 either because the item does not have general relevance (e.g. aged care for frail older people) or because it cannot be purchased by individuals (e.g. streets that are safe to walk in at night) and are thus not relevant to deprivation because the affordability filter cannot be applied. One item that has been maintained but could be omitted on similar grounds is comprehensive motor vehicle insurance, since the car itself was excluded from the list of essentials. It has been kept in the list because this is an item that many low-income Australians are known to have to forego for affordability reasons, leaving them exposed to considerable risk if they are involved in a motor vehicle accident.

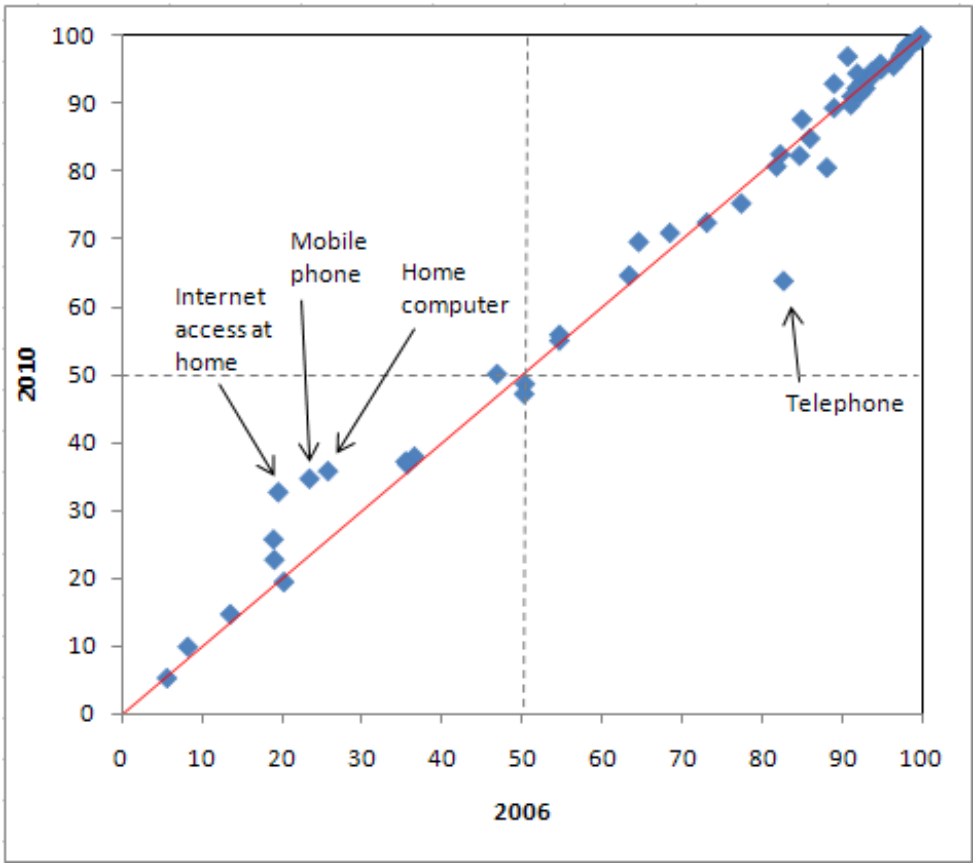
Heating in at least one room of the house	89.0	87.4	89.3	87.0	93.2	91.4
Up to $500 in savings for an emergency	82.3	81.1	82.5	81.4	81.6	84.6
A separate bed for each child	84.7	84.0	82.3	81.3	85.3	82.0
A washing machine	81.8	79.4	80.7	77.7	84.3	82.3
Home contents insurance	77.4	75.1	75.2	72.4	77.7	76.2
Presents for family or friends at least once a year	73.1	71.6	72.4	71.4	72.5	70.2
Computer skills	68.5	68.7	70.9	72.6	68.5	69.9
Comprehensive motor vehicle insurance	63.4	60.2	64.6	59.9	63.0	65.6
A telephone	82.7	81.1	63.8	59.7	83.0	65.6
A week's holiday away from home each year	54.7	52.9	55.9	53.9	50.6	53.1
A television	54.7	50.9	55.0	50.1	55.5	57.5
Up to $2,000 in savings for an emergency	46.9	44.4	50.1	48.4	46.3	53.8
A car	50.4	47.8	48.6	44.7	47.7	47.9
A separate bedroom for each child aged over 10	50.3	49.1	47.1	45.0	48.0	43.7
A special meal once a week	36.6	35.9	37.9	36.1	32.0	32.7
A night out a fortnight	35.5	35.6	37.2	36.7	29.9	28.5
A spare room for guests to stay over	35.7	31.5	36.8	31.6	34.6	34.1
A home computer	25.8	25.9	35.7	35.2	26.2	31.5
A mobile phone	23.5	23.0	34.6	34.3	19.6	31.0
Access to the internet at home	19.6	19.7	32.6	32.1	19.4	27.1
A DVD player	19.0	17.2	25.7	22.6	17.7	26.0
A printer	19.1	18.6	22.7	21.2	17.2	21.4
A clothes dryer	20.3	18.9	19.4	17.9	16.6	16.6
An answering machine	13.6	12.3	14.6	12.3	14.5	16.6
A dishwasher	8.3	7.6	9.8	8.6	6.5	7.5
A fax machine	5.7	5.3	5.2	4.5	4.2	5.8

The stability in community opinion about how essential items are is illustrated for the main sample in Figure 3. It is clear that support for each item being essential was very close in each year, since all 61 observations lie close to the diagonal. The main exceptions relate to items where technological change is leading to rapid price reductions that are driving substantial changes in ownership patterns that clearly have an impact on people's views about which items are essential.[14] The most marked declines in support for items being essential are for access to a public telephone and a home (fixed line) telephone, while support increased most markedly for a home computer, a mobile phone and access to the internet at home. Despite these shifts, none of the observations plotted in Figure 3 lie in either the North-West or South-East quadrants of the scatter-plot: if they did, this would imply that the essential status of the item (when judged using the majority rule cut-off) would change between the two years. Although it has already been noted that one would not expect such views to change very much over a short period, it is reassuring to find that there is such stability in the identification of essential

[14] A simple (OLS) regression of the percentage support for each item in 2010 against percentage support in 2006 produced the following result: SUPPORT2010 = 4.47 + 0.95.SUPPORT2060, with both estimated coefficients highly significant (ρ = 0.01).

items. This provides powerful evidence that this first step in identifying deprivation is robust.

