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# Uncertain impacts: Trends in public expenditure on children and child outcomes in Australia since the 1980s

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#### **Abstract**

One of the purposes of social indicators is to inform policy, so that policymakers can respond to emerging trends and changing needs. Many policy responses are resource-based – that is, they involve changes in expenditure, and the size and purpose of public expenditure is an important indicator of policy effort. This article shows that between the 1980s and the mid-2000s, successive Australian governments increased expenditure on children to a greater extent than they did on elderly Australians. They also increasingly focused public expenditure on younger children, and on poorer children. Since the mid-2000s, while the focus of public expenditure on younger and poorer children appears to continue, the size of the public expenditure budget for children is no longer increasing greatly, suggesting that policy prioritisation of children overall may have come to an end. Yet even while public expenditure on children was increasing, a review of available indicators suggests that trends in Australian children's outcomes were not uniformly positive. In particular there is little substantive evidence that disparities in outcomes between children from lower and higher socio-economic backgrounds fell substantially. This raises questions of how the efficacy of public expenditure should be measured, and how the child indicators movement can rise to this challenge.

# Uncertain impacts: Trends in public expenditure on children and child outcomes in Australia since the 1980s

#### 1. Introduction

One of the purposes of social indicators is to act as signals for policy action – that is, they can inform policymakers if a particular phenomenon is becoming more or less prominent in society, or whether an identified problem is getter better or worse (Atkinson et al., 2002; Ben-Arieh, 2008; Cobb and Rixford, 1998). The response of policymakers to trends shown in indicators is often in the first instance resource-based – to agree to spend an amount of resources on a program to improve a set of outcomes that indicators suggest are sub-optimal among a population group, or to reduce policy effort and expenditure aimed at a group that indicators suggest is doing better than the average. Although a number of non-monetary indicators of policy effort are used in the literature (for example, legislation, number of staff employed, etc.) some of the most common indicators of policy effort are financial. How public expenditure on children is related to their wellbeing and development is often difficult to say. The expectation is nonetheless there in the minds of policymakers every time they announce a new initiative costing \$x million that this new initiative will make a positive difference to real people's lives.

In this sense, trends in public expenditure on children can be seen as indicators of trends in the visibility of children to policymakers, the priority they give to children over and above other groups in society, and the priority they give to certain groups of children over others. Therefore, while trends in expenditure on children cannot be seen as direct indicators of child wellbeing, they are nonetheless important indicators of the priority accorded to children, and can also be seen as leading indicators of expected trends in child wellbeing – that is, if expenditure on children increases, one might expect, *ceteris paribus*, improvements in at least some indicators of child wellbeing to follow.

Starting in the 1980s, public policy towards children in Australia underwent a major transformation. This was evidenced through increased concern, first with child poverty, and more recently with children's development into productive members of society. It is arguable that by the mid-2000s, children as a group were closer to the top of the policy agenda than they were at any time previously in Australia, in common with other rich countries (OECD, 2009). This increased focus on children was justified on the basis of supporting economic productivity growth and promoting equity among new generations (COAG, 2009; MCEETYA, 1999, 2008). However, recent evidence suggests that this period of expanding budgets for children has come to an end, and that focus is switching to more modest and more targeted targeted support.

As the Australian economy has grown, public expenditure has also increased in real terms. Therefore, governments have more resources to expend on different groups than was the case two or three decades ago. Nonetheless, policy decisions regarding investment in children have involved compromises and trade-offs. This article examines the extent to which increased investment in children came 'at the expense of' investment in other groups, notably the elderly; how concentrations of expenditure on children of different age have evolved; the extent to which public expenditure has redistributed resources and opportunities between children in low and high income households; and the extent to which private expenditure has counteracted these trends.

In this article I explore public investment in children in Australia since the 1980s, using data from fiscal incidence studies and other more recent sources to map trends in the incidence of public expenditure, and the taxes that pay for them, on children and the elderly; on younger and other children, and on low and high income households with children. Fiscal incidence data are derived by the Australian Bureau of Statistics to estimate the value of public services for a representative sample of Australian households. I use the term 'investment' broadly, to cover most types of expenditure for the benefit of children and young people (aged under 18). My main finding is that after 1988-89, investment in children overall increased to a significantly greater extent than it did among elderly Australians. If it is appropriate to characterise competing demands for public resources in terms of a generational struggle, then between the mid 1980s and the mid 2000s, children and young people clearly gained, and older Australians clearly lost out in relative terms. Since the mid-2000s however, the pendulum may have swung back the other way. After the 1980s public spending also became more focused on younger children. This represents a policy shift away from treating children as a relatively undifferentiated group, and towards the explicit notion of investment, with the aim of generating a return. A further emphasis, on children in low income households, could be seen both in terms of an equity agenda, and in terms of a productivity agenda - to improve the human capital of disadvantaged members of society. This dual aim for investment in children has arguably continued to the present. It has however been counterbalanced somewhat by increasingly unequal private expenditure on children – especially with respect to expenditure on education, and by a recent switch in focus on public expenditure back towards the elderly.

The paper is organised as follows. Section 2 discusses trends in policy towards investment in children over the past decades. The data used in this analysis are described in Section 3. In Section 4, trends in investment in families with children and the elderly since the early 1980s in Australia are considered. Investment in early and later childhood, and in children with lower and higher incomes, is examined in Section 5. Section 6 discusses evidence on trends in overall outcomes and disparities in outcomes for Australian children in recent decades. Section 7 concludes with a discussion of implications of this analysis for policy, outcomes, and research.

#### 2. Counting material investment in children

Public support for children has gone through a number of phases since the founding of modern welfare states during the 20<sup>th</sup> century. Seebohm Rowntree (1901) was one of the first social scientists to systematically map out 'cycles of want and plenty' across people's life course, highlighting in particular economic adversity among families with young children, and among the elderly. Rowntree's explicit aim was to advocate for public action to smooth income over the life cycle, and in the intervening century, the welfare state in most rich countries has taken up this challenge. Indeed, Barr (1990) argues that one of the most important functions of the welfare state is income smoothing, either enabling individuals to reallocate consumption over their own lifetimes (for example through actuarially based pension schemes), or redistributing in the present from some individuals who are at a phase in their lifecycles that involves fewer risks (through the tax system) to others who are at a different phase in their lives when risks are higher (through the social transfer system).

