

## **LOCATIONAL DIFFERENCES IN MATERIAL DEPRIVATION AND SOCIAL EXCLUSION IN AUSTRALIA**

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**ABSTRACT:** The emergence of the concepts of material deprivation and social exclusion offers new opportunities to explore the locational profile of social disadvantage in Australia. This paper uses data from a specially designed survey to estimate the extent and nature of material deprivation and different forms of social exclusion, and examine how they vary across different types of location. The results reveal a broadly similar overall picture to that provided by conventional objective and subjective indicators of economic well-being, but allow the spatial profile of locational disadvantage to be more thoroughly examined and better understood. The results are also used to examine the extent to which deprived and excluded individuals live in areas identified as relatively disadvantaged using conventional (census-based) indicators.

**KEY WORDS:** locational disadvantage, poverty, material deprivation, social exclusion

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### **1. INTRODUCTION**

The spatial dimensions of social disadvantage in Australia have been receiving increased attention from researchers and policy makers. This reflects growing evidence on the magnitude of locational disparities and increased awareness that such disparities can have long-term negative effects on those who live (and grow up) in the most disadvantaged areas. The concentration of social disadvantage in specific localities poses a

challenge for researchers who must develop appropriate measurement tools and for policy makers whose interventions must address a complex set of multi-dimensional interdependent factors.

A combination of factors has contributed to the growth in locational inequality in Australia, as a number of important studies have established. Gregory and Hunter (1995) used census data at the collector district (CD) level to map the changing nature of geographic inequality as a direct consequence of structural changes in the Australian economy and the decline in the supply of full-time (primarily male, blue collar) jobs that went with it (see also Gregory and Sheehan, 1998). Drawing on a broader political economy perspective, Stilwell and Jordan (2007: Chapter 6) identified four factors that have been driving spatial inequality in Australia: housing, employment, education and infrastructure. These factors were claimed to interact 'through processes of circular and cumulative causation' that are difficult to reverse as spatial inequalities become embedded in the social landscape of the nation. The regional differences in unemployment that have emerged from these processes of structural economic and social change have given rise to what former ALP Treasurer Wayne Swan (2005, p. 31) has described as a "fraying patchwork quilt" characterised by a marked change in the geographic profile of poverty (see also Fincher and Wulff, 1998; Lloyd *et al.*, 2001).

Randolph (2004) identifies a complex range of factors that combine to explain the pressures that have been impacting on the growth of Australian cities, including not only the employment imperatives identified by Gregory and Hunter but also changes in demography, culture and lifestyle, and in information technology. The resulting pressures have often been reinforced by an inadequate public policy response, particularly in the areas of housing and land release policy, transport and infrastructure and local area responses to the spatial impact of aggregate fiscal and welfare policies.

The social consequences of these changes have been examined qualitatively and quantitatively by Peel (2003) and Vinson (2007), respectively. Peel's interviews with people from three of Australia's most disadvantaged suburbs ('living at the sharp end of Australia's reshaping', p. 3) highlight the diverse but enduring poverty that pervades all aspects of their lives. Vinson (2007, p. 1) argues that the processes that create poor areas can result in a downwards spiral that produces "a range of difficulties that block life opportunities and which prevent people from participating fully in society".

The consequences of these processes have been given impetus by the growing interest in the concept of social exclusion, culminating in the

emergence of the current government's social inclusion agenda. The government has argued that "the drivers of social exclusion are more likely to be found in some neighbourhoods or regions, leading to concentrated disadvantage" (Australian Government, 2009, p. 6) and that:

"...different kinds of disadvantage tend to coincide in particular locations and persist over time. Those in the lowest socio-economic areas are around 20% less likely to attain Year 12 or equivalent ... and are more than twice as likely to feel unsafe walking alone in their local area than those in the least disadvantaged areas ... people with multiple disadvantage were also more likely to live in the most disadvantaged localities" (Australian Government, 2012, p. 7).

A recent report from the Productivity Commission has further highlighted some of the characteristics and consequences of locational disadvantage in Australia, noting that:

"Australians residing in more disadvantaged areas experience much higher rates of chronic disease and mental health problems and the most disadvantaged regions are characterised by higher rates of unemployment, people dependent on income support and children living in jobless families" (McLachlan *et al.*, 2013, p. 13).

An implication is that the adverse social outcomes that tend to concentrate in disadvantaged areas will be transmitted across generations, with particularly detrimental effects on children, unless they are tackled.

Against this background of growing interest in, and concern over, locational inequality, this paper examines locational disparities in the profile of social disadvantage in Australia using the concepts of material deprivation and social exclusion. It also examines how these disparities differ from those based on more conventional approaches to identifying social disadvantage. The focus is on documenting the differences that exist rather than on seeking to identify underlying causes, although the findings help to highlight some of the causal factors.

The paper is organised as follows. The next section explains the concepts material deprivation and social exclusion, focusing on how they differ conceptually from poverty and what this implies for how they are

identified and measured. This is followed by a brief description of the data used in the analysis and then by the presentation of the main results derived from that data. This includes an examination of how patterns of deprivation and exclusion vary across different types of location, and the extent to which individual households identified as deprived and/or excluded live in disadvantaged areas. The final section draws together the main conclusions.

## **2. IDENTIFYING SOCIAL DISADVANTAGE**

Most Australian studies of social disadvantage have either used income as the basis for identifying whether or not disadvantage exists at the household level, or have focused on area-based measures of disadvantage. The former approach involves comparing household income with a poverty line. (Harding *et al.*, 2001; Wilkins, 2008; Saunders and Hill, 2008), while the latter approach uses census income data at the CD level to identify the disadvantage status of local areas (see ABS, 2008; 2011a; Randolph and Holloway, 2005).