Figure 3: Scatter-plot of Support for Items being Essential in 2006 and 2010 (sample percentages)



The decision of whether or not to include those items where (weighted) support for them being essential was close to the 50 per cent cut-off was made for the 2006 data by examining how support varied across different age groups (Saunders, Naidoo and Griffiths, 2007: 37). This resulted in the car being removed from the list of essentials and the separate bedroom for older children being maintained. In 2010, there are four items where support is close to 50 per cent (shown in shading in Table 1) – the two mentioned above and a television and up to $2,000 in savings for use in an emergency. Table 2 shows separately the degree of (unweighted) support for these 4 items among those aged under-30, those aged between 30 and 64, and those aged 65 and over. The age variation in expressed support for items being essential is considerable but consistent with patterns observed in overseas studies.

Table 2: Support for Selected Items Being Essential, by Age in 2010 (percentages)

Item	All ages	Age group: Under 30	30-64	65 and over
A television	55.0	34.2	49.3	81.7
Up to $2,000 in savings for an emergency	50.1	45.2	45.7	64.6
A car	48.6	31.1	46.4	63.5
A separate bedroom for each child aged over 10	47.1	40.8	43.9	60.6

If the same procedure that was used in 2006 to identify essential items was applied in 2010, it would result in the removal of the car and $2,000 in emergency savings but not the television or the separate bedroom for older children. However, the television set was removed after further testing as noted earlier and the separate bedroom has also been removed because support for this item being essential in 2010 is considerably below the cut-off (39.2 per cent) among those respondents who had a child (of any age) living with them. These adjustments result in the number of essential items in 2010 being reduced from 26 to 24 (shown above the shading in Table 1) and the following analysis of deprivation is based on this truncated list.

Patterns of Deprivation

The 24 essentials of life items are now used to estimate deprivation in 2010 and examine changes since 2006. Results are shown in Table 3 for all households in each year and for households differentiated by whether or not they contain a child under 18. The latter provide an indication of the extent of child deprivation and how it has changed, although the items included as essential for children have been identified by adults not by children (or young people) themselves. As before, the items are listed in order of the degree of support for them being essential, those at the top receiving the most support.

The general picture revealed by the estimates in Table 3 is one of a modest decline in deprivation over a period when the global financial crisis was exerting its influence. Although the Australian economy has weathered the financial crisis far better than many other economies, there is evidence from studies commissioned by the federal government and undertaken some of Australia's leading NGO welfare agencies that some of those already most disadvantaged have been most affected, leading to an increase in the numbers seeking emergency welfare assistance from non-government agencies (FAHCSIA, 2009; The Salvation Army, 2010). This picture is not confirmed by the evidence in Table 3, although the estimates cover a period that spans the crisis and could be concealing a decline in deprivation between 2006 and 2008 that was partly reversed in the post-crisis period (i.e. between late-2008 and mid-2010).

Table 3 also indicates that deprivation is generally higher among households with children than among those without children, a pattern that reflects

differences in deprivation between those of working-age and those older people who have retired. The 5 items where deprivation fell most are: dental treatment if needed; an annual dental check-up for children; up to $500 in emergency savings; computer skills; and a week's holiday away. Four of these items had among the highest deprivation rates in 2006 and thus had the greatest scope to decline, although the decline in dental deprivation reflects government action to address problems in a system that has long been acknowledged as in need of improvement.

Table 3: Deprivation Rates in 2006 and 2010 (percentages)

Item	All households		Households with children		Households without children	
	2006	2010	2006	2010	2006	2010
Warm clothes and bedding, if it's cold	0.2	0.3	0.5	0.3	0.1	0.3
Medical treatment if needed	2.0	1.5	2.6	2.3	1.6	1.2
Able to buy medicines prescribed by a doctor	3.9	2.9	5.1	4.9	3.3	2.1
A substantial meal at least once a day	1.1	0.8	1.0	0.9	1.2	0.8
Dental treatment if needed	13.9	11.9	17.2	16.4	12.0	9.9
A decent and secure home	6.7	6.1	7.6	7.1	6.0	5.7
Children can participate in school activities & outings	3.5	2.6	4.2	3.8	2.9	2.0
A yearly dental check-up for children	9.1	7.0	12.4	10.1	6.8	5.5
A hobby or leisure activity for children	5.7	4.7	7.4	6.3	4.4	3.8
Up to date schoolbooks and new school clothes	3.8	3.4	5.6	4.4	2.7	2.9
A roof and gutters that do not leak	4.6	4.7	6.2	6.8	3.9	3.8
Secure locks on doors and windows	5.1	4.3	5.5	5.6	4.9	3.8
Regular social contact with other people	4.7	4.7	5.3	6.1	4.3	4.1
Furniture in reasonable condition	2.6	2.1	3.6	2.8	2.0	1.8
Heating in at least one room of the house	1.8	2.1	1.9	2.4	1.7	2.0
Up to $500 in savings for an emergency	17.6	15.3	23.5	20.5	14.6	13.1
A separate bed for each child	1.6	1.8	2.0	2.6	1.3	1.4
A washing machine	0.8	0.8	0.7	0.7	0.9	0.9
Home contents insurance	9.5	7.8	10.3	9.6	9.0	7.1
Presents for family or friends at least once a year	6.6	5.1	7.9	5.7	5.8	4.9
Computer skills	5.2	3.2	4.9	2.5	5.3	3.5
Comprehensive motor vehicle insurance	8.6	7.7	8.3	9.4	8.8	7.0
A telephone	1.5	2.9	1.2	3.3	1.6	2.8
A week's holiday away from home each year	22.4	18.5	28.2	23.3	19.4	16.4
Average deprivation rate	**5.9**	**5.1**	**7.2**	**6.6**	**5.2**	**4.5**

The other notable feature of Table 3, referred to earlier, is that there is evidence that some households without children appear to be deprived of items that meet the needs of children. Although the numbers involved are small, the shaded entries in the final column of Table 3 indicate that this apparent anomaly can affect up to 7 per cent of childless households. This suggests a note of caution should be applied to these estimates and they are separated out in some of the analysis that follows. However, even with these

reservations, it is clear that deprivation has declined over a turbulent period, pointing to the success of the fiscal actions taken promptly by the Australian Government in response to the financial crisis (see Saunders and Deeming, forthcoming).