In recent decades, orientations towards children in Australia, and in other rich countries, appear to have moved somewhat away from the lifecycle approach as described by Rowntree, and indeed

from slaying Beveridge's 'five evil giants' of Want, Disease, Ignorance, Squalor and Idleness (Abel-Smith, 1992). An overall policy approach of evening out the years of want and plenty in individual and family life-cycles may have appeared appropriate in an era when the family was seen as unequivocally in the sphere of the 'private': universal (and usually modest) and even targeted support could be characterised as a very weak form of intervention in this private sphere. But as Nikolas Rose (1989) argues, the sphere of the 'private' has gradually become an arena for legitimate public intervention; in part as a result of ongoing 'moral panic' about well-being and development of children on the one hand, and child abuse and exploitation on the other, and in part resulting from debate about children's rights, not only to be protected from exploitation and abuse, but also to be recognised as valued contributors on issues that affect them, and listened to as experts in their own lives.

The work of James Heckman and colleagues (Heckman, 2006; Heckman and Masterov, 2007; Heckman et al., 2006) has provided a rationale for increased policy intervention in children's development, with a particular focus on early childhood, once an issue seen as firmly in the zone of the 'private'. Heckman's research has been hugely influential in Australia, as in other countries. Heckman and Masterov argue that "Investing in disadvantaged young children is a rare public policy with no equity-efficiency trade-off. It reduces the inequality associated with the accident of birth and at the same time raises the productivity of society at large." (2007, p.446). This focus on investment in child development represents a clear policy shift away from what OECD (2009: 66) describes as the "lump of childhood" approach', where infants and young children are seen as essentially the same as teenagers as far as public policy is concerned. Gabel and Kamerman (2006) show that there was a shift in most OECD countries during the 1980s and 1990s away from the 'lump of childhood' approach characterised by largely age-undifferentiated cash transfers, and towards more targeted services for children and their parents: to support parents and their children around the time of childbirth; to support parents' abilities to reconcile employment and care responsibilities; and to promote positive early child development.

This shift was as evident in Australia as it was in other countries. Soon after winning government in 1983, the centre-left Labor government led by Bob Hawke pledged to eliminate child poverty. This pledge was followed by policy action; first, through the introduction of a new in-work benefits – Family Income Supplement – for families with children; and later with the replacement of the universal but modest Family Allowance with a means tested scheme that was considerably more generous to low income families. The pledge to abolish child poverty was also supported by other policy action, including the expansion of child care subsidies in order to enable more lone parents to enter paid work, and the introduction of a largely free universal health care. Eradication of child poverty was just one of the aims associated with the introduction of these reforms. Another was to buy industrial peace during a period when the government embarked on an ambitious program of labour market reform. The main thrust of these reforms was continued through the 13 years of Labor Party rule, during which period family allowances in particular were substantially expanded.

A change of government in 1996, when a centre-right Liberal-National Party coalition under John Howard took power, did not greatly change the thrust of policy, at least initially. For example, family allowances received a further substantial boost when a Goods and Services Tax was introduced in 2000, and again in 2004. Indeed, a very high proportion (by international standards) of public expenditure with respect to children continued to be paid in the form of cash payments. But the

government also began to expand services for early childhood around this time, including more comprehensive ante-natal and post-natal services, and increased subsidies for child care. This policy of increased investment in early childhood was not clearly articulated until quite late in the government's eleven year tenure. Indeed, Brennan (2007: 57) claims that the coalition government's focus on the early childhood education and care was adult-centred and instrumental. Nonetheless, she also acknowledges that in real terms, expenditure in early child care and education increased greatly over this period. Politically, the Howard government sought above all to promote the notion of 'choice' – for mothers to work or not, and for parents to choose their child care provider, and public or private school for their children. However, the emphasis on choice (part of a liberal free market ideology) was accompanied by a degree of redistribution from better off to worse off families and households.

The period of the Howard government ended in 2007 with the election of centre-left Labor governments lead by Kevin Rudd, and later, Julia Gillard. These governments arguably continued the Howard government's policies towards children in many respects, albeit with a somewhat more redistributive (but also increasingly residualist) agenda, but also with an economic rational focus – that one of the main aims of investment in children is to further economic growth and international competitiveness, while also seeking to ensure inclusion of those children who are in danger of being excluded from opportunities that most children in Australian society take for granted. This was seen for example in the *Melbourne Declaration* (MCEETYA, 2008), Australian governments' definitive policy statement on the goals of education:

Improving educational outcomes for all young Australians is central to the nation's social and economic prosperity and will position young people to live fulfilling, productive and responsible lives (MCEETYA, 2008: 7).

However, it seems that, either by design or by accident, the end of the Howard era also marked the high point of public investment in children, with growth in investment in children appreciably slowing from about 2005, and investment in the elderly beginning to pick up again. Since 2008, Labor government policies have shifted in three directions. First, governments responded to the Global Financial Crisis with massive (but temporary) increases in capital expenditure on education facilities, and provision of generous one-off bonuses for recipients of government payments, including pensions and family allowances. Second however, Labor governments after 2008 began to slowly restrict entitlement to means tested family payments, by both restricting eligibility to families on very high incomes, by making the uprating formula for the payments less generous, and by freezing some elements of family payments in nominal terms. Finally, in 2009 the government recognised the extent of hardship experienced by many age pensioners by sanctioning a large increase in the means tested age pension (Harmer, 2009) - this represented a definitive shift towards increased spending on the elderly (and has accompanied growing public expenditure on aged care, as the share of elderly persons in the population increases). The result, especially after immediate responses to the Global Financial Crisis had played themselves out, was a fairly strong shift away from children in public expenditure priorities.