Poverty line studies have relied almost exclusively on data from the *Survey of Income and Housing* (SIH) currently conducted every two years by the Australian Bureau of Statistics (e.g. ABS, 2011b). However, in order to protect respondent confidentiality, the SIH unit record data provide little detailed information on location and this has prevented researchers from examining the locational profile of poverty, resulting in the neglect of a locational perspective within mainstream Australian poverty research. The main exception can be found in research conducted at the National Centre for Social and Economic Modelling (NATSEM), which was based on statistical merging of the SIH data with census data in order to allow poverty to be estimated at the small area level and other analyses to be performed (see Miranti *et al.*, 2011; Vidyattama and Tanton, 2010).

There has been on-going concern over the quality and reliability of the ABS income data, particularly for those at the bottom of the distribution (see ABS, 2002). There is also an increased awareness that conventional poverty studies focus too much on the role of income and neglect other relevant factors. This has produced a distorted view of the nature and causes of the problem and resulted in the emergence of new ways of identifying social disadvantage that examine actual living standards more directly in order to see whether or not they are consistent with an acceptable minimum.

This is reflected in the deprivation approach to poverty measurement originally developed by Townsend (1979) and refined in a series of 'Breadline Britain' and other studies by Mack and Lansley (1985), Callan *et al.* (1993), Nolan and Whelan (1996), Gordon and Pantazis (1997), Pantazis *et al.*, (2006) and Gordon (2006). The approach involves identifying items that are regarded by a majority in the community as being essential - things 'that no-one should have to go without' - and then defining as deprived those who do not have and cannot afford each of these items (see Saunders *et al.*, 2007; Saunders *et al.*, 2008; Saunders and Wong, 2012). By including only those items that are regarded as essential by a majority in the community, the approach produces an experienced-based, community-endorsed benchmark for what is needed to achieve an acceptable minimum living standard. Note that the approach differs markedly from that applied in Australia by Baum (2004), who uses the term 'deprivation' to classify locational differences using the ABS SEIFA indexes.

Once the extent of material deprivation at the item level has been established, an index score can be derived by summing the number of essential items that each individual does not have and cannot afford. The average value of this index can then be compared across social groups in order to better understand the profile of deprivation. Alternatively, a deprivation threshold can be established (e.g. being deprived of at least three essential items) and the percentages in different groups that exceed this threshold can be compared. These measures can then be used to compare the adequacy of different social security benefits (see Saunders and Wong, 2011a) or to estimate the impact on social disadvantage of major events like the global financial crisis (see Saunders and Wong, 2011b).

In contrast with the literature on deprivation, the goal of much of the social exclusion literature has not been to better identify poverty but to develop a broader framework that focuses on the role of factors other than a lack of economic resources and pays more attention to the underlying barriers and processes that prevent people from participating in the opportunities available in society. In this case, A key insight of the exclusion literature is that the causal factors are often complex, multi-dimensional and inter-dependent, and require a policy response that is comprehensive and co-ordinated ("joined up government" to quote Tony Blair).

Although tackling social exclusion (or promoting social inclusion) has become a policy priority in many countries, concern has been expressed

in the academic literature about the definitional ambiguities that surround the concept. Thus, Saraceno (2002, p. 49) argues that:

“ ... social exclusion has been more developed as a discourse than as a concept: that is, the idea has been most used and articulated in the service of the language of politics ... it constitutes a relatively loose set of ideas that represent particular settings, rather than a concept with theoretical substance and coherence that transcends national and political contexts”.

These concerns have been highlighted by critics from across the political spectrum to argue (from the left) that social exclusion serves little purpose other than to divert attention away from more fundamental issues like inequality, or (from the right) that it allows more groups to be categorised as disadvantaged and thus become eligible to receive state support.

A group of leading British researchers has proposed the following ‘composite working definition’ of social exclusion after reviewing the ‘wide range of definitions used in the literature’:

“... a complex and multi-dimensional process [that] involves the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities, available to the majority of people in society, whether in economic, social, cultural, or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole” (Levitas *et al.*, 2007, p. 9).

The definition emphasises not only what social exclusion is, but what it gives rise to – its *consequences* - for individuals and for society, in both the short-run and over the longer-term.

In the Australian context, housing researchers were among the first to adopt a social exclusion framework to explore the spatial dimension of social disadvantage (see Arthurson and Jacobs, 2004). Some have been more favourably disposed to its potential value, Randolph and Holloway (2005, p. 175) arguing, for example, that: “ ... concepts such as social exclusion ... have taken the understandings of the root causes of

disadvantage into more complex areas. These newer conceptual frameworks are important for a more thorough understanding of the spatial dimensions of disadvantage although few studies in Australia have explored these aspects of social polarisation.” Since then, research on the measurement of social exclusion has been conducted at the Social Policy Research Centre (SPRC) at the University of New South Wales (e.g. Saunders *et al.*, 2007; Saunders *et al.*, 2008; Saunders and Wong, 2012) and (in conjunction with leading welfare sector NGO the Brotherhood of St Laurence) at the Melbourne Institute for Applied Economic and Social Research at Melbourne University (e.g. Scutella *et al.*, 2008; Horn *et al.*, 2011).

As part of its social inclusion agenda, the previous federal government established a framework of strategic change indicators and used it to monitor change in different dimensions of exclusion (Australian Government, 2010; 2012). The framework covers three broad areas – participation, resources and multiple disadvantage – and spans 12 domains and 49 indicators (27 headline and 22 supplementary). The latest report focuses on the locational dimensions of exclusion and notes that “different kinds of disadvantage tend to coincide in particular locations and persist over time” and that in 2010 “over 50% of people experiencing multiple disadvantage lived in the bottom two socio-economic areas” (Australian Government, 2012, p. 7).