Sensitivity Analysis

Sensitivity analysis has been conducted on two elements of the conventional approach used to identify deprivation: the treatment of child-related items, and the method used to establish whether a lack of an item is the result of a lack of affordability. It is already apparent that the first issue affects a relatively small number of cases, which implies that a different treatment of the child items will have only a small impact. However, while this true for the quantitative impact, adjustment of the estimates is nonetheless warranted because it increases their credibility: it is difficult to justify a method that identifies as deprived households that do not need the items on which this classification is based. The second form of sensitivity analysis is more fundamental because it addresses an aspect of the approach that has received considerable criticism, particularly from economists.

The first column of Table 4 shows the inverse of the ownership (or prevalence) rate of each of the 24 essentials of life items, i.e. the percentage that do not have each of these items. Reflecting the earlier discussion, separate estimates are presented for the child items, with those in brackets showing the impact of excluding those households that do not have children present. The second column repeats the benchmark (standard) deprivation rates shown in Table 3 for convenience, while column three presents the estimates of inferred deprivation, calculated as those who do not have each of the identified essentials of life item but who also regard that item as essential. Again, the estimates in brackets impose the condition that those without children are not lacking or deprived of the child items.

On the question of measurement method, it is clear that the inferred deprivation estimates are generally much closer to the inverse ownership rates than to the deprivation rates as conventionally estimated. The differences are relatively small in general, although there are exceptions. Consider the case of the item secure locks on doors and windows, which receives about 92 per cent support for being essential (Table 1): in 2010, 11.4 per cent report not having this item, but while less than 40 per cent of these (4.3 per cent of the total) indicate that this is because they cannot afford it and are hence identified as deprived, almost twice as many of those who do not have it (8.0 per cent of the total) regard the item as essential and are thus inferred to be deprived. This is an example where the affordability question seems to be identifying instances where the lack of an item reflects an affordability constraint. By implication, the higher inferred deprivation includes some who do not think that this item is essential and have not indicated that they cannot afford it, making it difficult to identify them as deprived.

Table 4: Estimated Deprivation Rates in 2010 – Sensitivity Analysis (percentages) [(a)]

Essential items	Inverse ownership rate - does not have	Deprivation rate - does not have and cannot afford	Inferred deprivation rate - does not have but regards as essential
Warm clothes and bedding, if it's cold	0.4	0.3	0.4
Medical treatment if needed	3.1	1.5	3.1
Able to buy medicines prescribed by a doctor	4.1	2.9	3.9
A substantial meal at least once a day	1.4	0.8	1.2
Dental treatment if needed	16.5	11.9	16.2
A decent and secure home	7.2	6.1	6.8
Children can participate in school activities and outings	28.4 (3.6)	2.6 (1.3)	26.1 (3.4)
A yearly dental check-up for children	25.0 (5.4)	7.0 (3.3)	21.9 (5.0)
A hobby or leisure activity for children	25.3 (3.9)	4.6 (2.1)	21.3 (3.3)
Up to date schoolbooks and new school clothes for school-age children	30.4 (4.4)	3.4 (1.5)	27.0 (3.8)
A roof and gutters that do not leak	9.2	4.7	7.0
Secure locks on doors and windows	11.4	4.3	8.0
Regular social contact with other people	13.0	4.7	10.5
Furniture in reasonable condition	2.3	2.1	1.7
Heating in at least one room of the house	7.7	2.1	2.7
Up to $500 in savings for an emergency	20.7	15.3	14.0
A separate bed for each child	16.9 (1.7)	1.8 (0.8)	12.0 (1.1)
A washing machine	1.4	0.8	0.6
Home contents insurance	14.7	7.8	7.1
Presents for family or friends at least once a year	10.3	5.1	4.4
Computer skills	26.1	3.2	15.6
Comprehensive motor vehicle insurance	14.7	7.7	6.2
A telephone	9.6	2.9	2.5
A week's holiday away from home each year	39.2	18.5	16.9

Note: (a) Figures in brackets assume that households without children do not lack, or are deprived of, child items.

The general similarity between the lack of ownership and inferred deprivation rates implies that most of those who do not have the essential items tend to regard them as essential themselves, although many of them, when asked, also indicate that they cannot afford the item in question. On this basis, the affordability filter is appropriately identifying those who are constrained by a lack of resources from acquiring essential items. Against this, the inferred deprivation estimates do not rely on responses to the much-criticised 'Can you afford it?'' question and produce a modest improvement relative to those based on lack of ownership alone.

The other notable feature of Table 4 is that the treatment of the child items makes a substantial difference to the estimated deprivation rate, however it is estimated. This is true by definition for the first measure (lack of ownership) but the impact on both conventional and inferred deprivation is also large enough to suggest that care needs to be taken when deciding how to treat the child items. There is a strong case on the grounds of both logic and plausibility

to exclude those without children who end up being identified as deprived of items that meet the needs of children.

4 Social Exclusion

The Policy Background

Social exclusion emerged onto the policy agenda in Australia following the election of the Labor Government in 2007, which identified social inclusion as the main theme of its social policy agenda. The then Deputy Prime Minister (now Prime Minister) Julia Gillard announced in 2008 that the new government was developing 'a new framework for national policy based on the powerful idea of social inclusion' (Gillard, 2008: 4). Since then, a Social Inclusion Unit has been established to support the work of a new Australian Social Inclusion Board (ASIB) comprised of experts, practitioners and community leaders in advising the government about how to examine, monitor and address specific forms of exclusion.

The government has articulated the principles underlying its inclusion agenda and set out its policy priorities (Australian Government, 2008; 2009). The Social Inclusion Board has overseen the development of a compendium of social inclusion indicators designed to 'reflect on both the social achievements of the recent past and those aspects which, on a comparative basis, might warrant greater attention' (ASIB, 2009a: ix). A companion volume provides a detailed profile of social exclusion in Australia using the indicator framework developed in the Compendium (ASIB, 2009b). In addition, a special module on social inclusion has been included in the 2010 *General Social Survey*, which will provide the first large-scale nationally representative picture of the extent of social exclusion in Australia.

The Australian social inclusion strategy is founded on the view that:
'Social inclusion means building a nation in which all Australians have the opportunity and support they need to participate fully in the nation's economic and community life, develop their own potential and be treated with dignity and respect. Achieving this vision means tackling the most entrenched forms of disadvantage in Australia today, expanding the range of opportunities available to everyone and strengthening resilience and responsibility.' (Australian Government, 2009: 2)

In pursuing its strategy, the government has highlighted the following 6 early priorities:

- Targeting jobless families;
- Improving the life chances of children at risk;
- Reducing homelessness;
- Improving outcomes for people with a disability or mental illness and their carers;

- Closing the gap for indigenous Australians; and
- Breaking the cycle of entrenched, multiple disadvantage.

