AUSTRALIAN JOURNAL OF LABOUR ECONOMICS
Volume 13 • Number 1 • 2010 • pp 27 - 47

Children with Jobless Parents: National and Small Area Trends for Australia in the Past Decade

Riyana Miranti, Ann Harding, Justine McNamara, Vu Quoc Ngu and Robert Tanton,
University of Canberra

Abstract

This paper examines national and spatial trends in the number and proportion of children with jobless parents during the past decade. At the national level, we found that the number of dependent children living in households where no parent had a job fell from around 756,000 in 1995-96 to around 684,000 in 2005-06. This reflects the increasing employment rates in Australia over this period. The proportion of all dependent children living in jobless households also fell, from 15.6 per cent in 199596 to 13.8 per cent in 2005-06. Despite this progress, however, one in every 7 dependent children in Australia in 2005-06 still lived in a household where no parent had a job. Looking at small areas, we found that in three-quarters of the 1049 small areas considered – covering 80 per cent of all children – the risk of children living in a jobless family fell between 2001 and 2006.

JEL Classification: J130, J210, R190

1. Introduction

The proportion of children growing up in jobless households is widely regarded as a key indicator of the well-being of societies, with the OECD and other organisations regularly reporting on progress on this front. As the OECD notes, 'children growing up in jobless households lack the role model of a working adult – a factor often identified as affecting educational and future labour market achievements of children' (OECD,

Address for correspondence: Dr Riyana Miranti, NATSEM, University of Canberra, ACT 0200 Australia. Email: riyana.miranti@natsem.canberra.edu.au
Acknowledgements: This study was funded by a Linkage Grant from the Australian Research Council (LP775396), with our research partners on this grant being the NSW Department of Community Services; the Australian Bureau of Statistics; the ACT Chief Minister's Department; the Queensland Department of Premier and Cabinet; Queensland Treasury; and the Victorian Departments of Education and Early Childhood and Planning and Community Development. We would like to gratefully acknowledge the support provided by these agencies. The authors would like particularly to thank the Australian Bureau of Statistics (ABS) for supplying data for this study. The findings in this paper must not be interpreted as New South Wales, Victorian, Queensland, Australian Capital Territory or ABS policy views or endorsements regarding methodology or results. The authors also thank two anonymous referees for valuable comments on the earlier draft of this paper.

2005, p. 38). The OECD has also noted that one of the two most important factors which can contribute to child poverty is whether or not children are living with parents who are jobless (OECD, 2005, p. 56). This is also considered as one key indicator of children's material well being (UNICEF, 2007). In Australia, the Australian Bureau of Statistics (ABS) has also recognised the importance of children in jobless households as a measure of child well-being, by including it in their publication *Measures of Australia's Progress* (ABS, 2006).

The importance of living in a jobless household as a key indicator of child wellbeing meshes with an increasing emphasis on understanding and addressing aspects of disadvantage which go beyond simple measures of income poverty (Daly, 2006; Saunders, 2005; Saunders, Naidoo and Griffiths, 2007; UNICEF, 2007). The concept of social exclusion (of long-standing research and policy interest in the UK and Europe, and more recently becoming prominent in Australia) is closely associated with this emphasis on a multidimensional approach to disadvantage (Burchardt *et al*., 2002; Saunders, 2003). Labour market participation is a prominent feature of many measures of social exclusion (Atkinson *et al*., 2002; Eurostat, 2002; Hayes *et al*., 2008; Levitas *et al*., 2007), and parental joblessness has been identified in Australian studies as an indicator of child social exclusion (McNamara *et al*., 2009; Saunders, Naidoo and Griffiths, 2007).

Parental joblessness may contribute to child social exclusion in a number of ways. The most straightforward of these is the poverty which frequently results from joblessness. Child poverty is associated with a range of difficulties during childhood which will have a potential impact on children's lives – such as their family relationships, educational and developmental achievements – and also may have an adverse impact on children's health (see for example, Fincher and Saunders, 2001). Further, child poverty has been associated with adverse outcomes in adulthood (see, for example, Bradshaw *et al*., 2004; Corcoran, 2001; Duncan and Moscow,1997; Hobcraft, 2002). Research has shown higher rates of income poverty for children than for adults in Australia (Harding *et al*., 2001; UNICEF, 2005), and higher rates of poverty for children compared to elderly people in America since 1980 (Lindsey, 2004, p. 231).

In addition to the strong impact which joblessness has on poverty, some research has identified other negative impacts of parental joblessness on children. For example, Gregory (1999) argued that family joblessness was likely to put children at a higher risk of mental health and development problems, as sometimes joblessness creates further social problems such as violence in families. He also argued that children's future development may be compromised by parental joblessness, since children depend on access to economic resources during their first fifteen years of life. Compared to other OECD countries, the latest available internationally comparative estimates for 2000 show that Australia is one of the worst performing OECD countries in terms of the percentage of children who are growing up in a household where no adult works (ranked 23 out of 24 countries). In 2000, Australia performed slightly better than Hungary (UNICEF, 2007, p.6).

Despite these statistics, the research on children living with jobless parents in Australia suffers from differences in approaches to measurement issues, which means that caution should be exercised when comparing the results of different studies.

Previous Australian research concentrated on the period of the late 1970s to the 1990s. Gregory (1999), using the family as the unit of analysis, found that the proportion of children aged 0-15 living in families without a parent employed in 1998 was 18 per cent, which was an increase from 11 per cent in 1979. Using the household rather than the family as the unit of analysis and including all working age adults rather than just parents, Dawkins, Gregg and Scutella (2002) found a slightly lower risk of joblessness but a similar magnitude of change – 15 per cent in 1997/98, which was almost 1.5 times higher than the 10.2 per cent found for 1986. The most current published figure of children with jobless parents for Australia was around 16 per cent, reported in the 2006 edition of *Measures of Australia's Progress* and based on data from the 2003-04 Survey of Income and Housing (ABS, 2006).

All these studies have looked at national results – no previous work focusing on children in jobless households or families has disaggregated the national analysis into a spatial picture. However, a spatial perspective on this measure is very important as, without knowing where these children are living, Government planners and policy makers have insufficient information available to plan the effective provision of services. This spatial aspect of disadvantage is now being recognised as important in measuring social inclusion in Australia, and 'Focusing on particular locations, neighbourhoods and communities to ensure programs and services are getting to the right places' is identified as one of the Australian Social Inclusion Priorities (Australian Government, 2009).

This paper incorporates this key aspect of child disadvantage, providing a spatial analysis which takes into account the geographical differences in the distribution of Australian children living in families where no parent works. The definition of parental joblessness used in this paper covers parents who are either unemployed or not in the labour force. The incorporation of both unemployed people and those not in the labour force into our definition of joblessness follows the standard definition of joblessness used by the OECD (2005).

This paper thus makes an important contribution to knowledge about children in jobless households – by both updating national level information to take account of changes over the last ten years using Survey of Income and Housing data and also providing the spatial picture at a Statistical Local Area level using census data.

The remainder of this paper is organised as follows. Section 2 presents the data and methodology. Section 3 discusses the national picture based on the 1995/96 and 2005/06 ABS Surveys of Income and Housing Costs. This section quantifies the incidence of jobless households/families and identifies the characteristics of these households. Section 4 presents the spatial picture of children living in jobless families by Statistical Local Area, using data from the ABS Censuses of Population and Housing for 2001 and 2006. Section Five presents the discussions and conclusions.