This brief review of how material deprivation and social exclusion differ from poverty illustrates how both concepts can shed new light on the nature, causes and consequences of social disadvantage and provide a basis for examining its locational profile. They differ in that deprivation is a direct consequence of the economic constraints that prevent people from acquiring the items required to satisfy basic needs, while social exclusion is a consequence of the processes that prevent people from participating economically, socially and politically. How the two concepts can be identified and what implications this has for locational disadvantage is the focus of the analysis that follows.

### **3. DATA SOURCES**

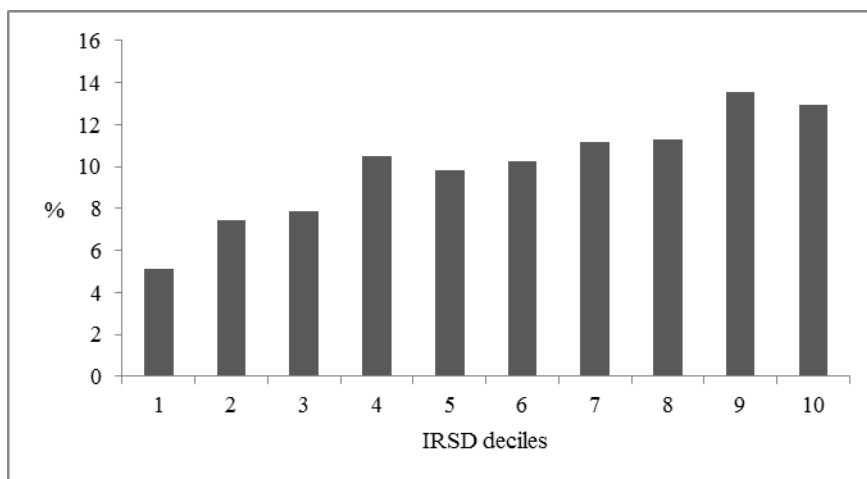
The source of the data used to estimate material deprivation and social exclusion is the *Poverty and Exclusion in Modern Australia* (PEMA) survey. The survey replicated an earlier survey (conducted in 2006) and was distributed by mail to a sample of 6 000 adults drawn at random from the electoral rolls in May 2010. It generated 2 645 responses – equivalent

to a response rate of 46.1 percent - similar to that achieved by other comparable surveys conducted at around the same time: the 2003 *Australian Survey of Social Attitudes* (AuSSA), for example, achieved a response rate of 44 per cent. - see Wilson et al. (2005, p. 7).

Detailed comparisons between the composition of the PEMA sample and relevant ABS data (reported in Saunders and Wong 2012, Table 3.2) indicate that the sample is broadly representative of the Australian population, although (along with other postal surveys) there is an under-representation of those at the top and bottom of the economic and social hierarchy. The former is not a problem given that the focus of the survey is on identifying disadvantage, although the latter suggests that this will be under-estimated. There is also a bias in the age composition of respondents, with an over-representation of older people (aged 50 and over) relative to younger people (particularly those aged under 30). This latter bias can affect key aspects of the survey results (e.g. when identifying whether an item attracts majority support for being essential). Therefore population weights based on ABS demographic data have been applied to the raw data before drawing any conclusions. A comparison of results from the two surveys also indicates that the methods used to identify deprivation and exclusion are robust (see Saunders and Wong, 2012, Chapter 4).

Information on the postcode of respondents was collected in the PEMA survey and this allows their location to be matched to the Socio-economic Index for Areas (SEIFA) derived by the ABS (2008) relevant to their place of residence. The Index of Relative Social Disadvantage (IRSD) derived from the 2006 census is used for this purpose and Figure 1 shows how survey respondents are distributed across the deciles of IRSD. It indicates that the sample under-represents those in the three lowest (most disadvantaged) IRSD deciles and over-represents those in the four least disadvantaged deciles, particularly those in the top quintile.





**Figure 1.** Allocating the Postcode Location of the PEMA Sample to the IRSD Deciles. Source: PEMA survey (see text).

The PEMA survey included a question that asked for details of the type of area in which the respondent was living. The wording of the question, the response categories provided and a breakdown of the sample into those categories are shown in Table 1. It is important to acknowledge that the categories shown in Table 1 reflect the structure of the survey questionnaire and cannot be varied, making the results that follow subject to the modifiable areal unit problem (MAUP) under which measures of (and differences between) spatial phenomena are sensitive to the boundaries used to identify districts. In this case, however, these boundaries are not statistical constructs but are embedded in the descriptions shown in Table 1. In raw (unweighted) terms, just over one-third of the sample live in the suburbs of the major cities, while around one-quarter live in inner city areas. The remainder are split roughly equally between those living in a country town (16.9 percent), a large town (12.5 percent) and a village or rural area (11.5 percent). Weighting the sample to adjust for differential response rates by age causes these percentages to change somewhat, but does not markedly affect the overall picture.