In developing its policy agenda and collecting the evidence required to support it, the Australian Government has drawn on the experience of several State Governments most notably in South Australia, where a social inclusion initiative was introduced in 2002, although similar initiatives have been introduced since then in Victoria and Tasmania (Hayes, Gray and Edwards, 2008: 5) These developments reflect the role that State Governments play in providing many of the services that affect social inclusion. With the sharing of responsibilities (and costs) under Australia's federal system of government, such integration must involve closer cooperation and collaboration between federal and state governments if it is to be successful, and the Council of Australian Governments (COAG) is playing a leading role in trying to engineer such an outcome.

However, the lack of an effective partnership between federal and state governments has been a formidable obstacle in the way of past efforts to improve coordination across tiers of government and there is little sign that current efforts are meeting with any greater success. This challenge is getting more difficult as two states (Western Australia and Victoria) have elected non-Labor governments and a third (New South Wales) looks set to do so at the election scheduled for early 2011. There is thus little evidence so far that the social inclusion agenda has moved beyond the realm of rhetoric, and there is a lack of hard evidence on demonstrated achievement. Fiscal imperatives are also making it increasingly unlikely that additional resources will be available until at least after 2012-13 when the government is committed to returning the budget to surplus from the large deficit incurred as a result of the stimulus spending introduced in the wake of the financial crisis.

5 Exclusion Indicators

The three broad domains and 27 indicators of social exclusion that were developed in the 2006 study are shown in Table 5. In seeking to include only those activities that are customary or commonplace in Australian society, several of these indicators were chosen because they received a high level of support for being essential, following the procedure used to identify deprivation, although the affordability filter was not applied in this case because lack of access to economic resources is only one of many potential causes of exclusion (Saunders, 2008). Some of the indicators are derived from variables that reflect subjective or experiential data where the question of the role of affordability was not asked. Other indicators apply to only sub-sets of the sample or population and where this is the case, the relevant groups are identified in square brackets in Table 5, and the size of these groups was

used to estimate the relevant rates of exclusion.[15] Finally, it is important to note that some of the variables (e.g. access to mental health or disability services) refer to circumstances that survey respondents may have little information about and it is thus likely that the responses provided (and hence the exclusion incidence rates derived from them) may be inaccurate.

Table 5: Social Exclusion Domains and Indicators

Disengagement (9 indicators)	Service Exclusion (10 indicators)	Economic Exclusion (8 indicators)
No regular social contact with other people	No medical treatment if needed	Does not have $500 in savings for use in an emergency
Did not participate in any community activities in last 12 months [(a)]	No access to a local doctor or hospital	Had to pawn or sell something, or borrow money in the last 12 months
Does not have a social life	No access to dental treatment if needed	Could not raise $2,000 in a week
No annual week's holiday away from home	No access to a bulk-billing doctor	Does not have more than $50,000 worth of assets
Children do not participate in school outings or activities [those with school-age children only]	No access to mental health services	Has not spent $100 on a 'special treat' for myself in last 12 months
No hobby or leisure activity for children [those with children only]	No child care for working parents [working-age parents only]	Does not have enough to get by on
Couldn't get to an important event because of lack of transport in last 12 months	No aged care for frail older people [people aged 70+ only]	Is currently unemployed or looking for work
Could not go out with friends and pay my way in last 12 months	No disability support services when needed	Lives in a jobless household
Unable to attend wedding or funeral in last 12 months	No access to a bank or building society	
	Couldn't keep up with payments for water, electricity, gas or telephone in last 12 months	

Note: (a) The community activities referred to in the survey question are: education or school-based activities, a volunteer in health or community services, church groups or activities (other than attending services), arts, music or cultural groups/activities, sport (participant, volunteer or spectator), neighbourhood groups or activities of any kind, and a political campaign or event of any kind. The last response category was 'None of the above' and those who gave this response were identified as excluded on this indicator.

The Incidence of Exclusion

Estimates of the incidence of the different forms of social exclusion in 2006 and 2010 are presented in Table 6. These are based both on the full sample in each year (truncated appropriately in line with Table 5) and on a sub-sample of those identified as in 'deep exclusion', being excluded in at least 7

[15] The poverty rate was not included among the indicators of economic exclusion because to do so would have made it invalid to estimate the overlap between poverty and exclusion and this has been a focus of the work conducted to date (see Saunders, Naidoo and Griffiths, 2007: Chapter 7; Saunders, forthcoming: Chapter 9).

dimensions.[16] The purpose of separately identifying those who face deep exclusion is to get a better handle on the forms of exclusion that are most prominent among those who face the most severest overall level of exclusion. The incidence rate ratios shown in columns 3 and 6 of Table 6 highlight which specific forms of exclusion are most pronounced (relative to the average) amongst those who are most severely excluded overall.

The estimates indicate that there was a marked decline in the overall incidence of social exclusion between 2006 and 2010, and in the incidence of most forms of both service and economic exclusion. In both cases, the government can take some comfort from these declines, the former because it reflects directly on the adequacy of government service provisions, the latter because it reinforces the point made earlier about the effectiveness of the fiscal stimulus measures that the government introduced in response to the financial crisis. The declines in the incidence of both unemployment and joblessness are a direct consequence of these measures and highlight how well the Australian economy has performed in a period when many other economies have been in recession.

The picture is more mixed in relation to the change in disengagement, where there is about an equal number of declines and increases in the incidence of exclusion. This suggests – at least tentatively – that this component of exclusion may be less amenable to policy intervention, at least in the short run, and more dependent on changing entrenched attitudes and structures over the longer-term. Thus although this domain captures what many see as the 'soft end' of the exclusion landscape, the estimate in Table 5 suggest that it represents the 'hard end' when it comes to policy impact. It is important that policy makers recognise this and take steps to ensure that the social inclusion policy response is appropriately broad.

Table 6: Social Exclusion Domains and Indicators [(a)]

Exclusion Indicator	2006 Full sample (a)	2006 Deep excluded sub-sample (b)	2006 Ratio (b)/(a)	2010 Full sample (a)	2010 Deep excluded sub-sample (b)	2010 Ratio (b)/(a)
Disengagement:						
No regular social contact with other people	13.0	41.4	3.18	13.0	48.6	3.74
Did not participate in community activities	28.1	46.8	1.67	30.9	60.3	1.95
Does not have a social life	11.3	31.3	2.77	12.1	45.1	3.73
No week's holiday away from home each year	43.7	86.0	1.98	39.3	86.6	2.20
Children do not participate in school activities or outings	6.7	22.7	3.39	Na	Na	Na
No hobby or leisure activity for children	14.2	38.1	2.68	12.0	46.8	3.90

[16] The deep exclusion sub-sample contains 484 households (17.9 per cent of the total) in 2006 and 380 households (14.4 per cent) in 2010.