2. Data and Methodology

Data

This study uses data from the ABS 1995-96 and 2005-06 Confidentialised Unit Record Files (CURFs) of the Surveys of Income and Housing (SIH) to analyse the national

picture in Section Three. The advantage of using the SIH for this national picture is that the SIH allows a comparable picture over 10 years. The SIH has a sample size of about 7,000 households for 1995-96 and 10,000 households for 2005-06. For both years, the population in the SIH covers private dwellings only.

For the spatial picture presented in Section 4, the 2001 and 2006 Censuses of Population and Housing were used, as these data were available at a small area level. The high level of spatial disaggregation at which the data can be obtained is the advantage that the Census has over the SIH.

For this study, we used the Statistical Local Area (SLA) as the base spatial unit of analysis. This standard geographical unit was chosen from the ABS Australian Standard Geographical Classification (ASGC) because it was the smallest unit with complete coverage of Australia that does not introduce the problems of data confidentiality evident at smaller spatial levels, such as Census Collection District (Daly *et al*., 2007; Daly *et al*., 2008).

Since there are two sources of data for this study, there are also some differences in terms of the unit of analysis and coverage as follows. First, all the data provided from the Census were based on children in families, while the SIH provided data about children in households.[1]

Given that relatively few children live in multi-family households, this definitional difference between the two data sources is not expected to have much impact upon the results.

Second, the children in the Census data we use for this paper are split into two age groups: children aged 0-4 and children aged 5-15 years. These two groups follow other work focussing on the regional distribution of child social exclusion (Daly *et al*., 2007; Daly *et al*., 2008 and Tanton, *et al*., 2009). However, the data in the Survey of Income and Housing uses a slightly different age cut off, since this data follows the ABS definition of 'dependent children', which includes children aged 0-14 and dependent students aged 15-24. The definition of children adopted in this paper is different from Dawkins, Gregg and Scutella (2002) who defined dependent children as all children aged less than 15 years old and full time students aged less than 18 years old.

There are also differences in terms of definitions of a household head (reference person) in the 1995-96 and 2005-06 Confidentialised Unit Record Files (CURFs) of the Surveys of Income and Housing (SIH). In 1995-96, the household reference person was defined as the adult male for a couple income unit and the parent in a one-parent income unit. However, in the 2005-06 SIH, the household reference person was defined as the person in the household with the highest income, except

[1] A 'family' is defined by the ABS (2005a) as follows:
'two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household. The basis of family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will therefore, contain more than one family.'
Whereas, a 'household' is defined by the ABS (2005a) as follows:
'one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling.'

for single parent households, where the reference person was the parent (Tanton, Nepal and Harding, 2008). Therefore results and analysis based on the gender of the household head may be affected by this change in definition.

In some earlier studies, jobless households/families have been defined as households/families where *no working age adults* are in paid employment. The problem with this definition is that students may be working part time or casual hours, and be counted as working while not supporting the household. In this paper we have modified this definition slightly to focus on *parents only*, as parents are the traditional income sharers in a family. It should also be noted that the analysis presented here does not take into account the duration of joblessness, as our data do not contain this information.

In the remainder of this paper, 'jobless households/families' refers to those households/families in which children are living, and in which neither of the child's parents are working (if a couple family) or where a single parent is not working (if a single parent family). Thus, cases in couple families in which one parent is working and the other parent is not are excluded from this definition. As stated earlier, our definition of jobless parents covers those parents who are either unemployed or not in the labour force.[2]

Spatial Methodology

In the 2001 Census, there were 1353 SLAs covering all of Australia whereas, in the 2006 Census, the number of SLAs was 1426. The populations of these SLAs in both years were distributed unevenly across Australia, with some small states and territories being broken into a relatively large number of SLAs and other larger states consisting of relatively few. For example, according to the 2006 Census, the Australian Capital Territory contained only 1.63 per cent of Australia's population, but had 109 SLAs (or 7.64 per cent of total SLAs). In contrast New South Wales, which contains 33 per cent of Australia's total population, had only 200 SLAs (or 14.03 per cent of all SLAs). Queensland also had 479 SLAs (33.59 per cent of total Australian SLAs), but contains only 19.67 per cent of the total population. Almost half of Queensland SLAs are Brisbane SLAs, with quite low populations.

Uneven population sizes within small areas creates an issue known as the Modifiable Area Unit Problem (MAUP). More populous SLAs are likely to cover more heterogeneous populations, leading to pockets of extreme values being averaged out. In contrast, less populous SLAs (which are particularly concentrated in Canberra and Brisbane) usually have more homogenous populations and, thus, more extreme values for the characteristic being studied, simply because the extreme values are not being averaged out.

The methodology we used to address the issue of the MAUP follows that used in Baum, O'Connor and Stimson (2005) and Daly *et al*. (2008). SLAs in Brisbane and Canberra were aggregated to Local Council Electoral Wards for Brisbane and

[2] This definition excludes other adults in the family, whereas some other authors, for example, Dawkins, Gregg and Scutella (2002), do not restrict their definition to parents only but also include other individuals in the household of working age (15-64 years for males and 15-59 years for females) who are not studying full time. These differences in definition should be kept in mind when interpreting results in this paper.

Statistical Subdivisions (SSD) for Canberra, so that they were more similar in the level of heterogeneity to SLAs in other areas of Australia.[3]

As one of the purposes of this paper was to undertake a spatial comparative analysis between 2001 and 2006, we also needed to take into account the SLA boundary changes between 2001 and 2006. Therefore, 2001 SLA codes are expressed in terms of 2006 ASGC boundaries, using a concordance supplied by the ABS. It is important to note that where SLAs have been split up, the 2001 concordance is simply based on the population weight. This means that populations with particular characteristics are split between the SLAs, based on their population weights. While this is the standard approach to dealing with such SLA boundary changes across time, care needs to be taken when interpreting the results from spatial comparative analysis, to take into account these concordance issues.

Before analysing joblessness, those SLAs, Wards or SSDs that had very low cell counts (a child population of less than 30) or had a very high non-response rate on the Census (greater than 80 per cent non-response) were excluded from the analysis, since the data for small areas with low cell counts and high not-stated responses may be unreliable. The low cell counts mean that any small change in numbers can result in a large percentage change. In addition, low cell counts are sensitive to randomisation/ perturbation issues. After those low cell and high non-response counts were excluded, there were 1049 small areas of observation for the analysis in 2001 and 2006.

3. The National Picture (1995-96 to 2005-06)

Previous studies showed an increase in the risk of children being in jobless households between the late 1970s/early 1980s and the 1990s (Gregory, 1999; Dawkins, Gregg and Scutella, 2002; Scutella and Wooden, 2004).[4] This section explores the national picture of children in jobless households to see whether there was still a high risk of children in jobless households in 2005-06; whether this risk fell between 1995-96 and 2005-06 in line with the national fall in the unemployment rate; and whether there were changing characteristics among these jobless parents.

Unless specified differently, the number and the risk reported in this section always refers to total dependent children, which also includes full time students aged 15 to 24 as well as 0 to 14 year olds. Unless specified differently, the risk is calculated as the number of children in households with jobless parents, as a percentage of all children in each relevant decomposition, such as by state or by family composition.