**Table 1.** Breakdown of Survey Respondents by Type of Location in 2010

<i>QUESTION: Which of the following best describes where you live?</i>	Sample size	Unweighted percentage	Weighted percentage	ABS breakdown by Remoteness (1996)
A rural area or village (Rural)	298	11.5	10.6	3.0
A small country town (under 10,000 people) (Small country town)	265	10.2	9.4	11.7
A larger country town (over 10,000 people) (Larger country town)	173	6.7	6.1	} 24.6
A large town (over 25,000 people) (Large town)	324	12.5	12.9	
An outer metropolitan area of a major city (over 100,000 people) (Outer suburbs)	903	34.8	35.3	
An inner metropolitan area of a major city (over 100,000 people) (Inner city)	630	24.3	25.7	} 60.7
<b>Total</b>	<b>2 593</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Note:* The four ABS remoteness categories shown in the final column are: remote and very remote (combined); moderately accessible; accessible; and highly accessible, respectively. Source: ABS *Views on Remoteness* (Catalogue No. 1244.0)

Table 1 also indicates that, relative to the population as a whole, the PEMA sample over-represents people living in remote and very remote/rural locations, and under-represents those living in moderately accessible/small and larger towns. Part of this difference is attributable to differences in the two classifications, although it is difficult to establish the precise impact of this. In any case, to the extent that the analysis that follows examines mean differences in the circumstances of those living in each location, the results will be unaffected by any bias in response rates *between* locations – as long as those who did respond are equally representative of all residents *within* that location.

The PEMA questionnaire identified 73 items that are used to identify different forms of deprivation and social exclusion. Examples of the former include ‘a substantial meal at least once a day’, ‘a washing machine’ and ‘able to buy medicines prescribed by a doctor’. Examples of the latter include ‘regular social contact with other people’, ‘an annual week’s holiday away from home’ and ‘lives in a jobless household’. The items were drawn from those used in overseas studies of deprivation and exclusion, and reflect the feedback provided by a series of focus group discussions with low-income Australians about what is needed for a decent life in Australia. Respondents were asked three questions about each item: Is it essential for all Australians? Do you have it? And if not, (and where relevant) is this because you cannot afford it?

Of the 73 items include in the survey, 24 were regarded as essential by a majority of those surveyed, after applying the age-based population weights as explained earlier (see Saunders and Wong, 2012: Table 4.3). These items are used to identify material deprivation and they are shown in Table 2 grouped into 6 broad need areas. These areas provide a shorthand way of summarising the data and are somewhat arbitrary, but this level of aggregation greatly simplifies the presentation of the findings and does not affect the broad patterns that are described below.

**Table 2.** Need Classification of the Essentials of Life in 2010.

<b>Basic Material Needs</b>	<b>Children's needs</b>
Warm clothes and bedding, if it's cold	Children can participate in school activities & outings
A substantial meal at least once a day	A hobby or leisure activity for children
A washing machine	Up to date schoolbooks and new school clothes
<b>Accommodation Needs</b>	A separate bed for each child
A decent and secure home	<b>Social Functioning Needs</b>
Secure locks on doors and windows	Regular social contact with other people
Furniture in reasonable condition	Presents for family or friends at least once a year
Heating in at least one room of the house	Computer skills
A roof and gutters that do not leak	A telephone
<b>Health-related Needs</b>	A week's holiday away from home each year
Medical treatment if needed	<b>Risk Protection Needs</b>
Able to buy medicines prescribed by a doctor	Up to \$500 in savings for an emergency
Dental treatment if needed	Home contents insurance
A yearly dental check-up for children	Comprehensive motor vehicle insurance

Source: the Authors

Some of the items in Table 1 relate to forms of social participation (e.g. regular social contact with other people) and these also appear as indicators of social exclusion, although in the latter case this does not depend on them being foregone because of a lack of affordability: exclusion is about what people do not do, not what they cannot afford. Altogether, there are 27 indicators of exclusion across three broad domains of exclusion: disengagement (9 indicators); service exclusion (10 indicators) and economic exclusion (8 indicators) - details are provided in Saunders and Wong, 2012, Table 7.1. The focus here is on the broad patterns and so results are only presented at the social exclusion domain level. As in the case of deprivation, a summary measure (within each domain and across all these domains) has been derived by summing the number of instances of exclusion for each individual and averaging these scores across social groups.

#### **4. MAIN FINDINGS**

The focus of the following analysis is on the locational patterns of material deprivation and social exclusion, although it is useful to also examine what the data being examined imply about the locational differences in conventional measures of social disadvantage. Two dimensions of the conventional approach are examined, the first (described below) relates to the use of a set of conventional indicators of economic well-being, while the second (described in the next section) relates to the widely-used IRSD produced and published by the ABS.

##### *Differences in Economic Status*

Table 3 compares the mean values of a range of conventional objective and subjective indicators of economic well-being across the location types identified in Table 1. A degree of caution should be applied when interpreting these differences, not only because of the MAUP noted earlier, but also because the area differences will in part reflect differences in the population structures living in each location (an example of the ecological fallacy). Thus, for example, a location that contains a larger proportion of older people will automatically show up as having a lower level of mean income and a higher outright home ownership rate (other things constant). This is because its older citizens will be more likely to be dependent on an age pension and to have paid off the mortgage on their home.

**Table 3.** Indicators of Economic Status by Location, 2010 (weighted percentages).

Economic Indicator	Rural	Small country town	Larger country town	Large town	Outer suburbs	Inner city	<b>Total</b>
Mean weekly gross income (\$) <sup>(a)</sup>	1030.8	1081.3	1043.3	1130.8	1307.5	1438.1	<b>1252.4</b>
Mean weekly equivalised disposable income (\$) <sup>(b)</sup>	830.5	852.5	837.8	894.9	1008.4	1084.2	<b>969.8</b>
Home ownership rate (outright) (%)	42.3	38.8	42.2	30.3	29.7	27.1	<b>32.1</b>
Has over \$50,000 in assets (%)	72.9	74.7	72.4	71.1	75.2	76.0	<b>74.4</b>
Poverty rate (%) <sup>(d)</sup>	15.5	16.8	14.8	12.6	12.4	12.0	<b>13.1</b>
Subjective poverty rate (%)	12.7	14.9	13.8	14.2	10.3	8.8	<b>11.3</b>
Unable to make ends meet (%) <sup>(c)</sup>	10.1	5.3	7.0	7.9	5.7	4.7	<b>6.2</b>
Pension/allowance is main source of income (%) <sup>(e)</sup>	21.0	27.0	29.6	17.3	15.1	12.5	<b>17.2</b>