Couldn't get to an event due to lack of transport	5.0	18.3	3.66	4.4	19.7	4.47
Could not go out with friends and pay their way	21.4	69.1	3.23	18.5	63.6	3.44
Unable to attend a wedding or funeral	3.2	11.3	3.53	3.7	17.5	4.73
Service Exclusion:						
No medical treatment if needed	3.0	13.2	4.40	3.1	16.7	5.39
No access to a local doctor or hospital	4.5	13.2	2.93	4.2	15.6	3.71
No dental treatment if needed	18.7	67.0	3.58	16.5	63.9	3.87
No access to a bulk-billing doctor	26.4	32.8	1.24	20.8	31.7	1.52
No access to mental health services, if needed	24.9	51.3	2.06	20.6	53.3	2.59
No child care for working parents	52.7	76.5	1.45	41.0	69.3	1.69
No aged care for frail older people	47.8	80.8	1.69	34.3	55.9	1.63
No disability support services, when needed	50.2	70.6	1.41	42.1	66.3	1.57
No access to a bank or building society	7.0	14.9	2.13	6.6	19.9	3.02
Couldn't make electricity, water, gas or telephone payments	12.5	46.0	3.68	11.6	45.5	3.92
Economic Exclusion:						
Does not have $500 in emergency savings	23.9	75.9	3.18	20.7	72.4	3.50
Had to pawn or sell something or borrow money	6.5	25.8	3.97	6.5	29.8	4.58
Could not raise $2,000 in a week	14.2	54.6	3.85	11.0	51.4	4.67
Does not have $50,000 worth of assets	27.2	66.3	2.44	24.7	66.6	2.70
Has not spent $100 on a special treat	9.1	26.2	2.88	6.7	24.0	3.58
Does not have enough to get by on	6.2	25.1	4.05	6.0	29.9	4.98
Currently unemployed or looking for work	3.9	13.0	3.33	2.6	10.2	3.92
Lives in a jobless household	20.8	39.2	1.88	14.6	26.7	1.83
Mean Incidence of Exclusion	**18.7**	**42.9**	**2.29**	**16.2**	**43.7**	**2.70**

In relation to the changes experienced by those in deep exclusion, a rather different picture emerges. Not only have the numbers affected by deep exclusion increased (see footnote 13), but so has the mean incidence rate and the incidence of 14 of the 26 indicators for which estimates are available in both years. The degree of disadvantage experienced by those in deep exclusion (shown by the ratios in columns 3 and 6) increased in all but two cases (no aged care for frail older people and joblessness). Increases were experienced even for those forms of exclusion where the relativities are highest (shown by the shaded cells), although the 5 indicators with the highest relativity were the same in both years.

It is tempting to conclude from these results that, so far, the government's social inclusion agenda has been relatively ineffective. However, it would be premature to draw such an implication, for two reasons: first, because it is almost certainly too soon to expect any significant change in exclusion, particularly bearing in mind the impact that the financial crisis has had in exacerbating some areas of exclusion and simultaneously reducing the government's ability to focus its policy attention (and resources) on promoting inclusion; second, and more importantly, the indicators on which this analysis is based do not reflect the government's priorities (identified earlier) and are thus not capable of providing the basis for assessing the impact of its actions. Despite this, the failure of the general decline in exclusion to be extended to those in deep exclusion and to the forms of exclusion that they are most prevalent amongst this group suggests that more effort will be required to achieve the decline in 'the most entrenched forms of disadvantage in Australia

today' that is a central goal of the social inclusion policy agenda.

6 Concluding Remarks

As emphasised earlier, the results reported in this paper are preliminary and need to be treated with an appropriate degree of caution. Those derived from the 2010 PEMA survey are based on data that have been available for analysis for less than 3 months and more work is required to validate the estimates, to develop a weighting system to adjust for sample bias and to conduct significance tests on the reported differences in the estimates. This will take time and the outcomes will be reported in due course.

For the moment, the results reported here provide a brief overview of the policy context in Australia and of recent research on deprivation and social exclusion. The estimates have been presented in a way that is designed to be of interest not only to those with an eye on policy and its impact, but also to those whose main interest is in the relevance and robustness of the underlying research methods.

One of the most important conclusions that emerges from the analysis is that, at least over a short period, the deprivation methodology is capable of generating robust and plausible results about what constitutes the essentials of life that can be used to shed important new light on the nature of social disadvantage in Australia and who is most affected by it. They also suggest that there is value in applying alternative methods when estimating the incidence of deprivation as a robustness check, given the limitations of some aspects of the approach.

The definition, identification and measurement of social exclusion are contested areas, but the issue itself (at least in Australia) currently has the attention of policy makers and thus provides fertile ground for researchers. The indicators used here are not comprehensive, but they capture the range and diversity of exclusion and thus help to highlight the complex challenges that policy makers face in making substantial in-roads in addressing the problem. Despite the global financial crisis, there is evidence that many forms of exclusion declined between 2006 and 2010, particularly those relating to exclusion from the labour market and employment. Less progress has, however, been made in tackling deep exclusion and this is an issue that requires greater attention from researchers and a task that requires greater attention from policy makers.