National Overview

The number of dependent children who lived in jobless households declined by 9.6 per cent over the ten years to 2005-06, from 756,400 children in 1995-96 to 683,800 children in 2005-06 (table 1). To a minor extent, this fall in the number of children in jobless households was driven by the declining number of children aged 0 to 14 years in all of Australia, which declined by around two per cent, from around 3.88 million children to 3.80 million children (table 1).

[3] The Brisbane aggregation was based on an SLA to ward concordance kindly supplied by the Centre for Research into Sustainable Urban and Regional Futures at the University of Queensland, and modified by the authors for use with 2006 SLAs.
[4] Some researchers refer to the risk as 'incidence'.

Table 1 - The Number, Risk and Distribution of Children in Jobless Households, by Age, 1995-96 and 2005-06

	1995-96				2005-06			
Age of children	*All children*	*Children in Jobless Households*	*Risk (per cent)*	*As percentage of all children in jobless households*	*All children*	*Children in Jobless Households*	*Risk (per cent)*	*As percentage of all children in jobless households*
0 to 4	1,292,900	225,800	17.5	29.8	1,224,600	180,200	14.7	26.4
5 to 14	2,584,200	406,100	15.7	53.7	2,570,800	382,700	14.9	56.0
0 to 14	3,877,200	631,900	16.3	83.5	3,795,400	562,900	14.8	82.3
15 to 24	977,000	124,500	12.7	16.5	1,157,000	120,900	10.4	17.7
0 to 24	4,854,200	756,400	15.6	100	4,952,400	683,800	13.8	100

Note: All estimates of numbers have been rounded to the nearest 100. *Data source*: SIH 1995-96 and 2005-06

The increasing propensity of Generation Y (persons who were born between 1976-1991) to remain within the parental home (Cassells and Harding, 2007) was clearly shown in the rising number of dependent 15 to 24 year olds nationally, with 1.16 million 15 to 24 year old full-time dependent students still living with their parents in 2005-06, up from 977,000 a decade earlier.

But, despite this increase in the size of this group, by 2005-06 fewer 15 to 24 year olds were living in households where no parent worked (down from 125,000 in 1995-96 to 121,000 in 2005-06).

Another way of looking at these results is to look at changes in the risk of children living in jobless households. Again, these results were positive, with the proportion of all dependent children living in jobless households declining from 15.6 per cent in 1995-96 to 13.8 per cent a decade later.[5] This suggests that the pattern of rising risk in the 1980s and early 1990s revealed in the earlier research has now been reversed. Despite this progress, however, one in every seven dependent children in Australia in 2005-06 still lived in a household where no parent had a job. Across all age groups, around 80 per cent of children in households without any parent working were dependent children aged less than 15 years old – and this proportion did not change much over the decade.

Risk by Household Composition

This section examines the household composition of jobless households by examining single parent and couple parent households separately. Table 2 shows that children who lived in single parent households faced a higher risk of living in a jobless household than couple parent households. Their risk was almost ten times more in 2005-06 than their counterparts in couple parent households. The overall risk of living in a jobless

[5] This risk was higher than the risk of 12.9 per cent for SIH 1995-96 data found in Dawkins, Gregg and Scutella (2002) due to definitional differences (they included only dependent children up to 18 years of age and their jobless households definition also included other adults in the household rather than parents only).

household for children of single parent families declined across the period (from around 55 per cent to 49 per cent). Thus in 2005-06, almost one in every two children who lived with single parents, lived with jobless single parents. This reflects the high numbers of single parents who were not in the labour force.

Table 2 - The Number, Risk and Distribution of Children in Jobless Households, by Household Composition, 1995-96 and 2005-06

	1995-96				*2005-06*			
Age of children	*All children*	*Children in Jobless Households*	*Risk (per cent)*	*As percentage of all children in jobless households*	*All children*	*Children in Jobless Households*	*Risk (per cent)*	*As percentage of all children in jobless households*
				Household Composition				
0 to 14								
Single parent	564,300	338,500	60.0	44.8	706,400	384,700	54.5	56.3
Couple parents	3,199,600	246,300	7.7	32.6	3,007,300	165,300	5.5	24.2
0 to 24								
Single parent	705,500	384,800	54.5	50.9	910,100	449,400	49.4	65.7
Couple parents	4,016,100	317,500	7.9	42.0	3,947,900	220,700	5.6	32.3

Note: All estimates of numbers have been rounded to the nearest 100. A small number of children live in multi-family households and are excluded from the numbers in the above table because small sample size means that the results for this group are unreliable. *Data source*: SIH 1995-96 and 2005-06.

The results in table 2 also explain much of the puzzle about why the risk of children living in jobless households did not fall even more rapidly during a decade characterised by strong economic growth and falling unemployment. This table shows that there was a pronounced compositional shift in the types of households that dependent children lived in (especially for those single parents with younger children aged 0-14), with around an additional 200,000 children living in sole parent households by 2005-06 compared with a fall in the number of dependent children living in couple households (thus, around 910,000 dependent children lived in sole parent households in 2005-06, compared with 705,000 in 1995-96).

The difficulties of obtaining child care, transportation and adequately flexible hours to balance the demands of sole parenthood with work are factors which may contribute to the higher rates of non-participation in the labour force among single parents, with many single parents relying in whole or part on income support payments. Lower rates of employment among single parents compared with couple households in turn contribute to the high rates of poverty experienced by single parent families (Miranti *et al*., 2008).

Because the risk of having a jobless parent is so much higher for children in sole parent households than in couple households, this compositional shift offset the across-the-board fall in the risk of joblessness that occurred during the decade. Thus, in 1995-96, almost half of all those children living in jobless households lived in single parent households. But the story had changed 10 years later, so that around two-thirds of all those children living in jobless households lived in single parent households.

The risk of living in a jobless household for children who lived in couple parent households was relatively low. Around 5.6 per cent of all children who lived with couple parents in 2005/06 lived in jobless households, a decline from 7.9 per cent in 1995/96. In contrast to the case of children in single parent households, less than one in every 20 children who lived with couple parents had no parent without paid work. However, as the number of couple households greatly outweighs the number of single parent households, one-third of all children who lived with jobless parents still lived in couple households.

Risk by Characteristics of Household Head

This section analyses the risk of children who lived in jobless households by taking into account the education characteristic of the household head as shown in table 3.

Table 3 - The Number, Risk and Distribution of Children in Jobless Households, by Educational Qualification of Household Head, 1995-96 and 2005-06

	1995-96				*2005-06*			
Age of children	*All children*	*Children in Jobless Households*	*Risk (per cent)*	*As percentage of all children in jobless households*	*All children*	*Children in Jobless Households*	*Risk (per cent)*	*As percentage of all children in jobless households*
	Highest Educational Qualification of Household Head							
0 to 14								
Bachelor or above	627,500	18,400	2.9	2.4	920,000	33,700	3.7	4.9
Diploma	415,700	46,500	11.2	6.2	339,400	30,600	9.0	4.5
Certificate	1,057,600	94,000	8.9	12.4	1,058,500	94,400	8.9	13.8
No higher education	1,776,300	472,900	26.6	62.5	1,477,500	404,100	27.4	59.1
0 to 24								
Bachelor or above	802,000	22,000	2.7	2.9	1,232,300	40,200	3.3	5.9
Diploma	518,100	55,600	10.7	7.3	473,900	44,000	9.3	6.4
Certificate	1,333,600	123,300	9.2	16.3	1,374,800	118,300	8.6	17.3
No higher education	2,200,500	555,600	25.2	73.5	1,871,400	481,400	25.7	70.4

Note: All estimates of numbers have been rounded to the nearest 100. *Data source*: SIH 1995-96 and 2005-06.