*Notes:* (a) Estimates of gross income are taken directly from the survey responses and set each income bracket value at its mid-point; (b) Disposable income is based on a randomised allocation of gross incomes within the response brackets with the proviso in the case of those aged 65 and over that no incomes fall below the maximum rate of age pension, and has been estimated using a simple tax imputation model; (c) this variable has been derived from responses to a question asking whether people can make ends meet on their current incomes; (d) the poverty rate has been derived using a poverty line set at 50 percent of median, equivalised disposable income; (e) this variable is derived from a question asking for the main source of income in the previous week. Numbers may sum to more than 100 because of multiple responses. Source: PEMA survey.

A reasonably clear ranking of the locations in terms of their economic prosperity emerges from Table 3. City residents have the highest incomes by a considerable margin (even after adjusting for differences in household size using the equivalence scale), are more likely to own considerable assets, have the lowest poverty rates (objectively measured and subjective expressed) and are least likely to be reliant on a government benefit for their main source of income. On all of these criteria, those living in inner city areas fare better than those who live in the outer suburbs. The comparative economic status of city residents is lower when it comes to home ownership, although the variable reported in Table 3 is *outright* (mortgage-free) ownership, which reflects

differences in life cycle position. Because city resident homeowners are younger on average, they are more likely to be still paying off a mortgage.

Across all of the indicators except home ownership and ownership of a modest level of assets (where life cycle differences are again relevant), the indicators all suggest that those living in rural areas are faring worst overall economically, followed by those living in small or larger country towns. The poverty rates of those living in these three locations are around 15 percent compared with around 12 percent for those living in the other three location types. The difference is substantial although it would narrow if housing costs were taken into account when estimating poverty rates.

Similar differences apply to the two measures of subjective poverty shown in Table 3 – the subjective poverty rate (the percentage who describe themselves as poor) and the percentage who say they do not have enough to make ends meet. In both cases, the rates are below the objectively estimated poverty rate for each location type, with the percentage saying they cannot make ends meet lower than the percentage who say that they are poor - presumably because even those who regard themselves as poor have to live within their means and make ends meet as best they can. The high rates of social security dependence in country towns and, to a lesser extent, rural areas reflects the high unemployment in those areas, reinforced by the re-location of some benefit recipients to areas where housing costs are lower in order to ease cost of living pressures.

### ***Differences in Subjective Wellbeing***

Table 4 compares locational differences in a range of conventional indicators of subjective well-being. The first three indicators are derived from questions that ask respondents to judge the level of their overall standard of living, their satisfaction with it, and their general level of happiness. The final indicator is based on responses to a question asking people how satisfied they are with the location in which they are currently living. For all but the happiness question the survey response categories provided are: very high/very satisfied, fairly high/fairly satisfied, medium/neither satisfied nor dissatisfied, fairly low/dissatisfied and very low/very dissatisfied. For happiness the options are: very happy, happy, unhappy and very unhappy. There are large locational differences in the three subjective well-being indicators, particularly the first –

people's *assessment* of their overall standard of living. Almost 43 percent of inner city residents report that their standard of living is very or fairly high compared with only 33 percent of those living in the suburbs, less than 30 percent of those living in large towns and only around 25 percent of those living in country towns or rural areas. These differences mirror the objective comparisons of economic status reported in Table 3.

**Table 4.** Indicators of Subjective Wellbeing by Location, 2010 (weighted percentages)

Indicator	Rural	Small country town	Larger country town	Large town	Outer suburbs	Inner city	Total
Standard of living is 'very high' or 'fairly high'	25.1	24.9	25.1	29.2	32.8	42.9	32.9
'Very' or 'fairly' satisfied with overall standard of living	63.1	70.0	68.3	62.4	69.3	70.8	68.1
'Very' or 'fairly' happy	88.9	86.2	91.0	86.9	89.0	88.9	88.6
'Very' or 'fairly' satisfied with current location	89.5	90.7	91.9	85.7	85.9	91.6	88.5

*Note:* Numbers sum to more than 100 because of multiple responses. Source: PEMA survey.

The locational differences in expressed levels of *satisfaction* with one's standard of living are much smaller than those relating to subjective assessments of the standard of living itself. Thus, whereas the gap between the percentages of inner city residents and those living in rural areas reporting that their standard of living is very high or high is almost 18 percentage points. The corresponding gap between the percentage of these two groups who are very or fairly *satisfied* with their standard of living is less than 8 percentage points. This result is consistent with the commonly held view that those living 'in the bush' (broadly defined) are compensated to some extent for their relative lack of economic prosperity by their greater access to a range of 'lifestyle' factors associated with less urban sprawl and a more relaxed (and greener) environment.

The final indicator in Table 4 relates directly to the degree of satisfaction with location (as opposed to with life more generally) and the patterns revealed here are of particular interest. The locational differences in 'satisfaction with location' are smaller than those associated with 'satisfaction with overall standard of living', with those living in large



towns and the outer suburbs less satisfied with their location than those living in each of the other four location types. Again, those living in the bush are happy with their location, despite the economic shortfalls they experience.