#### 3. Data

Three major data sources are used in this analysis to examine trends in public expenditure. First, the OECD Social Expenditure Database (SOCX) is used to show long term trends in Australia, from 1980 to 2007, and to compare these with averages for all OECD countries. SOCX contains data on public social spending for all OECD countries disaggregated to the program level and organised into nine broad social policy areas, including 'Families' and 'Old Age', the two categories of OECD data used in this analysis (Adema and Ladaique, 2009). Programs grouped under the 'Family' category include cash benefits (family allowances; maternity and parental benefits); child day care and home help services; and a wide range of programs to support families, including for example child abuse prevention and grants to family relationship support organisations. 'Family' benefits however do not include education, or health care. Moreover, it is important to acknowledge that expenditure on 'family' programs only roughly equates with expenditure on children. Similarly, programs in the 'Old Age' category include cash benefits and a range of residential, home help and other services, but again does not include health care.

Second, the *Household Expenditure Survey* has been conducted at roughly five-year intervals in Australia since 1975-6, and includes detailed information about the expenditure, income and household characteristics of a national sample of private households throughout Australia. As the title of the survey suggests, the household is the basic unit of analysis because it is assumed that the sharing and use of goods occurs at this level. Information is collected on housing tenure and costs, and household structure. Information on income, social transfers received and income taxes paid is collected in personal interviews, and data on personal expenditure is collected in diaries.

Fiscal incidence data, on the value of different kinds of in-kind benefits calculated for the ABS's fiscal incidence studies, are attached to the information for each household in the publicly available Confidentialised Unit Record Files for the 1988-9, 1993-4, 1998-9 and 2003-04 surveys. These data allow estimation of the distribution of in-kind public benefits and indirect taxes across the life cycle (as well as cash benefits and direct taxes). Fiscal incidence studies aim to allocate to households as much as possible of commonwealth, state and local taxation revenue that is levied on individuals and expenditure that benefits them (as reported in the Australian system of National Accounts; see Australian Bureau of Statistics, 2007a), and from which individuals benefit. In its most recent study based in the 2003-04 HES, ABS claims to allocate 59 per cent of taxes and half of total public expenditure to households (Australian Bureau of Statistics, 2007b). The combination of household income and expenditure with fiscal incidence study data in the HES therefore arguably gives a more complete picture of trends in investment in children than is possible with aggregate data alone.

However, as noted above, the most recent fiscal incidence study in Australia was carried out on 2003-04 data, and the next (based on 2009-10 data) may not be released until 2013. To update the analysis and bridge this gap, I use published data from Intergenerational Reports (Treasury, 2007, 2010), which map out current and future projected public expenditure, divided into major categories, including payments to families, education, pensions and aged care. These reports give a flavour of current and likely future directions in public expenditure on children in Australia.

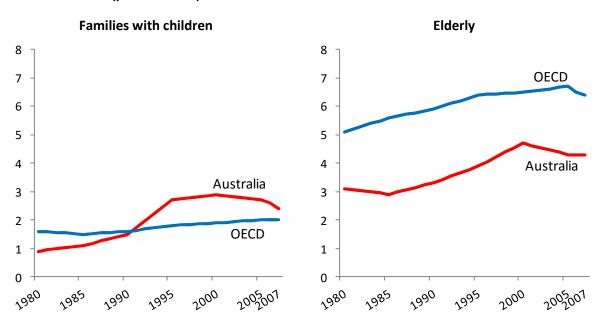
It should be noted that none of the data used here are directly focused on children. That is, they do not identify expenditure on children as individuals, but usually on children (and elderly people) in

their family contexts. Given debates about the distribution of resources within households (Middleton et al., 1997), this is an important limitation.

### 4. Investment in Families and the Elderly in Australia

As <u>Gabel</u> and <u>Kamerman</u> (2006) show, levels of public investment in children (as defined above) increased across most OECD countries after the 1980s. However Figure 1 shows that the increase in Australia was more pronounced than that for OECD countries on average. In 1980, OECD countries spent an average 1.6 per cent of GDP on families and children (excluding health care and education); by 2007, this had increased to 2 per cent – a very significant increase given that the child population was falling in absolute terms in most countries (<u>Gabel</u> and <u>Kamerman</u>, 2006), and falling as a proportion of the total population in all countries. In Australia however, the increase was considerably greater than the average (albeit starting from a low base), rising from 0.9 per cent of GDP in 1980, matching the OECD average in 1990, and surpassing it thereafter. However, a decrease in social expenditure on families as a percentage of GDP is apparent after about 2000. By 2007, the Australian total was heading back towards the OECD average. Figure 1 also shows that, by way of contrast, public expenditure on the elderly as a proportion of GDP has remained well below the OECD average throughout the past 30 years, with little evidence of convergence towards the OECD average.

Figure 1: Trends in social expenditure (excluding health & education) on families and the elderly, Australia & OECD (per cent GDP)



Source: OECD Social Expenditure Database (OECD, 2010)

Note: social expenditure includes cash payments to families with children and the elderly, and public expenditure on child care, as well as welfare services aimed at families with children and the elderly.

The left hand panel in Figure 2 shows that while aggregate public expenditure increased as a proportion of all public expenditure for both children and the elderly, aggregate expenditure on the elderly remained far ahead of aggregate expenditure on children. The right hand panel on the other hand shows that when changes in the share of children and elderly in the population are taken into

account, the growth in public expenditure per child far surpassed growth in expenditure per elderly person. The share of children in the population has been shrinking until recently, while the share of elderly has been rising. However, while public expenditure on children now surpasses the OECD average as Figure 2 shows, expenditure on the elderly remains low by international standards. In 2007, public expenditure on the elderly in Australia as a percentage of GDP was only about two thirds of the average for all OECD countries (Bradshaw and Redmond, 2011). Again however, evidence of slowing growth in per capita expenditure on children (but not on the elderly) is apparent from about 2004. This is discussed in greater detail below.