Not surprisingly, the risk of children being in jobless households reduces as their parents are better educated (table 3). The risk was the lowest for households with a head who had a bachelor degree and above (3.3 per cent) and the highest for households where the head had no higher education (25.7 per cent). This indicates that education improves one's employment prospects. Around seven in every 10 children who lived in a jobless household had a head who had gained no higher educational

qualifications after completing their schooling. Somewhat surprisingly, for children living in households where the head had a tertiary degree, a marginal increase in the risk of being in a jobless household allied with a sharp increase in the number of children living in such households resulted in a doubling in the proportion of all children in jobless households who had tertiary qualified heads (from 2.9 per cent to 5.9 per cent of all children in jobless households).

These results could be influenced by a number of factors, including the possibility that an increase in the overall proportion of people completing tertiary education (ABS, 2005b) may be associated with greater competition for available jobs, or an increasing numbers of single parents (for whom joblessness is more common) completing a tertiary qualification.

4. The Spatial Picture (2001-2006)

The objective of this section is to analyse the distribution of children in jobless families across smaller spatial units than those available in the SIH. As noted in the methodology section, our base spatial unit of analysis is the Statistical Local Area (SLA), with aggregations to local council electoral wards in Brisbane and statistical subdivisions (SSDs) in Canberra to even out differences in SLA populations.

The comparison across time in this section is a five year period between 2001 and 2006. In interpreting these results, it is important to remember the definitional differences between our national and spatial analysis as noted earlier. In particular, 'children' here means children aged 0 to 15 years old, which is a subset of the 'dependent children' definition used in the national analysis, which included dependent full-time students aged 15 to 24 years old still living in the parental home. Therefore, due to differences in terms of unit of analysis and coverage, direct comparison of results from sections 3 and 4 is not possible.

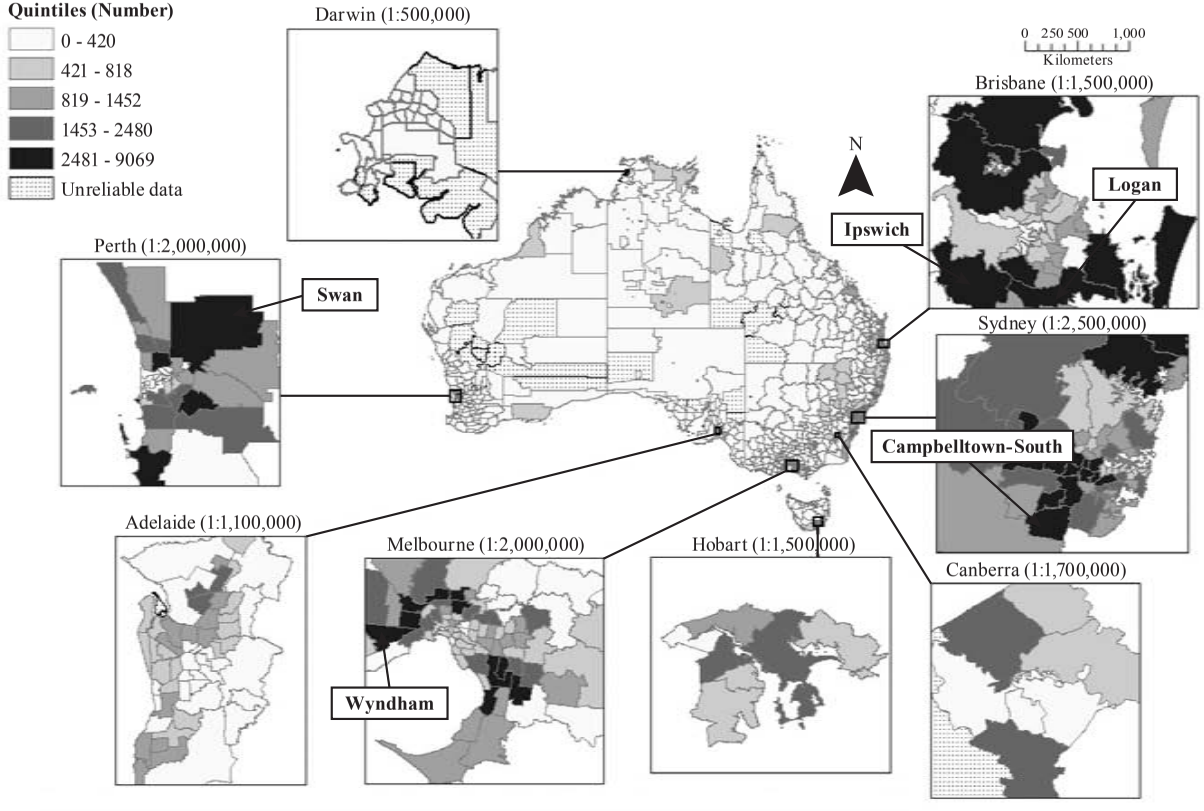
Where do Children in Jobless Families Live?

Since the data excluded those SLAs with a high non-stated response and where child populations were less than 30, the analysis covers 1049 observations (SLAs, ACT SSDs, and Brisbane Electoral Wards). For simplicity, these 1049 observations will be referred as 1049 small areas. It is important to note that where the analysis by state or capital city/balance of state is provided, it covers only these 1049 areas. These 1049 areas consist of 318 urban areas (in the capital cities) and 731 rural areas (in the balance of states). Thus, almost 70 per cent of total small areas discussed in this paper are rural areas.

Figure 1 shows the distribution of the number of children in jobless families by small area, for the whole of Australia and for each of the state and territory capital cities. The number of children, as well as the risk, is important for policy analysis purposes (for example, in planning for services).

Figure 1 divides small areas into child population weighted quintiles of the number of children who lived in jobless families in 2006 in such a way that the total number of children in each quintile represents 20 per cent of the total Australian child population. This means that results for each small area have been weighted by the child population in that area. Using a child weighted population means that the maps will be more relevant to service providers.

Figure 1 - The Number of Children in Jobless Families 2006



Note: Quintiles are weighted by the number of children aged 0-15 Data source: ABS Census of Population and Housing 2006, authors' calculations.

This approach allows us to overcome in part the issues created by differences in child population size between small areas. As the map uses child population-weighted quintiles to present the results, the numbers of small areas in each quintile are not the same.

Quintiles are used in this paper to present the mapped data because they provide some comparability across maps, as each category (quintile) contains 20 per cent of children. Using other category splitting methods, like natural breaks, which locates where breaks naturally occur in the data, means the categories are not comparable across different maps. In one map a category may contain 80 per cent of children, and in another map it may be only 20 per cent of children. Using quintiles, there is always 20 per cent of children in each category.[6]

The lightest colour on the map represents the areas in the lowest quintile, which corresponds to the 20 per cent of Australian children living in small areas with the lowest number of children in jobless families (that is, the bottom child-weighted quintile), while, in contrast, the darkest colour on the map represents areas in the highest quintile, containing the 20 per cent of Australian children living in small areas with the greatest number of children in jobless families.