7 Tables and Figures

Figure 1: The Age Structure of the Population and the Two 2010 Samples

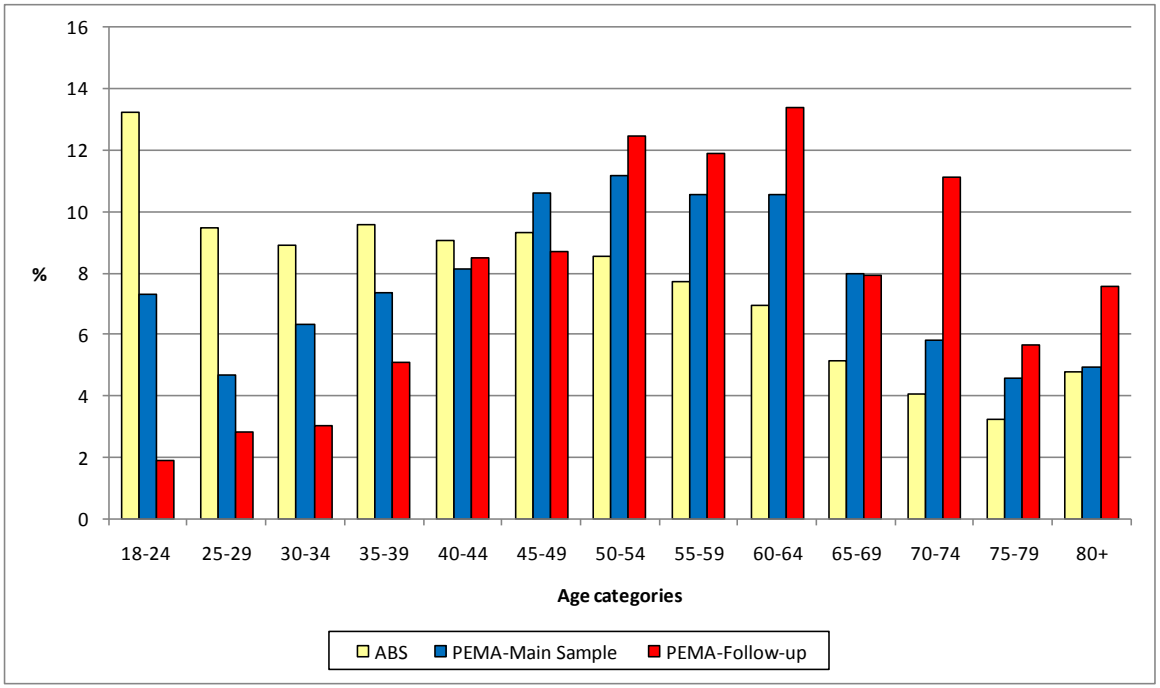


Figure 2: Identifying the Essentials of Life and Deprivation: Survey Structure

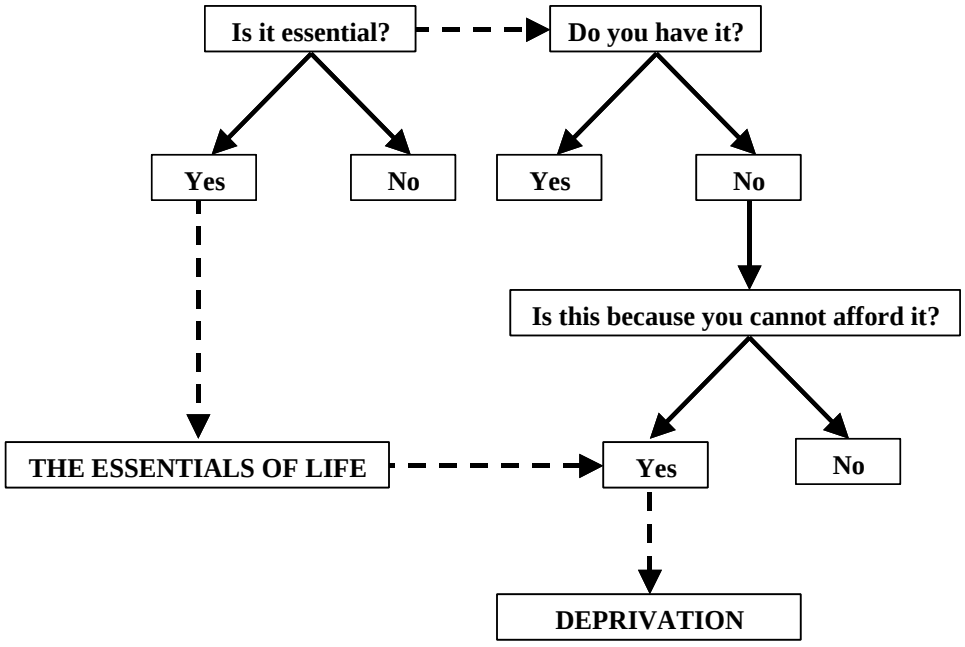


Figure 3: Scatter-plot of Support for Items being Essential in 2006 and 2010 (sample percentages)

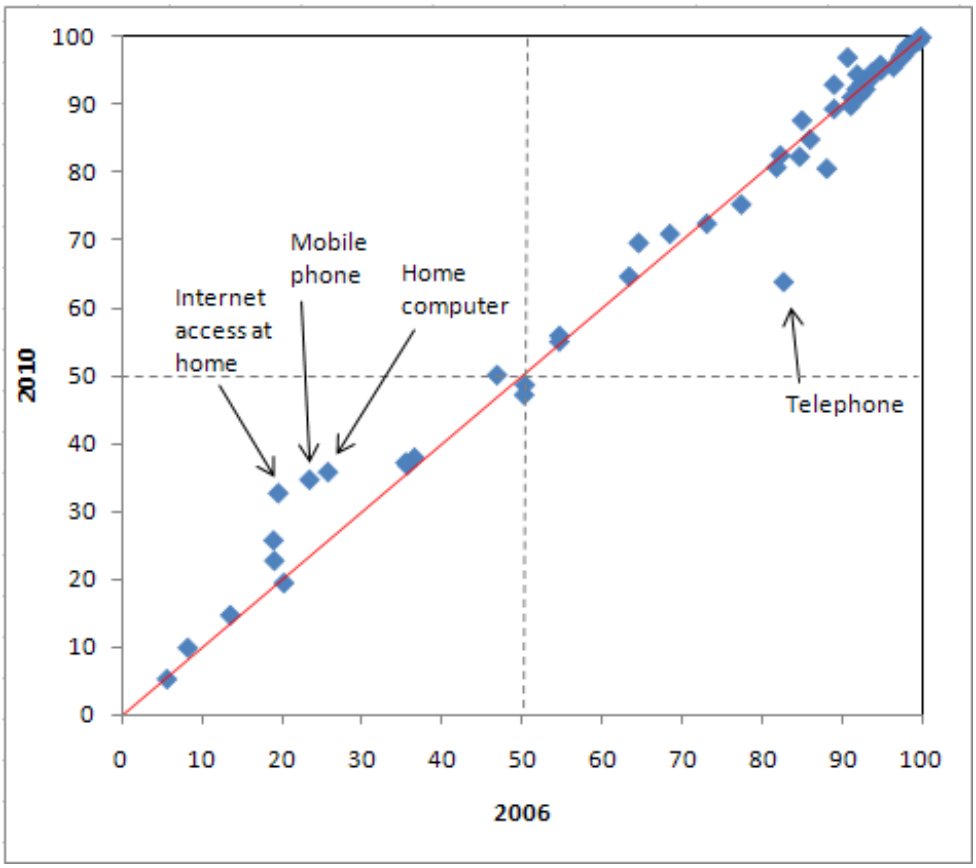


Table 1: Support for Items Being Essential in 2006 and 2010 (percentages)