Per capita (1980=100) Per cent Public Expenditure Elderly Children Elderly Children O 19<sup>95</sup> 

Figure 2: Public expenditure on elderly people and children, 1980 to 2007 (per cent GDP)

Source: OECD Social Expenditure Database (OECD, 2010).

While it would not be correct to suggest that every extra dollar which goes to children represents a dollar lost to the elderly (it could be lost to defence, or roads, for example), it is nonetheless valid to compare relative allocations of public expenditure towards children and the elderly as an indicator of changing policy priorities. Table 1 shows changes in private income, taxes, and public benefits per person accruing to households with children and households with elderly persons between 1988-89 and 2003-04 (the most recent year for which such detailed data are available). Unlike the OECD data, these data, taken from the Australian Household Expenditure Survey and its associated fiscal incidence study, give a picture of households' private incomes, the taxes they pay, and a fuller range of in-kind benefits that they receive, including health care and education. The table shows that while average private incomes of households with elderly persons increased by proportionately more than among households with children, the net gain for children (36 per cent), once all forms of income are taken into account, was considerably greater than the net gain for the elderly (26 per cent).

This was brought about in part by a doubling of cash benefits (for example Family Allowance and Family Tax Benefit) for households with children, which was greater in both absolute and relative terms than the increase in cash benefits (principally Age Pension) for the elderly, and more than compensated for the increase in income taxes that households with children also experienced. Part of the increase in cash benefits, and reduction in direct taxes, that occurred over this period was in

direct compensation for the introduction of Goods and Services Tax (GST) in 2000. Analysis suggests that the distributional impact of changes in the indirect tax regime was generally regressive (Warren et al., 2005).

Table 1: Private incomes and public investments received by households, 1988-89 and 2003-04

	Households with children (aged 0-14)			Households with elderly persons (aged 65+)		
	1988-89 (\$)	2003-04 (\$)	per cent change	1988-89 (\$)	2003-04 (\$)	per cent change
Private income	485	573	+18.1	219	270	+23.6
Cash benefits	43	88	+103.4	176	195	+10.6
Income taxes	115	129	+12.5	43	39	-8.0
Disposable income	414	532	+28.5	352	426	+20.9
Indirect benefits	60	100	+66.4	110	154	+39.8
Total	474	632	+33.3	463	578	+24.9

Source: Household Expenditure Survey 1988-89 and 2003-04 and associated fiscal incidence studies (see note at the end of this article).

Note: data are in average dollars per week, and are deflated to December 2003 prices to allow easier comparison across years, and equivalised to facilitate comparison across households of different size. Households are weighted so that each child aged 0-14 and each elderly person aged 65+ is counted once. Disposable income = private income + cash benefits – income taxes. Indirect benefits include the imputed value to households of services provided directly by government, or government-mandated agencies, including health care, education, disability services, welfare services and child care services.

Also important was the increase in the value of indirect benefits as estimated by the fiscal incidence studies – public expenditure on health, education, childcare and child welfare services – accruing to households with children. The average value of these investments increased by two-thirds. This compares with an increase in indirect benefits for elderly households – comprising mostly expenditure on health care – of less than 40 per cent.

Factors associated with these trends are discussed above. First, from the 1980s, successive governments sought to increase cash family allowances for families with children, in part to alleviate child poverty, and in part to extend public support to a broader range of low income families. Second, the Howard government in the 1990s took steps to improve child health through better resourced post-natal care, immunisation and early child development programs. Third, public expenditure on child care subsidies increased greatly as more women entered the paid workforce.

Among the elderly, a number of factors were also in play, including reduced reliance on public pensions after the introduction of compulsory superannuation contributions in 1993, and better health, which was associated with a significant reduction in the number of patient days spent by elderly persons in hospital (Redmond, 2008). On the other hand, public subsidies for residential care (not included in Table 1 since people in residential care are not considered to live in households) rose as longevity among elderly persons increased.

Between 2004 and 2008, there were no clear signals that policy had shifted in emphasis away from children. Indeed, policy rhetoric on the importance of early child development remained strong over this period, backed by the institution of tax breaks to cover child care costs and some school related expenses. But as noted above, from 2008 there were clearer indications that public expenditure on children was being wound back somewhat. This can be seen from Figure 3, which shows recent and projected expenditure on four key elements of public policy towards elderly people and children. The Figure shows that in terms of both percent of GDP and dollars per person, public expenditure on pensions for the aged and aged care (residential and community care for elderly persons) has risen since 2006-07, and is projected to rise into the future. Expenditure on education is projected to increase slightly (from about \$990 to \$1190 per person in 2009-10 dollars) while expenditure on family payments is projected to fall (from about \$1250 to \$1150 per person in 2009-10 dollars), as reforms outlined above take effect.

3 2500 Aged & service pensions 2.5 2000 Aged & service pensions Education \$ per person per year 2 Per cent GDP 1500 Education Family payments 1.5 1000 Family payments 500 0.5 Aged care 0 0 2019-20 2014-15 2014-15 2006-07 2009-10 2006-07

Figure 3: Projected public expenditure on elderly people and families, 2006-07 to 2019-20

Source: Australian Treasury (2007; 2010) Intergenerational Reports, 2007 and 2010 Note: per person amounts are deflated to 2009-10 prices.

## 5. Investment in early and later childhood, and in low income children

Although data on public expenditure can show the extent to which policymakers' rhetoric and plans are translated into concrete spending decisions, it is nonetheless sometimes difficult to assess the impact of public expenditure on inequality between groups. As noted in Table 1, average private incomes of elderly households increased at a faster rate than was the case among households with children. In the absence of state intervention, this would have had the effect of reducing income inequality between these two groups, since average private incomes of elderly households are lower than those of households with children. Therefore, public intervention through taxes, transfers and public expenditure on services may have served to increase disparities in disposable income between children and the elderly.

Whether disparities in *living standards* (what disposable incomes actually buy) between these two groups also increased is more difficult to assess – this would require a more detailed analysis of changes in the costs faced by households with children and the elderly since the 1980s. Nonetheless,

all other things being equal, it might be expected that the increased focus of public expenditure on children would have had the effect of improving children's lives on average, of improving the lives of young children in particular, and of reducing inequalities between children – this after all is what Australian governments have said they aim to achieve.