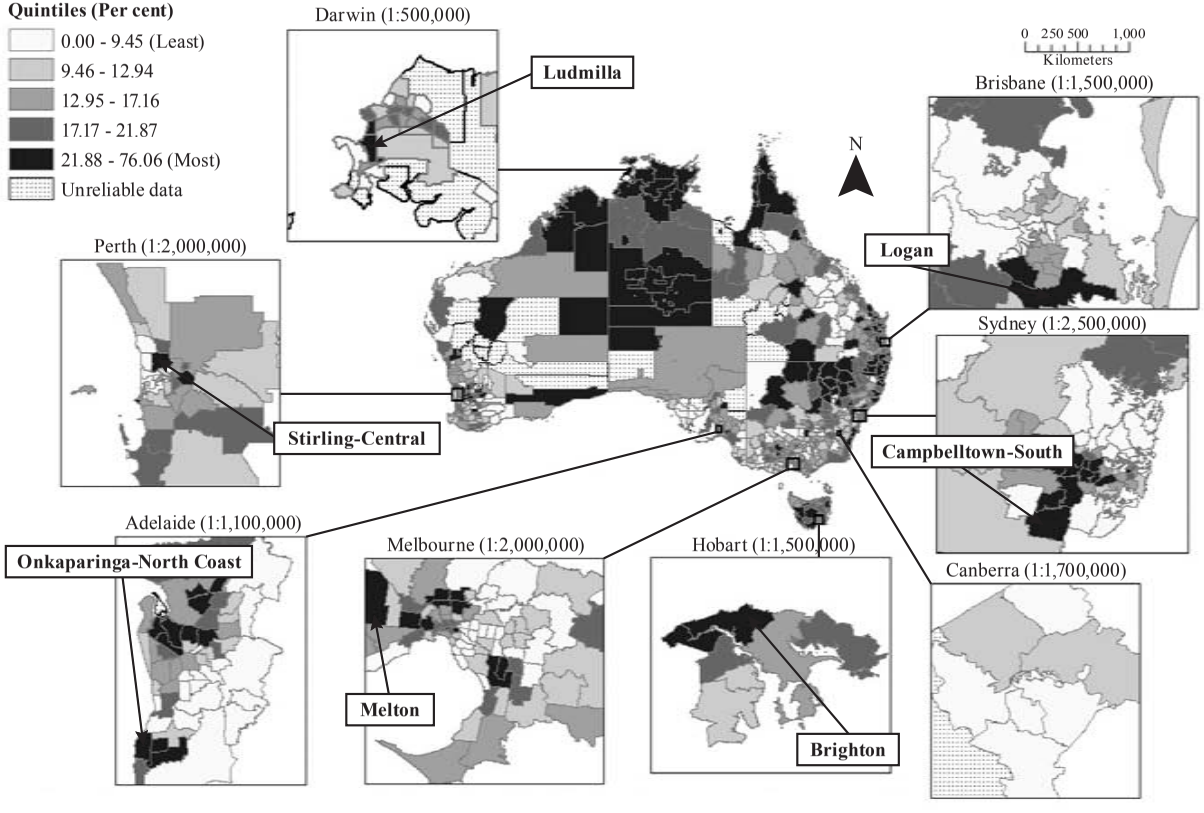
Readers should note that the spread of data within quintiles differs – for example, in figure 1 the first quintile represents those small areas which have between 0 and 77 children living in jobless households (a relatively small range), while the fourth quintile contains those small areas with between 379 and 850 children living in jobless households – a much broader range. Similar differences in the quintile content appear in figure 3.

From the national map, some spatial patterns can be observed. First, in every state, there are clusters of children in jobless families. Second, areas with high numbers of children in jobless families are mostly urban, and are particularly focused in small areas in Brisbane (including Logan and Ipswich), Sydney (including Penrith, Campbelltown-South and Gosford-West), Melbourne (including Wyndham-North, Frankston-West and Brimbank-Sunshine) and Perth (including Swan and Rockingham). This may reflect the emergence of new urban poor areas within states (Wilson, 1996) or it might reflect high total population in urban areas.

The absolute number of children living in jobless families by small area is of interest to policy makers in its own right, as this measure indicates where such children are concentrated. Another common measure of relative disadvantage is the *risk* for children within each small area of being in a jobless family. The two measures may give a different impression of the spread of disadvantage, especially where a particular area has a relatively high *proportion* of its children living in jobless families but has a low population size – which means that this still represents a relatively low *number* of children. Figure 2 shows the distribution of the *risk* of children being in jobless families by small area. Unless specified differently, the risk is calculated as the number of children in jobless families as a percentage of all children resident in the small area.

[6] However, it is acknowledged that the use of quintiles is not always an ideal way to present population characteristics spatially (see, Murray and Shyy, 2000 for example, for a discussion of methods of displaying spatial data). The child population weighted quintiles methodology adopted in this paper follows previous papers which discuss child disadvantage (see for example, Harding *et al*. (2009b); McNamara *et al*. (2009) and Tanton, *et al*. (2009)).

Figure 2 - The Risk of Children Being in Jobless Families 2006



Note: Quintiles are weighted by the number of children aged 0-15 Data source: ABS Census of Population and Housing 2006, authors' calculations.

Similarly to figure 1, this map shows child population-weighted quintiles of risk of children living in jobless families in 2006. The highest quintile (the darkest colour on the map) contains the 20 per cent of Australian children living in areas with the highest risks of living in jobless families (with percentages of children in jobless families ranging from 21.9 to 76.1 per cent). This shows a substantially different spatial picture to that based on numbers. From the national map, the presence of the clusters of risk is less obvious than in absolute numbers and, in contrast to figure 1, areas with the highest risk of children being in jobless families are rural, mostly in the Northern Territory, Tasmania, Western Australia and some areas in New South Wales. Children faced the highest risk of living in jobless families if they lived in the rural Northern Territory, which is not surprising due to the disadvantaged socioeconomic status and extreme remoteness (so lack of accessibility to work) of much of the rural Northern Territory. In terms of numbers, children in jobless families are a capital city phenomenon but, in terms of risk, non-capital city children are the most disadvantaged. However, some western suburbs small areas in Sydney (such as Campbelltown, Fairfield, Blacktown, Liverpool) fell into the highest quintiles for both number and risks of children in jobless families.

2006 vs 2001

After examining the risk across small areas cross-sectionally, we were also interested in comparing risk across time.

Most small areas in 2006 performed better than 2001, with 74.5 per cent of all small areas recording lower risk than in 2001. The figure is even more impressive when it is translated to the proportion of children in jobless families who improved their risk over the five years – these 'improving' small areas covered 80 per cent of children in jobless families.

Nevertheless, when a more detailed decomposition is carried out, the picture shows there were still discrepancies in terms of the improvement of the risk. Figures 3 and 4 show this more detailed decomposition by dividing small areas into four groups.