***Differences in Material Deprivation***

Table 5 compares the mean deprivation index scores for the 6 broad basic need areas identified in Table 2 and across all 24 essentials of life items. The estimates indicate that deprivation is highest overall in large towns and rural areas followed by those in the outer suburbs and larger country towns, small country towns with those in inner city areas least deprived. These rankings are again similar to those based on the conventional economic variables shown in Table 3, although large towns perform somewhat worse on the deprivation measure and country towns (small and larger) somewhat better.

**Table 5.** Mean Deprivation Index Scores by Need Classification and Location, 2010 (weighted percentages).

Need Classification	Rural	Small country town	Larger country town	Large town	Outer suburbs	Inner city	<b>Total</b>
Basic Material Needs	0.03	0.02	0.00	0.04	0.01	0.03	0.02
Accommodation Needs	0.29	0.18	0.22	0.23	0.21	0.15	0.20
Health-related Needs	0.31	0.21	0.20	0.41	0.25	0.19	0.26
Children's needs	0.18	0.13	0.15	0.16	0.12	0.08	0.12
Social Functioning Needs	0.45	0.36	0.35	0.43	0.35	0.29	0.36
Risk Protection Needs	0.40	0.31	0.36	0.44	0.35	0.32	0.35
<b>Overall deprivation</b>	<b>1.64</b>	<b>1.16</b>	<b>1.25</b>	<b>1.67</b>	<b>1.28</b>	<b>1.06</b>	<b>1.30</b>

*Note:* Numbers may not sum exactly due to rounding. Source: PEMA survey.

Within each area, the deprivation rankings across the different need areas is similar, with the highest levels of deprivation existing in the areas

of social functioning and risk protection. The two specific forms of deprivation that stand out as the largest deviation from the general pattern are the high level of accommodation-related deprivation in rural areas and the high level of health deprivation in large towns.

### *Differences in Social Exclusion*

Table 6 compares broad patterns of social exclusion across different locations. The mean exclusion scores are consistently higher than the mean deprivation scores, which implies that social exclusion is a more widespread issue (even though the number of indicators on which it is based is very similar to the number of essential items used to construct the deprivation index). This is consistent with the observation that the two forms of social exclusion that are most common – disengagement and service exclusion – are less closely aligned with deprivation than economic exclusion, where lack of economic resources plays a central role.

**Table 6.** Mean Social Exclusion Index Scores by Domain and Location, 2010 (weighted percentages)

Exclusion Domain	Rural	Small country town	Larger country town	Large town	Outer suburbs	Inner city	<b>Total</b>
Disengagement	1.45	1.34	1.20	1.47	1.28	1.06	1.27
Service Exclusion	1.70	1.26	1.07	1.40	1.41	1.29	1.37
Economic Exclusion	1.09	0.97	0.95	1.08	0.88	0.81	0.92
<b>Overall Exclusion</b>	<b>4.25</b>	<b>3.57</b>	<b>3.21</b>	<b>3.94</b>	<b>3.58</b>	<b>3.16</b>	<b>3.56</b>

*Note:* Numbers may not sum exactly due to rounding. Source: PEMA survey.

The exclusion ranking of locations indicates that inner city residents and those living in larger country towns face the lowest levels of exclusion, followed by those in small country towns and the outer suburbs, with those living in large towns and rural areas the most excluded. This ranking is similar to those presented earlier, aside from the position of large country towns, which perform better in the exclusion ranking than in those based on either economic variables or deprivation scores.

The variation within areas across the different forms of exclusion is greater than that for deprivation, particularly in relation to disengagement and service exclusion – possibly reflecting the role of individual preferences (in relation to disengagement) and service availability relative to need (in the case of service exclusion). The high value for service exclusion in rural areas suggests that there is a deficiency in supply of basic services in these areas.

## **5. COMPARISONS WITH ABS SEIFA DATA**

As noted earlier, many Australian studies of locational inequality have been based on (or drawn heavily from) the ABS estimates of the Socio-economic Indexes for Areas (SEIFA) (see ABS, 2008; 2011a). The four SEIFA indexes are the Index of Relative Socio-economic Disadvantage (IRSD), the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD), the Index of Economic Resources (IER) and the Index of Education and Occupation (IEO). They are derived from census data are based on an underlying concept of relative advantage and disadvantage that captures:

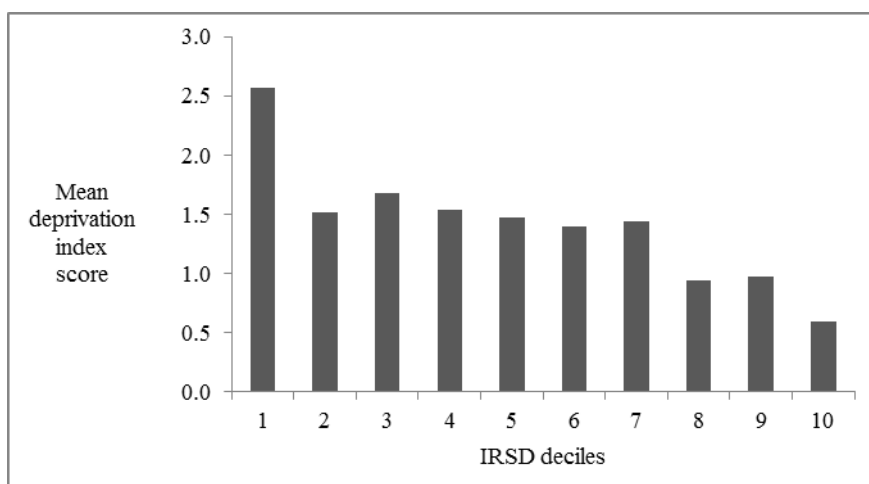
“People’s access to material and social resources and their ability to participate in society; relative to what is commonly experienced or accepted by the wider community” (ABS, 2011a, p. 4)

This concept has clear parallels with the concepts of material deprivation and social exclusion, and it is therefore of interest to examine the degree to which the locational patterns presented above relate to those revealed by the SEIFA indexes.