The above analysis not only suggests that investment in children increased after the 1980s in step with policy rhetoric on the importance of childhood, but also that policymakers in particular targeted early childhood, through early health care interventions, and through child care subsidies, which were at least partly intended to improve the quality of care for children. The data on Figure 4 confirm that while the highest total public spend went towards children of primary school age (of which expenditure on schooling itself was the second largest single component, after family allowances), the biggest increase in expenditure between 1988-89 and 2003-04 was on children aged 0-4 years – it increased by 89%, compared for example with an increase of 47 per cent for 15-17 year olds. Most of the increase in expenditure on younger children occurred during the coalition government of John Howard. In contrast, the earlier governments of Hawke and Keating did not differentiate their policies greatly according to the age of the child.

250 ■ Change to 2003-04 **1988-89** +74% +85% 200 87 +47% +89% +40% 150 74 44 123 100 117 110 110 83 50 0 age 0-4 age 5-9 age 10-14 age 15-17 age 18-19

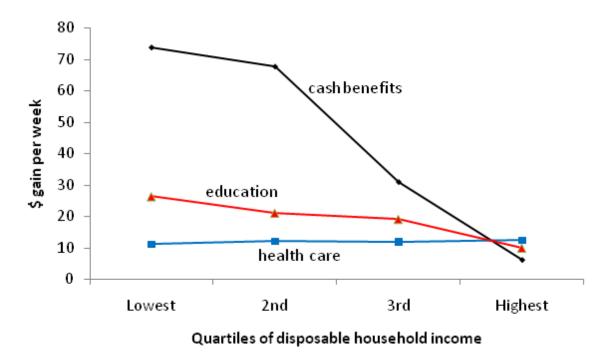
Figure 4: Public expenditure on cash and non-cash benefits for children, by age of child, 1988-89 to 2003-04 (\$ per week)

Source: Household Expenditure Survey 1988-89 and 2003-04 and associated fiscal incidence studies (see note at the end of this article). See notes to Table 1 for methodological details.

Figure 5 shows that public expenditure was increasingly redistributed towards poorer children after the 1980s. The Figure shows that in terms of absolute dollars per week, children living in households with the lowest disposable incomes gained the most from the increases in public expenditure that occurred between 1988-89 and 2003-04, particularly in terms of cash benefits, but also in terms of expenditure on education. The gain in cash benefits among low-income children came about through means-testing of eligibility of Family allowance and later Family Tax Benefit, the main cash support payments for families with children. The gain in education among children in low income households was associated with both federal and state initiatives (primary and second education are state responsibilities in Australia) to equalise educational opportunities through provision of extra

support for schools where the majority of children were from low socio-economic status backgrounds, or directly for low socio-economic status children. Even for health care, where most provision was universal (and therefore almost equally benefitted poorer and richer children in equal measure), the *relative* increase in support as a proportion of total household income was much greater at the bottom of the distribution, implying a reduction in inequality.

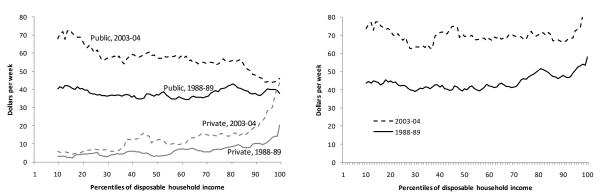
Figure 5: Absolute gains from changes in public expenditure for children between 1988-89 and 2003-04, by quartiles of household disposable income (\$ per week)



Source: Household Expenditure Survey 1988-89 and 2003-04 and associated fiscal incidence studies (see note at the end of this article). See notes to Table 1 for methodological details.

This increased investment had a positive impact on the living standards of Australia's poorest children. But policy has not operated in a vacuum, and households have responded to these changes in the distribution of public expenditure. Figure 6 shows public and private investment in children's education, by household income, in 1988-89 and 2003-04. The left hand panel shows that, consistent with Figure 5, there is clear evidence of a shift in public expenditure over this period towards children in lower income households. However, the panel also shows that over the same period, private expenditure on children's education also increased significantly, and was weighted (as might be expected) towards the top of the income distribution. The right hand panel of the Figure shows the net effect – little significant difference in the distribution of overall public and private expenditure on education over the period examined.

Figure 6: Public and Private Investment in Children's Education, 1988-89 to 2003-04, by household income



Source: Household Expenditure Survey 1988-89 and 2003-04 and associated fiscal incidence studies (see note at the end of this article). See notes to Table 1 for methodological details.

It is debatable whether the increase in private expenditure on children's education has been a direct response to the shifting distribution of public expenditure on education, or to policies that may have encouraged increased private expenditure in education (for example, increased subsidisation of private schools, a policy pursued by the Howard government after 1996 as part of its goal of expanding parent choice), but one net impact is a steady decrease in the proportion of children enrolled in public schools over the period examined, and a steady increase in the proportion enrolled in private schools; the latter typically produce better educational results. It might therefore be expected that increased stratification in school participation is associated with increased stratification in educational outcomes. Indeed, more recent trends suggest that stratification in terms of school participation has increased since the 1990s (Lamb, 2007).

#### 6. Outcomes

Information on both changes and disparities and in outcomes is mixed. The increased expenditure focus on children in their early years is evidenced by an increase in their utilisation of formal day care: 34 per cent of all children aged 0-4 years were in formal day care in 2008, compared with 24 per cent in 1996 (Australian Bureau of Statistics, 2008). Its impact is also notable in terms of increased immunisation rates. Figure 7 shows that Diphtheria, Tetanus, Pertussis and Measles immunisation rates for Australian children increased steadily over the 1980s, but also jumped in the late 1990s, when Australian governments invested in greater primary health care for children, and for newborns in particular.