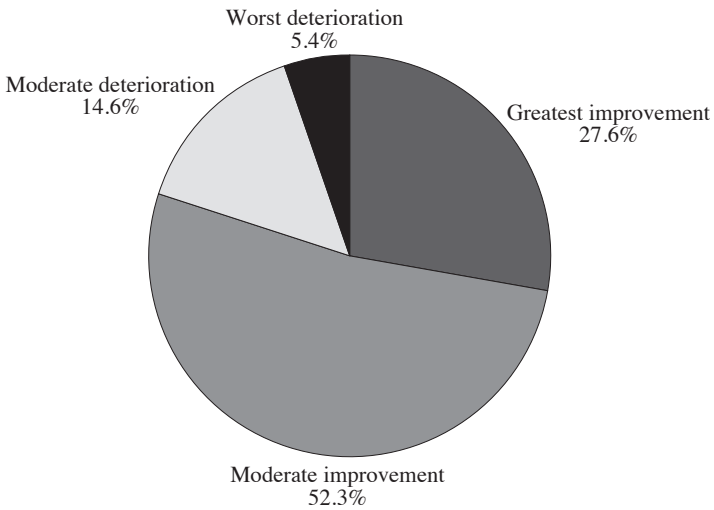
First, the division is based on the category of 2006 risk being better or worse than the 2001 risk. Second, the difference in the risk between 2001 and 2006 (2006 risk – 2001 risk) for each of these small areas is calculated. Third, for each of the two groups (better or worse), the mean of the difference is calculated. This is 4.1 percentage points for small areas that were 'better' and 3.3 percentage points for small areas that were 'worse'. These percentage points were then used to classify all our small areas into four different groups:

- Better than 2001 risk and risk decreased more than 4.1 percentage points — the greatest improvement group.
- Better than 2001 risk but risk decreased less than 4.1 percentage points — the moderate improvement group.
- Worse than 2001 risk and risk increased less than 3.37 percentage points — the moderate deterioration group.
- Worse than 2001 risk and risk increased more than 3.37 percentage points — the worst deterioration group.

Thus, the small areas which saw the strongest improvement in risks of children living in jobless households are those in the 'greatest improvement' category, and the small areas which experienced the most deterioration in risk are those in the 'worst deterioration' category.

These categories are shown in a pie chart (figure 3). Only 27.6 per cent of children in jobless families fell into the 'greatest improvement' category, with the bulk of children in jobless families (52. 3 per cent) falling into the 'moderate improvement' group. This suggests that, while most small areas experienced falls in the risk of children living in jobless families, for the most part these decreases were of a fairly modest magnitude. Similarly, most of the increasing risk small areas fell into category of 'moderate deterioration' (14.6 per cent of children). Only 5.4 per cent of children in jobless families fell into category of 'worst deterioration'.

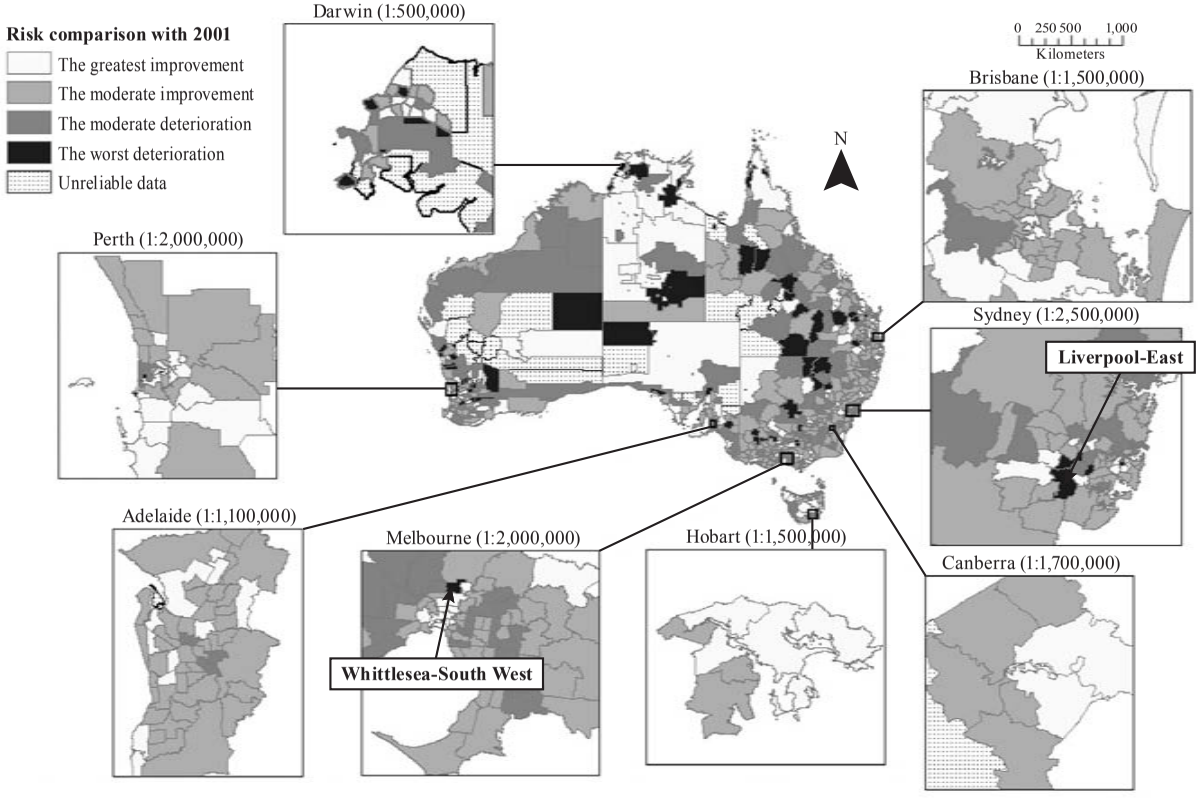
Figure 3 - The Percentage of Children in Jobless Families according to Change in Risk between 2001 and 2006



Note: The greatest improvement covered small areas where the risk in 2006 was better than 2001 risk and decreased more than 4.1 percentage points. The moderate improvement covered small areas where the risk in 2006 was better than 2001 risk but decreased less than 4.1 percentage points. The moderate deterioration covered small areas where the risk in 2006 was worse than 2001 risk and increased less than 3.37 percentage points. The worst deterioration covered small areas where the risk in 2006 was worse than 2001 risk and risk increased more than 3.37 percentage points. Data source: ABS Census of Population and Housing 2001 and 2006, authors' calculations.

Figure 4 shows the spatial distribution of these four categories, with the darkest colour on the map representing the 'worst deterioration' category and the palest colour on the map representing the 'greatest improvement' category.

Figure 4 - The Risk of Children in Jobless Families by small areas, 2006 Compared with 2001



Data source: ABS Census of Population and Housing 2001 and 2006, authors' calculations.

As shown on the map (figure 4), there were clusters of small areas in the categories of moderate deterioration and the worst deterioration, both in urban and rural areas (with the exception of Hobart and Canberra). For the capital cities, these clusters were very clear in Sydney, Melbourne and Brisbane. However, there was a higher proportion of non-capital city SLAs which fell into the worst deterioration category compared to capital city SLAs. Areas with the worst deterioration tended to be at the outskirts of capital cities, including the western suburbs of Sydney. Areas of greatest improvement included remote areas in the Northern Territory, which may be due to increasing employment for the non-Indigenous people working in the private sector in these remote areas over this 5 year period (Biddle, Taylor and Yap, 2009).