It is important to acknowledge at the outset that the unit of analysis that underpins the SEIFA indexes is a geographic area – defined on the basis of CDs - and the approach thus provides a basis for ranking the disadvantage and/or advantage status of areas, not of the individuals who live in those areas. (The ABS is currently developing a new set of indexes that are based directly on information about individuals and families, the Socio-economic Indexes for Individuals (SEIFI) (see Baker and Adhikari, 2007; Wise and Mathews, 2011)). The following analysis focuses on the Index of Relative Socio-economic Disadvantage (IRSD), which embodies a range of information about economic and social resources of people and households within an area. The dimensions included are all measures of

relative disadvantage and many of the components of IRSD align with the indicators of deprivation and social exclusion described earlier.

Figure 2 shows how the overall mean deprivation scores vary across the IRSD deciles, where information on postcode has been used to map the PEMA survey respondents to the IRSD decile of their location (see Figure 1). It is clear that in general, the most deprived individuals live in the most disadvantaged areas and the least deprived individuals live in the least disadvantaged areas, although deprivation does not decline consistently across the IRSD deciles. In addition there is little variation in the mean level of deprivation faced by those living in deciles 2 to 7 of the distribution of IRSD scores.

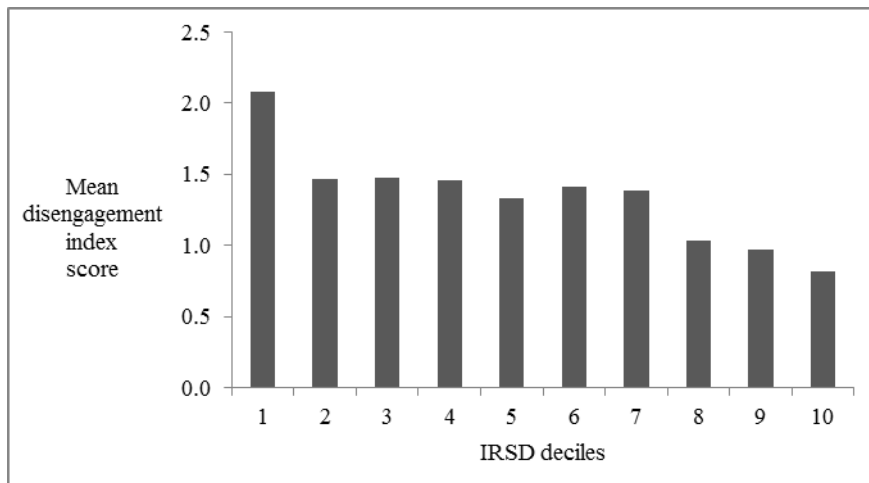


**Figure 2.** Mean Overall Deprivation Score by IRSD Decile. Source: PEMA survey.

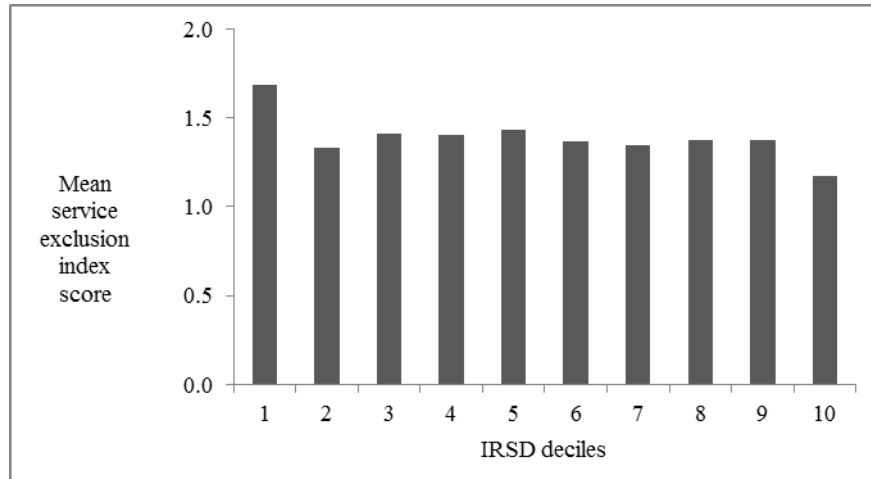
The mean deprivation score of over 2.5 for those in the lowest IRSD decile is two and a half times higher than that among those in deciles 8 and 9 and almost 5 times higher than that recorded by those in the top decile. This compares with a ratio of mean incomes in the highest to lowest *income* deciles in 2009-10 of 8.1 to one according to data from the latest ABS household income survey (ABS, 2011b). Finally, it is worth noting that if deprivation is defined as those deprived of at least 3 essential items, then the overall (age-weighted) deprivation rate is equal to 18.9 percent. The pattern of this measure across the IRSD deciles is very similar to that shown in Figure 2. Although less than one-third (29.6 percent) of those identified as deprived on this measure are located in the

lowest three IRSD deciles, almost as many (22.8 percent) of those identified as deprived live in one of the top three IRSD deciles. These figures highlight the extent of the ecological fallacy and point to the need to use the SEIFA indices with extreme caution as indicators of the socio-economic status of individuals (or households).