Item	2006		2010		Linked Panel (Unwtd.)	
	Unwtd.	Wtd.	Unwtd.	Wtd.	2006	2010
Warm clothes and bedding, if it's cold	99.8	99.8	99.9	99.9	100.0	99.8
Medical treatment if needed	99.9	99.9	99.9	99.9	99.8	99.6
Able to buy medicines prescribed by a doctor	99.4	99.3	99.5	99.5	99.2	99.4
A substantial meal at least once a day	99.6	99.6	99.3	99.4	99.8	99.8
Dental treatment if needed	98.6	98.5	98.6	98.4	99.1	98.7
A decent and secure home	97.3	97.3	96.8	97.1	96.9	97.7
Children can participate in school activities & outings	94.8	94.7	95.8	95.8	93.9	95.4
A yearly dental check-up for children	94.7	94.3	95.2	94.9	94.4	96.6
A hobby or leisure activity for children	92.5	92.5	93.0	92.7	92.6	92.6
Up to date schoolbooks and new school clothes	89.0	88.5	92.9	92.8	88.7	94.3
A roof and gutters that do not leak	92.3	91.5	92.2	91.3	91.9	93.7
Secure locks on doors and windows	91.8	91.6	92.2	92.4	90.2	92.8
Regular social contact with other people	92.3	92.5	91.4	91.6	91.7	91.7
Furniture in reasonable condition	91.2	89.3	91.0	89.0	93.2	95.2
Heating in at least one room of the house	89.0	87.4	89.3	87.0	93.2	91.4
Up to $500 in savings for an emergency	82.3	81.1	82.5	81.4	81.6	84.6
A separate bed for each child	84.7	84.0	82.3	81.3	85.3	82.0
A washing machine	81.8	79.4	80.7	77.7	84.3	82.3
Home contents insurance	77.4	75.1	75.2	72.4	77.7	76.2
Presents for family or friends at least once a year	73.1	71.6	72.4	71.4	72.5	70.2
Computer skills	68.5	68.7	70.9	72.6	68.5	69.9
Comprehensive motor vehicle insurance	63.4	60.2	64.6	59.9	63.0	65.6
A telephone	82.7	81.1	63.8	59.7	83.0	65.6
A week's holiday away from home each year	54.7	52.9	55.9	53.9	50.6	53.2
A television	54.7	50.9	55.0	50.1	55.5	57.5
Up to $2,000 in savings for an emergency	46.9	44.4	50.1	48.4	46.3	53.8
A car	50.4	47.8	48.6	44.7	47.8	47.9
A separate bedroom for each child aged over 10	50.3	49.1	47.1	45.0	48.0	43.7
A special meal once a week	36.6	35.9	37.9	36.1	32.0	32.7
A night out a fortnight	35.5	35.6	37.2	36.7	29.9	28.5
A spare room for guests to stay over	35.7	31.5	36.8	31.6	34.6	34.1
A home computer	25.8	25.9	35.7	35.2	26.2	31.5
A mobile phone	23.5	23.0	34.6	34.3	19.7	31.0
Access to the internet at home	19.6	19.7	32.6	32.1	19.4	27.1
A DVD player	19.0	17.2	25.7	22.6	17.7	26.0
A printer	19.1	18.6	22.7	21.2	17.2	21.4
A clothes dryer	20.3	18.9	19.4	17.9	16.6	17.5
An answering machine	13.6	12.3	14.6	12.3	14.5	16.6
A dishwasher	8.3	7.6	9.8	8.6	6.5	7.5
A fax machine	5.7	5.3	5.2	4.5	4.2	5.8

Table 2: Support for Selected Items Being Essential, by Age in 2010 (percentages)

Item	All ages	Age group: Under 30	30-64	65 and over
A television	55.0	34.2	49.3	81.7
Up to $2,000 in savings for an emergency	50.1	45.2	45.7	64.6
A car	48.6	31.1	46.4	63.5
A separate bedroom for each child aged over 10	47.1	40.8	43.9	60.6

Table 3: Deprivation Rates in 2006 and 2010 (percentages)

Item	All households		Households with children		Households without children	
	2006	2010	2006	2010	2006	2010
Warm clothes and bedding, if it's cold	0.2	0.3	0.5	0.3	0.1	0.3
Medical treatment if needed	2.0	1.5	2.6	2.3	1.6	1.2
Able to buy medicines prescribed by a doctor	3.9	2.9	5.1	4.9	3.3	2.1
A substantial meal at least once a day	1.1	0.8	1.0	0.9	1.2	0.8
Dental treatment if needed	13.9	11.9	17.2	16.4	12.0	9.9
A decent and secure home	6.7	6.1	7.6	7.1	6.0	5.7
Children can participate in school activities & outings	3.5	2.6	4.2	3.8	2.9	2.0
A yearly dental check-up for children	9.1	7.0	12.4	10.1	6.8	5.5
A hobby or leisure activity for children	5.7	4.7	7.4	6.3	4.4	3.8
Up to date schoolbooks and new school clothes	3.8	3.4	5.6	4.4	2.7	2.9
A roof and gutters that do not leak	4.6	4.7	6.2	6.8	3.9	3.8
Secure locks on doors and windows	5.1	4.3	5.5	5.6	4.9	3.8
Regular social contact with other people	4.7	4.7	5.3	6.1	4.3	4.1
Furniture in reasonable condition	2.6	2.1	3.6	2.8	2.0	1.8
Heating in at least one room of the house	1.8	2.1	1.9	2.4	1.7	2.0
Up to $500 in savings for an emergency	17.6	15.3	23.5	20.5	14.6	13.1
A separate bed for each child	1.6	1.8	2.0	2.6	1.3	1.4
A washing machine	0.8	0.8	0.7	0.7	0.9	0.9
Home contents insurance	9.5	7.8	10.3	9.6	9.0	7.1
Presents for family or friends at least once a year	6.6	5.1	7.9	5.7	5.8	4.9
Computer skills	5.2	3.2	4.9	2.5	5.3	3.5
Comprehensive motor vehicle insurance	8.6	7.7	8.3	9.4	8.8	7.0
A telephone	1.5	2.9	1.2	3.3	1.6	2.8
A week's holiday away from home each year	22.4	18.5	28.2	23.3	19.4	16.4
Average deprivation rate	**5.9**	**5.1**	**7.2**	**6.6**	**5.2**	**4.5**

Table 4: Estimated Deprivation Rates in 2010 – Sensitivity Analysis (percentages) [(a)]