5. Discussions and Conclusions

The proportion of children living in jobless households is widely regarded as one of the most important social indicators, as earlier research has shown that this phenomenon is linked to poorer outcomes later in life and to child poverty. The decline in the national unemployment rate in Australia during the past decade has raised the hope that today fewer Australian children are living in jobless households. Our analysis of trends at the national level has shown that the number of dependent children living in households where no parent had a job fell from around 756,000 in 1995-96 to around 684,000 in 2005-06 reflecting strong economic growth over this period.

While there were across-the-board falls in the number of such children by age group, the sharpest decreases occurred for 0 to 4 year old children, with a one-fifth fall in the number of 0 to 4 year olds living in jobless households over this decade. The proportion of dependent children living in jobless households also fell, from 15.6 per cent in 1995-96 to 13.8 per cent in 2005-06. Despite this progress, however, one in every 7 dependent children in Australia in 2005-06 still lived in a household where no parent had a job.

Parental joblessness is a complex phenomenon and is associated not just with unemployment, but also with whether or not parents are able to work, or are seeking work. For example, the high effective marginal tax rates (EMTRs) faced by some Australian families may reduce the likelihood of parents working.[7]

Harding *et al*. (2009a) found that one in every five single parents faced EMTRs of more than 50 per cent in 2006-07. This was more than double the proportion a decade ago. Our findings here show that in 2005-06, almost one in every two children who lived with single parents lived with jobless single parents. This reflects the high numbers of single parents who were not in the labour force, and for whom decisions about working may be related to high EMTRs.

Thus, programs that assist single parents to return to work, and a consideration of possible ways in which EMTRs could be reduced in order to increase incentives for work – not only for jobless single parents but also for other jobless parents – would be beneficial. For example, the availability of high quality and affordable child care

[7] An effective marginal tax rate (EMTR) calculates how much of each additional dollar of earnings workers can actually keep, after taking into account the various income tests associated with social security and family payments, the payment of income tax and the receipt of various tax allowances and rebates (Harding *et al*. 2005, p. 202).

is a crucial factor, as child care will provide parents (especially women) with an opportunity to participate in the labour market (McNamara *et al*., 2006), and the cost of child care has been found to affect the decisions of single parents and low income women to participate in the labour market (Doiron and Kalb, 2005). Policies focused on introducing additional flexibility into the workplace may also assist women's labour force participation, as the shift towards increasing paid work for women has not been met with an equivalent decrease in unpaid work (Cassells *et al*. 2009).

How spatially concentrated are children in jobless families today? This paper finds that the overwhelming majority of all children with jobless parents live in the capital cities, making this an urban phenomenon. However, if we look at the risk of children being in jobless families, then those risks are higher for those children living outside the cities.

In terms of trends over time at a small area level, our spatial analysis of 1049 small areas indicated that in three-quarters of the areas considered – covering 80 per cent of all children – the risk of children living in a jobless family fell between 2001 and 2006. The positive news was that just over one-quarter of Australian children lived in areas where the risk of children being in jobless families fell by more than 4.1 percentage points between 2001 and 2006. Just over half of Australian children lived in areas where the risk of being in a jobless family declined during the five years, although by less than 4.1 percentage points.

However, gains were not equally spread across Australia. Some 5.5 per cent of Australia's children lived in areas where the risk of being in a jobless family actually increased by more than 3.4 percentage points between 2001 and 2006. Almost a further 15 per cent of children lived in areas where the risk of being in a jobless family still increased during these five years, but by less than 3.4 percentage points. Our spatial findings are in line with the differences in regional economic well-being reported by Vu *et al*. (2008) who found that, although the national unemployment rate fell between 2001 and 2006, the reduction in terms of unemployment (which is one aspect of joblessness) was concentrated within certain areas, suggesting that economic growth over the five years was not distributed evenly across all states. Baum, O'Connor and Stimson (2005) suggest that public policies, including local regional development are necessary to enable people living in disadvantaged areas to participate in various economic activities, and the spatial differences in parental joblessness revealed in our study support the need for this type of intervention in areas with high concentrations of such risk.

Regional policy responses could include, for example, improved transport facilities to assist access to work, and the provision of flexible and affordable child care services. Spatial targeting of employment initiatives and supports (such as policies to support people to participate in emerging industry sectors and occupations, or supports for parents returning to work after a period out of the labour force) could also be used to address needs of particularly vulnerable communities. The increase we found in the risk of parental joblessness in some small areas across Australia in the context of overall improvements in this key indicator of child well-being may suggest a substantial degree of vulnerability in such communities, which may require more intensive and broader-based support than a focus on labour market related interventions

alone. Programs that engage with families and children and provide a wide range of support and services may be necessary to help address entrenched disadvantage and promote long-term improvements in community, child and family outcomes.

In summary, while the overall decreases in children living in jobless households are encouraging, the continuing very high rates of parental joblessness in Australia, the substantial regional variation in the degree of improvement, and the existence of a substantial minority of areas where parental joblessness actually *rose* across the five year period studied here are all causes for concern, and suggest that further policy responses may be required.

References

ABS (1995-96), file generated 23 April 2008 using Survey of Income and Housing – 1995-96 CURF, Australian Bureau of Statistics, Basic CURF, Canberra.

ABS (2005a), 'Family, Household and Income Unit Variables', Australian Bureau of Statistics, Catalogue No. 1286.0, Canberra.

ABS (2005b), 'Measures of Australia's Progress: Summary Indicators, 2005', Australian Bureau of Statistics, Catalogue No. 1383.0.55.001, Canberra.

ABS (2005-06), file generated 23 April 2008 using Survey of Income and Housing – 2005-06 CURF, Australian Bureau of Statistics, Basic CURF, Canberra.

ABS (2006), 'Measures of Australia's Progress 2006', Australian Bureau of Statistics, Catalogue No. 1370, Canberra.

Atkinson, A., Cantillon, B., Marlier, E. and Nolan, B. (2002), *Social Indicators: The EU and Social Exclusion*, Oxford University Press, Oxford.

Australian Government (2009), Social Inclusion Priorities, http://www.socialinclusion.gov.au/Priorities/Pages/default.aspx, Accessed 22 October 2009

Baum, S., O'Connor, K. and Stimson, R. (2005), *Fault Lines Exposed: Advantage and Disadvantage across Australia's Settlement System*, Monash University ePress, Clayton, Victoria.

Biddle, N., Taylor, J. and Yap, M. (2009), 'Are the Gaps Closing? – Regional Trends and Forecasts of Indigenous Employment', *Australian Journal of Labour Economics*, 12(3), 263-280.

Bradshaw, J., Kemp, P., Baldwin, S. and Rowe, A. (2004), *The Drivers of Social Exclusion. A Review of the Literature for the Social Exclusion Unit in the Breaking the Cycle Series, the Social Exclusion Unit*, Office of the Deputy Prime Minister, UK, (available from www.socialexclusion.gov.uk).

Burchardt, T. Le Grand, J. and Piachaud, D. (2002) 'Introduction' in Hills, J., Le Grand, J. and Piachaud, D. (eds), *Understanding Social Exclusion*, Oxford University Press, Oxford.