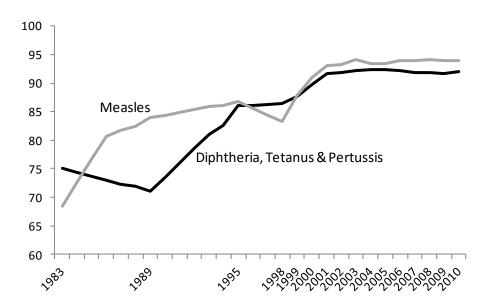


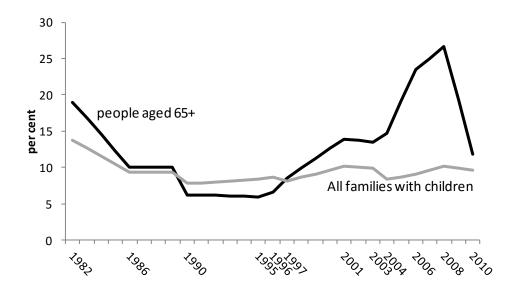
Figure 7: Immunisation rates for Australian children, 1983-2010 (per cent)

Source: OECD (2011).

Notes: Data are for the percentage of children aged 1 or 2 years who have been fully immunised against for Diphtheria, Tetanus and Pertussis (black line) and Measles (grey line). Data are reported for the years noted on the horizontal axis. Data for intervening years are interpolated.

Figure 8 shows that relative poverty among children declined quite steeply during the late 1980s and early 1990s following prime minister Bob Hawke's pledge that no child need live in poverty. Over the same period however, poverty among elderly families also decreased greatly (from a higher starting point) before rising again from the mid 1990s. The rate of relative poverty among children on the other hand did not change greatly after about 1995, in spite of the continued increase in public expenditure on children through to 2004. Relative poverty among the elderly fell steeply in 2009-10 after age pensions were substantially increased, bringing their poverty rate almost to the level experienced by families with children (note however that poverty among elderly persons in Australia is sensitive to where the poverty line is drawn).

Figure 8: Trends in poverty among families with children and elderly persons, 1982 to 2009-10 (per cent)

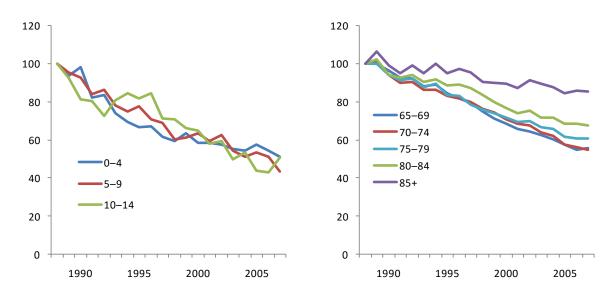


Source: Survey of Incomes and Housing, intermittent years 1982 to 2009-10, author's calculations. See Whiteford, Redmond and Adamson (2011).

Note: Poverty estimated as number of persons (families with children and elderly) with equivalised incomes below half the national median in each year. Equivalence scale is square root of household size. Survey data are used to estimate poverty for years noted on horizontal axis. Poverty estimates for other years are interpolated.

Mortality statistics improved for both children and elderly persons after 1988, but more so for the former than for the latter (Figure 9) - this is consistent with the shift in public expenditure towards children, although it is unlikely to entirely explain the difference in mortality trends. Relatively few data on trends in disparities in health and other outcomes among Australian children (and adults) are available. Nonetheless, available information does not generally suggest narrowing of socioeconomic gradients. Analysis by Korda et al (2007) shows that the socio-economic gradient of overall non-age-specific death rates associated with both avoidable and non-avoidable causes increased between 1986 and 2002. Freemantle et al. (2006) show that the gap in death rates between Indigenous and non-Indigenous infants increased between 1980 and 2001, even though overall death rates fell in both populations. While a meta-analysis by Olds et al (2009) shows that overall rates of overweight and obesity in Australian children have not changed since the mid 1980s, a study by Salmon et al (2005) suggests that participation in physical exercise classes and other sporting activity among lower socio-economic status children either declined or did not increase between 1985 and 2001, suggesting greater risk of overweight or ill-health among this group (although more of them were walking to school in the latter year). Wake et al. (2006) find that in a sample of 4-5 year old Australian pre-schoolers, indicators of socio-economic status, including mother's education, parent occupation are all strong predictors of obesity and overweight. However, she does not present data on trends. Finally, Redmond et al (2010) use two child development datasets for the early 1980s and the early 2000s to show that differences in 4-9 year old children's social and emotional wellbeing according to their parents' education do not appear to have narrowed over this period.

Figure 9: Trends in mortality in children and elderly persons, 1988 to 2007, by age group (1988=100)



Source: Australian Institute of Health and Welfare *Mortality Database*.

Trends in educational outcomes and wider social mobility for children are more mixed. Studies by Leigh (2007) and Marks (2009) both examine trends in intergenerational mobility in Australia since the 1960s, but draw different conclusions. Leigh (2007), in a study of four surveys conducted between 1965 and 2004 looks at how the relationship of fathers' and sons' earnings changed in Australia for sons who were born between 1910 and 1979. In general, while he finds that mobility in Australia is reasonably high (for example, higher than in the US), he fails to find evidence that the extent of mobility changed much during the 20<sup>th</sup> century. On the other hand, Marks (2009) who uses some of the same data as Leigh to examine mobility in education, occupation and earnings, argues that the reproduction of socio-economic inequalities in Australia declined during the second half of the 20th century. More recent studies also present mixed results. Fullarton et al (2003) show that absolute differences in participation rates in Year 12 of secondary school between students from low and high socio-economic backgrounds declined during the 1980s, but remained constant during the 1990s. Indeed, ABS (2011) shows that overall school participation rates among 16 and 17 year olds did not change between 1997 and 2005. Rothman (2003) argues that the influence of socioeconomic status on student achievement declined between 1975 and 1995, but appeared to increase between 1995 and 1998. On the other hand Redmond (2009) shows that while overall, educational standards as measured in internationally comparable tests slipped in Australia between 2000 and 2006, disparities did not decrease, and may have increased.