Essential items	Inverse ownership rate - does not have	Deprivation rate - does not have and cannot afford	Inferred deprivation rate - does not have but regards as essential
Warm clothes and bedding, if it's cold	0.4	0.3	0.4
Medical treatment if needed	3.1	1.5	3.1
Able to buy medicines prescribed by a doctor	4.1	2.9	3.9
A substantial meal at least once a day	1.4	0.8	1.2
Dental treatment if needed	16.5	11.9	16.2
A decent and secure home	7.2	6.1	6.8
Children can participate in school activities and outings	28.4 (3.6)	2.6 (1.3)	26.1 (3.4)
A yearly dental check-up for children	25.0 (5.4)	7.0 (3.3)	21.9 (5.0)
A hobby or leisure activity for children	25.3 (3.9)	4.7 (2.1)	21.3 (3.3)
Up to date schoolbooks and new school clothes for school-age children	30.4 (4.4)	3.4 (1.5)	27.0 (3.8)
A roof and gutters that do not leak	9.2	4.7	7.0
Secure locks on doors and windows	11.4	4.3	8.0
Regular social contact with other people	13.0	4.7	10.5
Furniture in reasonable condition	2.3	2.1	1.7
Heating in at least one room of the house	7.7	2.1	2.7
Up to $500 in savings for an emergency	20.7	15.3	14.0
A separate bed for each child	16.9 (1.7)	1.8 (0.8)	12.0 (1.1)
A washing machine	1.4	0.8	0.6
Home contents insurance	14.7	7.8	7.1
Presents for family or friends at least once a year	10.3	5.1	4.4
Computer skills	26.1	3.2	15.6
Comprehensive motor vehicle insurance	14.7	7.7	6.2
A telephone	9.6	2.9	2.5
A week's holiday away from home each year	39.2	18.5	16.9

Note: (a) Figures in brackets assume that households without children do not lack, or are deprived of, child items.

Table 5: Social Exclusion Domains and Indicators [(a)]

Disengagement (9 indicators)	Service Exclusion (10 indicators)	Economic Exclusion (8 indicators)
No regular social contact with other people	No medical treatment if needed	Does not have $500 in savings for use in an emergency
Did not participate in any community activities in last 12 months [(a)]	No access to a local doctor or hospital	Had to pawn or sell something, or borrow money in the last 12 months
Does not have a social life	No access to dental treatment if needed	Could not raise $2,000 in a week
No annual week's holiday away from home	No access to a bulk-billing doctor	Does not have more than $50,000 worth of assets
Children do not participate in school outings or activities [those with school-age children only]	No access to mental health services	Has not spent $100 on a 'special treat' for myself in last 12 months
No hobby or leisure activity for children [those with children only]	No child care for working parents [working-age parents only]	Does not have enough to get by on
Couldn't get to an important event because of lack of transport in last 12 months	No aged care for frail older people [people aged 70+ only]	Is currently unemployed or looking for work
Could not go out with friends and pay my way in last 12 months	No disability support services when needed	Lives in a jobless household
Unable to attend wedding or funeral in last 12 months	No access to a bank or building society	
	Couldn't keep up with payments for water, electricity, gas or telephone in last 12 months	

Note: (a) The community activities referred to in the survey question are: education or school-based activities, a volunteer in health or community services, church groups or activities (other than attending services), arts, music or cultural groups/activities, sport (participant, volunteer or spectator), neighbourhood groups or activities of any kind, and a political campaign or event of any kind. The last response category was 'None of the above' and those who gave this response were identified as excluded on this indicator.

Table 6: The Incidence of Social Exclusion in 2006 and 2010 (unweighted percentages)

Exclusion Indicator	2006			2010		
	Full sample (a)	Deep excluded sub-sample (b)	Ratio (b)/(a)	Full sample (a)	Deep excluded sub-sample (b)	Ratio (b)/(a)
Disengagement:						
No regular social contact with other people	13.0	41.4	3.18	13.0	48.6	3.74
Did not participate in community activities	28.1	46.8	1.67	30.9	60.3	1.95
Does not have a social life	11.3	31.3	2.77	12.1	45.1	3.73
No week's holiday away from home each year	43.7	86.0	1.98	39.3	86.6	2.20
Children do not participate in school activities or outings	6.7	22.7	3.39	Na	Na	Na
No hobby or leisure activity for children	14.2	38.1	2.68	12.0	46.8	3.90
Couldn't get to an event due to lack of transport	5.0	18.3	3.66	4.4	19.7	4.47
Could not go out with friends and pay their way	21.4	69.1	3.23	18.5	63.6	3.44
Unable to attend a wedding or funeral	3.2	11.3	3.53	3.7	17.5	4.73
Service Exclusion:						
No medical treatment if needed	3.0	13.2	4.40	3.1	16.7	5.39
No access to a local doctor or hospital	4.5	13.2	2.93	4.2	15.6	3.71
No dental treatment if needed	18.7	67.0	3.58	16.5	63.9	3.87
No access to a bulk-billing doctor	26.4	32.8	1.24	20.8	31.7	1.52
No access to mental health services, if needed	24.9	51.3	2.06	20.6	53.3	2.59
No child care for working parents	52.7	76.5	1.45	41.0	69.3	1.69
No aged care for frail older people	47.8	80.8	1.69	34.3	55.9	1.63
No disability support services, when needed	50.2	70.6	1.41	42.1	66.3	1.57
No access to a bank or building society	7.0	14.9	2.13	6.6	19.9	3.02
Couldn’t make electricity, water, gas or telephone payments	12.5	46.0	3.68	11.6	45.5	3.92
Economic Exclusion:						
Does not have $500 in emergency savings	23.9	75.9	3.18	20.7	72.4	3.50
Had to pawn or sell something or borrow money	6.5	25.8	3.97	6.5	29.8	4.58
Could not raise $2,000 in a week	14.2	54.6	3.85	11.0	51.4	4.67
Does not have $50,000 worth of assets	27.2	66.3	2.44	24.7	66.6	2.70
Has not spent $100 on a special treat	9.1	26.2	2.88	6.7	24.0	3.58
Does not have enough to get by on	6.2	25.1	4.05	6.0	29.9	4.98
Currently unemployed or looking for work	3.9	13.0	3.33	2.6	10.2	3.92
Lives in a jobless household	20.8	39.2	1.88	14.6	26.7	1.83
Mean Incidence of Exclusion	**18.7**	**42.9**	**2.29**	**16.2**	**43.7**	**2.70**

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