Cassells, R. and Harding, A. (2007), 'Generation Why?', *AMP NATSEM Income and Wealth Report*, 17, July 2007.

Cassells, R, Miranti, R., Nepal, B. and Tanton, R. (2009), 'She Works Hard for the Money', *AMP NATSEM Income and Wealth Report*, 22, April 2009.

Corcoran, M. (2001), 'Mobility, Persistence and the Consequences of Poverty for Children: Child and Adult Outcomes', in Danziger, S. and Haveman, R. (eds.), *Understanding Poverty*, Russell Sage Foundation, New York.

Daly, A. (2006) 'Social inclusion and exclusion among Australia's children: A review of the literature', NATSEM Online Discussion Paper DP62 (available from www.natsem.canberra.edu.au).

Daly A., McNamara, J. ,Harding A., Tanton, R., and Yap, M. (2007), 'Indicators of Risk of Social Exclusion for Australia's Children: an Analysis by State and Age Group', NATSEM Other Publication-OP 52 (available from www.natsem.canberra.edu.au).

Daly A., McNamara, J. ,Harding A., Tanton, R., and Yap, M. (2008), 'Indicators of Risk of Social Exclusion for Children in Australian Households: an Analysis by State and Age Group', *Australasian Journal of Regional Studies*, 14(2), 133-154.

Doiron, D. and Kalb, G. (2005), 'Demands for Child Care and Household Labour Supply in Australia, *The Economic Record*, 81, 215-336.

Dawkins, P. , Gregg, P. and Scutella, R. (2002), 'The Growth of Jobless Households in Australia', *The Australian Economic Review*, 35(2), 133-154.

Duncan, G. and Moscow, L. (1997), 'Longitudinal Indicators of Children's Poverty and Dependence', in Hauser, R., Brown, B. and Prosser, W. (eds), *Indicators of Children's Well-Being*, Russell Sage Foundation, New York.

Eurostat (2002), European Social Statistics. Income, Poverty and Social Exclusion: 2nd Report, Eurostat, European Commission, Luxembourg, (available from http://epp.eurostat.ec.europa.eu/cache)

Fincher, R. and Saunders, P. (ed). (2001), *Creating Unequal Futures. Rethinking Poverty, Inequality and Disadvantage*, Allen & Unwin, Crows Nest, Sydney.

Gregory, R.G. (1999), 'Children and the Changing Labour Market: Joblessness in Families with Dependent Children', Centre for Economic Policy Research Discussion Paper, 40, Australian National University.

Harding, A., Lloyd, R. and Greenwell, H. (2001), *Financial Disadvantage in Australia 1990 to 2000: The Persistence of Poverty in a Decade of Growth*, The Smith Family (available from www.natsem.canberra.edu.au).

Harding, A, Vu Q.N., Percival, R. and Beer, G. (2005), 'Welfare-to-Work Reforms: Impact on Sole Parents', *Agenda*, 12(3), 195-210

Harding, A., Vu, N.Q., Tanton, R. and Vidyattama, V. (2009a), 'Improving Work Incentives and Incomes for Parents: the National and Geographic Impact of Liberalising the Family Tax Benefit Income Test', *Economic Record*, 85, September, S48-S58.

Harding, A., McNamara, J., Daly, A. and Tanton, R. (2009b), 'Child Social Exclusion: Aan Updated Index from the 2006 Census', *Australian Journal of Labour Economics*, 12(1), 41-64.

Hayes, A., Gray, M. and Edwards, B. (2008), 'Social Inclusion: Origins, Concepts and Key Themes'. Paper prepared by the Australian Institute of Family Studies for the Social Inclusion Unit, Department of Prime Minister and Cabinet, October 2008 (available at http://www.socialinclusion.gov.au/publications.htm).

Hobcraft, J. (2002), 'Social Exclusions and Generations', in Hills, J., Le Grand, J. and Piachaud, D. (eds), *Understanding Social Exclusion*, Oxford University Press, Oxford.

Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd, E. and Patsios, D. (2007), 'The Multi-dimensional Analysis of Social Exclusion', Department of Sociology and School for Public Policy, Townsend Centre for the International Study of Poverty and Bristol Institute of Public Affairs, University of Bristol.

Lindsey, D (2004), *The Welfare of Children, Second Edition*, Oxford University Press, New York.

McNamara, J., Cassells, R., Harding A., and Lloyd, R. (2006), 'Trends in Child Care Use and Cost Between 1999 and 2002+', *Australian Journal of Labour Economics*, 9(2), 125-146.

McNamara, J., Tanton, R., Daly, A. and Harding, A. (2009), 'Spatial Trends in the Risk of Social Exclusion for Australian Children: Patterns from 2001 to 2006', Child Indicators Research, 2, 155-179. Published online January 2009. http://www.springerlink.com/content/3683711401333664/?p=528b038c0dc5465381cec3811a87947c&pi=7

Miranti, R., McNamara, J., Tanton, R. and Harding, A. (2008), 'Poverty at the Local Level: National and Small Area Poverty Estimates by Family Type for Australia in 2006', paper presented at the Creating Socio-economic Data for Small Areas: Methods and Outcomes' Workshop, Canberra, 19 September 2008.

Murray, A.T. and Shyy, T. (2000), 'Integrating Attribute and Space Characteristics in Choropleth Display and Spatial Data Mining', *International Journal of Geographical Information Science*, 14(7), 649-667.

OECD (2005), *Society at a Glance: OECD Social Indicators*, 2005 edition.

Saunders, P. (2003), 'Can Social Exclusion Provide a New Framework for Measuring Poverty?', SPRC Discussion Paper No. 127, Social Policy Research Centre, University of New South Wales, available on the web at www.sprc.unsw.edu.au

Saunders, P. (2005), *The Poverty Wars*, UNSW Press, Sydney.

Saunders, P., Naidoo, Y. and Griffiths, M. (2007), 'Towards New Indicators of Disadvantage: Deprivation and Social Exclusion in Australia', Social Policy Research Centre, University of New South Wales.

Scutella, R. and Wooden, M. (2004), 'Jobless Households in Australia: Incidence, Characteristics and Financial Consequences', *The Economic and Labour Relations Review*, 14(2), 187-207.

Tanton, R., Nepal B., and Harding, A. (2008), 'Wherever I Lay My Debt That's My Home?', *AMP NATSEM Income and Wealth Report*, 19, March 2008.

Tanton, R., Harding, A., Daly, A., McNamara, J. and Yap, M. (2009), Australian Children at Risk of Social Exclusion: A Spatial Index for Gauging Relative Disadvantage, Population, *Space and Place*, DOI: 10.1002/psp.531

UNICEF (2005), *Child Poverty in Rich Countries 2005*, Innocenti Research Centre, Florence, Italy.

UNICEF (2007), Children Poverty in Perspective : An Overview of Child Well-Being in Rich Countries, Innocenti Research Centre, Florence, Italy.

Vu, Q.N., Harding, A., Tanton, R., Nepal, B. and Vidyattama, Y. (2008), Advance Australia Fair ?, *AMP NATSEM Income and Wealth Report No 20*, July 2008.

Wilson, W.J. (1996), *When Work Disappears: The World of the New Urban Poor*, Alfred A. Knoff, New York, United States of America.