#### 7. Discussion

The analysis above shows that in absolute terms, both public and private investment in children in Australia increased significantly between the 1980s and the early 2000s. Trends in children's average outcomes are consistent with this increase in investment. For example, the proportion of children immunised increased, educational outcomes for children improved, and both relative child poverty and child mortality declined. In other words, an increased focus on investment in children, and

especially on investment in the early years, appears to have produced beneficial effects for Australian children. Some outcomes, such as mortality rates, also improved for elderly Australians. However, other outcomes, such as relative poverty rates, did not improve for elderly Australians to anything like the same degree as they did for children.

But there is little evidence of a reduction in disparities in children's outcomes in Australia in recent decades – despite the aspiration of successive Australian governments that all children should have a fair go (MCEETYA, 1999, 2008). This is in some senses surprising. Children's average living standards have risen substantially in Australia since the late 1980s, and public policy has done much to improve the living standards of the poorest families. Living standards of elderly persons have also risen, although not, on the evidence of Table 1, to the same extent as enjoyed by children. In the two decades until the mid-2000s, children in Australia clearly enjoyed a degree of policy attention that was not apparent before, or possibly since.

Yet in spite of the apparent increased focus of public expenditure on children overall, and on children in more disadvantaged households, available data do not consistently suggest that these children are 'catching up' with the rest, either in terms of physical health outcomes, early developmental outcomes, or educational outcomes. In other words, there is little sense that Australia is a 'fairer' place for children of diverse backgrounds than it was 20 or 30 years ago. One interpretation is that public policy in Australia may have been successful in preventing excessive growth in social and economic inequalities between children, but less successful in reducing them. For example, disparities in educational outcomes might have increased in the absence of redistribution of public resources towards poorer children in a period when private households increased their expenditure on education. More research is needed on how changes in the focus of public expenditure, from elderly people to children (and back to elderly people again), from older to younger children, and from better-off to more disadvantaged children, can translate into substantive gains for children and reduced inequalities between them.

Herein lies a challenge for the child indicators movement. As Atkinson et al (2002) attest, an important property of a social indicator is that it captures changes that result from policy initiatives. That is, if policy aims to improve a particular outcome, then indicators designed to monitor the relevant outcome should be timely (that is, available within a short time interval), and able to gauge the effectiveness of that policy. Analysis of trends in public expenditure is a useful tool in the elaboration of policy intentions. To the extent that the aim of policy in Australia from the 1980s was to improve children's outcomes *on average*, the evidence presented here suggests that it was generally successful. If however the aim of policy was to reduce *disparities* between children, evidence of success is less certain.

Analysis of trends in public and private expenditure can aid understanding of how dynamic interactions between changing policy and socio-economic environments translate into real outcomes for people. Yet, as Marks (2009) argues, linking changing trends in outcome indicators to specific policy and other causes has proved to be difficult, especially where changes are measured across decades or generations. The challenge for the child indicators movement is to better understand how change in children's development and wellbeing can not only be monitored, but also contextualised, so that important causal linkages between public policy, private action and child outcomes can be better elaborated.

#### References

- Abel-Smith, B. (1992), 'The Beveridge Report: Its origins and outcomes', *International Social Security Review*, 45(1-2), 5-16.
- Adema, W. and Ladaique, M. (2009), How Expensive is the Welfare State? Gross and Net Indicators in the OECD Social Expenditure Database (SOCX), OECD Social, Employment and Migration Working Papers, No. 92, Organisation for Economic Cooperation and Development, Paris. <a href="http://dx.doi.org/10.1787/220615515052">http://dx.doi.org/10.1787/220615515052</a>.
- Atkinson, A. B., Cantillon, B., Marlier, E. and Nolan, B. (2002) *Social indicators: The EU and Social Inclusion*, Oxford University Press, Oxford.
- Australian Bureau of Statistics (2007a), *Australian System of National Accounts 2006-07*, Cat. No.5204.0, Australian Bureau of Statistics, Canberra.
- Australian Bureau of Statistics (2007b), *Government Benefits, Taxes and Household Income 2003-04*, Cat. No.6537.0, Australian Bureau of Statistics, Canberra.

  <a href="http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/30A1BDA7F5A93A9CCA2572F80">http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/30A1BDA7F5A93A9CCA2572F80</a>
  0133897/\$File/65370 2003-04.pdf.
- Australian Bureau of Statistics (2008), *Childhood education and Care*, Cat. No. 4402.0, Australian Bureau of Statistics, Canberra.

  <a href="http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/573FA1277E2378E3CA25765700">http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/573FA1277E2378E3CA25765700</a>

  162238/\$File/44020 june%202008%20%28reissue%29.pdf.
- Australian Bureau of Statistics (2011), *Schools Australia*, 2010, ABS Cat. No.4221.0, Australian Bureau of Statistics, <a href="http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4221.02010?OpenDocument">http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4221.02010?OpenDocument</a>.
- Barr, N. (1990), Economic Theory and the Welfare State: A Survey and Reinterpretation, Working Paper Number WSP/54 Welfare State Programme, The London School of Economics,
- Ben-Arieh, A. (2008), 'The Child Indicators Movement: Past, Present, and Future', *Child Indicators Research*, 1(1), 3-16.
- Bradshaw, J. and Redmond, G. (2011). *Trends in distributional Equity Betwen Young and Old:*Australia and the United Kingdom Compared. Paper presented at Promoting Social Inclusion:
  The Wellbeing of Children in Australia and Internationally, Social Policy Research Centre, the University of New South Wales, Sydney, 6-7 April 2011.
- Brennan, D. (2007). 'Home and away: the policy context in Australia', in B. Pocock, E. Hill and A. Elliot (eds.), *Kids Count: Better Early Childhood Education and Care in Australia* (pp. 57-74), University of Sydney Press, Sydney.
- COAG (2009), Investing in the Early Years—A National Early Childhood Development Strategy, 2 July 2009, Council of Australian Governments, Commonwealth of Australia, Canberra.