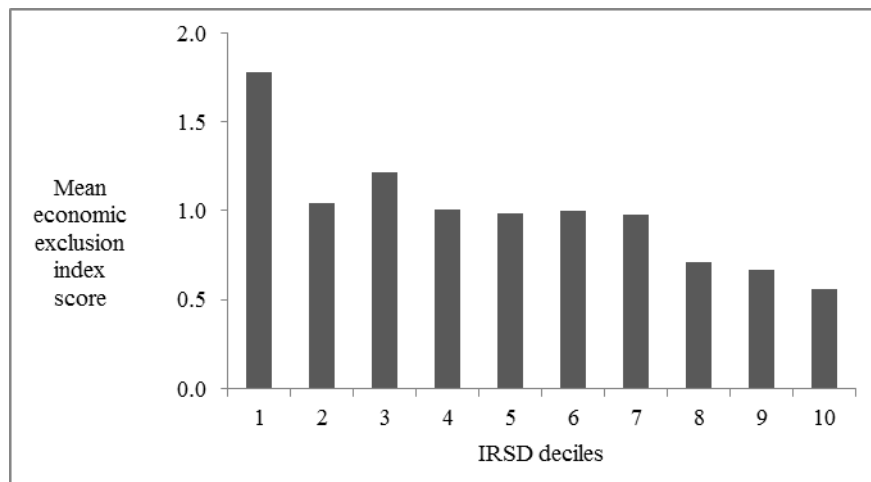
Figures 3 to 5 show variations in the mean social exclusion scores across the IRSD deciles for the three domains of exclusion: disengagement, service exclusion and economic exclusion, respectively. In overall terms, the patterns displayed by the first and third domains of exclusion are similar to those shown in Figure 2 for deprivation – broadly flat across deciles 2 to 7, declining in deciles 8 to 10, with the maximum value (by a considerable margin) in the first (lowest) decile. The main differences relate to the somewhat lower index scores in both cases in the lowest decile, although it is important to emphasise that fewer indicators are used to reflect the two domains of exclusion than the 24 items used to identify deprivation.



**Figure 3.** Mean Disengagement Index Scores by IRSD Decile. Source: PEMA survey.



**Figure 4.** Mean Service Exclusion Index Scores by IRSD Decile. Source: PEMA survey.



**Figure 5.** Mean Economic Exclusion Index Scores by IRSD Decile. Source: PEMA survey

The pattern of service exclusion across the IRSD deciles in Figure 4 indicates that there is almost no locational variation in service exclusion, except in the lowest and top three deciles – and even here the variation is modest compared with that prevailing in other dimensions of social disadvantage. One interpretation of this finding is that the availability of

the services included in this analysis does not vary greatly across areas of Australia that are ranked according to their degree of disadvantage, with the exception of the bottom and top deciles (The services included were: medical treatment, hospital treatment, dental treatment, mental health services, child care, aged care services, disability support services, financial services (in the form of access to a bank or building society) and household services in the form of water, electricity, gas and telephone). In this sense (and with the above exceptions noted), the service provision system thus appears to be providing a degree of equity of access and availability to people, irrespective of the degree of disadvantage in the area in which they live.

However, it is also the case that the mean level of service exclusion across all areas is high – around 1.5 when measured across the 10 indicators used in this analysis. Since these services are designed to meet basic needs (see footnote 20), the fact that a large proportion of the community is not able to access some of them suggests that there is a need for an improvement in the overall level of provision, if not in its geographic distribution. Finally, the mean economic exclusion scores across the IRSD deciles in Figure 5 are lower than those for disengagement, even though the number of underlying indicators is similar (8, compared with 9). In this case, however, the spike in the first decile is more pronounced (relative to the scores in the other deciles), but similar to the deprivation spike in decile one shown in Figure 2.

## **6. SUMMARY**

There has been growing concern over increasing locational inequality in recent decades, leading to claims that areas of concentrated disadvantage create barriers that prevent people from reaching their economic potential and participating in social and civic life more generally. When those living in disadvantage areas are themselves socially disadvantaged, these factors can reinforce each other, resulting in entrenched poverty and deep pockets of exclusion that may be transmitted across generations. Reflecting the seriousness of these factors, this issue was a focus of the ALP government's social inclusion agenda and received increasing attention from government agencies in Australia including the Australian Social Inclusion Board and the Productivity Commission.

This paper has examined the extent and nature of locational disadvantage in Australia using indicators drawn from recent

international research developments on the deprivation approach to poverty measurement and the identification and measurement of social exclusion. The use of these indicators is more in line with recent research on the identification of social disadvantage and represents a move away from reliance on the ABS area-based SEIFA indexes that have dominated much of the previous Australian work in the field.

Results are also presented that compare different location types using a set of conventional economic indicators and those using the IRSD SEIFA index in order to highlight the differences. While many of the new findings confirm those based on previous approaches, they also reveal important new differences and, most importantly, are based on a set of indicators of individual disadvantage that reflect research best practice and are robust. Although the six-way classification of areas used in the first part of the analysis is rudimentary, it is sufficient to highlight substantial differences across areas that are of national significance. No country can claim to achieve overall equity if the markers of social disadvantage are associated systematically with where one lives.

The findings point to clear locational differences in all of the indicators of social disadvantage, both between areas identified on the basis of their size and type, and on the basis of where they fit in the national distribution of area-based disadvantage. These differences highlight the importance of taking account of people's local environment (or local community) when examining patterns of social disadvantage. Although it is true that not all of the most (least) disadvantaged people live in the most (least) disadvantaged areas, it is the case that there are substantial and systematic differences in the degree of social disadvantage experienced by those living in different areas. There is also a noticeable gradient in the degree of individual-level disadvantage across areas ranked by the degree of area disadvantage. These patterns indicate that location does matter when it comes to examining the overall profile of inequality and that further research is needed to better understand these differences and guide the policy response.



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