  <a href="http://www.coag.gov.au/coag\_meeting\_outcomes/2009-07-02/docs/national\_ECD\_strategy.pdf">http://www.coag.gov.au/coag\_meeting\_outcomes/2009-07-02/docs/national\_ECD\_strategy.pdf</a>.
- Cobb, C. and Rixford, C. (1998) *Lessons Learned from the History of Social Indicators*, Redefining Progress, San Francisco.
- Freemantle, C. J., Read, A. W., de Klerk, N. H., McAullay, D., Anderson, I. P. and Stanley, F. J. (2006), 'Patterns, trends, and increasing disparities in mortality for Aboriginal and non-Aboriginal infants born in Western Australia, 1980-2001: population database study', *The Lancet*, 367(9524), 1758-1766.
- Fullarton, S., Walker, M., Ainley, J. and Hillman, K. (2003), *Patterns of Participation in Year 12*,
  Longitudinal Surveys of Australian Youth Research Report No.33, 7 January 2003, Australian
  Council for Educational Research, Carlton, Vic.
  <a href="http://research.acer.edu.au/lsay\_research/37/">http://research.acer.edu.au/lsay\_research/37/</a>.
- Gabel, Shirley G. and Kamerman, Sheila B. (2006), 'Investing in Children: Public Commitment in Twenty-one Industrialized Countries', *The Social Service Review*, 80(2), 239-263.

- Harmer, J. (2009), *Pension Review Report*, 27 February 2009, Australian Government Department of Families, Housing, Community Services and Indigenous Affairs, Canberra.

  <a href="http://www.fahcsia.gov.au/about/publicationsarticles/corp/BudgetPAES/budget09\_10/pension/Pages/PensionReviewReport.aspx">http://www.fahcsia.gov.au/about/publicationsarticles/corp/BudgetPAES/budget09\_10/pension/Pages/PensionReviewReport.aspx</a>.
- Heckman, J. J. (2006), 'Skill Formation and the Economics of Investing in Disadvantaged Children', *Science*, 312(5782), 30 June 2006, 1900-1902.
- Heckman, J. J. and Masterov, D. V. (2007), 'The Productivity Argument for Investing in Young Children', *Review of Agricultural Economics*, 29(3), Fall 2007, 446-493.
- Heckman, J. J., Stixrud, J. and Urzua, S. (2006), 'The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior', *Journal of Labor Economics*, 24(3), July 2006, 411-482.
- Korda, R. J., Butler, J. R., Clements, M. S. and Kunitz, S. J. (2007), 'Differential impacts of health care in Australia: trend analysis of socioeconomic inequalities in avoidable mortality', *International Journal of Epidemiology*, 36(1), February 1, 2007, 157-165.
- Lamb, S. (2007). 'School Reform and Inequality in Urban Australia: A Case of Residualising the Poor', in R. Teese, S. Lamb, M. Duru-Bellat and S. Helme (eds.), *International Studies in Educational Inequality, Theory and Policy* (Vol. 3: Inequality: Educational Theory and Public Policy, pp. 1-38), Springer Netherlands,
- Leigh, A. (2007). Intergenerational Mobility in Australia [electronic version]. *The B.E. Journal of Economic Analysis & Policy* 72. Retrieved 16 October 2009, from <a href="http://www.bepress.com/bejeap/vol7/iss2/art6">http://www.bepress.com/bejeap/vol7/iss2/art6</a>. DOI:
- Marks, G. (2009), 'Modernization Theory and Changes Over Time in the Reproduction of Socioeconomic Inequalities in Australia', *Social Forces*, 88(2), 917-944.
- MCEETYA (1999), The Adelaide Declaration on National Goals for Schooling in the Twenty-first

  Century, Ministerial Council on Education, Employment, Training and Youth Affairs

  <a href="http://www.dest.gov.au/sectors/school\_education/policy\_initiatives\_reviews/national\_goal\_smaller-schooling\_in\_the\_twenty\_first\_century.htm">http://www.dest.gov.au/sectors/school\_education/policy\_initiatives\_reviews/national\_goal\_smaller-schooling\_in\_the\_twenty\_first\_century.htm</a>
- MCEETYA (2008), *Melbourne Declaration on Educational Goals for Young Australians*, December 2008, Ministerial Council on Education Employment Training and Youth Affairs, Carlton, Vic. <a href="http://www.mceecdya.edu.au/verve/resources/National\_Declaration\_on\_the\_Educational\_Goals\_for\_Young\_Australians.pdf">http://www.mceecdya.edu.au/verve/resources/National\_Declaration\_on\_the\_Educational\_Goals\_for\_Young\_Australians.pdf</a>.
- Middleton, S., Ashworth, K. and Braithwaite, I. (1997) *Small Fortunes: Spending on Children, Childhood Poverty and Parental Sacrifice*, Joseph Rowntree Foundation, York.
- OECD (2009), Doing Better for Children, September 2009, OECD, Paris.
- OECD (2010), *Social Expenditure: Aggregated data*, OECD Social Expenditure Statistics (database), Paris. /content/data/data-00166-en <a href="http://dx.doi.org/10.1787/data-00166-en">http://dx.doi.org/10.1787/data-00166-en</a>
- OECD (2011) OECD Health Data: Health care utilisation, OECD, Paris.
- Olds, T. S., Tomkinson, G. R., Ferrar, K. E. and Maher, C. A. (2009), 'Trends in the prevalence of childhood overweight and obesity in Australia between 1985 and 2008', *International Journal of Obesity*, 34(1), 57-66.
- Redmond, G. (2008), Changing Patterns of Resource Transfers Across the Lifecycle: Australia since the 1980s: Final Report prepared for Department of Families, Community Services and Indigenous Affairs, Social Policy Research Centre, the University of NSW, Sydney.
- Redmond, G. (2009), 'What Can Data on Educational Outcomes Reveal Regarding Australian Children's Right to Develop 'To Their Fullest Potential'?', *The Economic and Labour Relations Review*, 20(1), December 2009, 35-58.
- Redmond, G., Gubhaju, B., Smart, D. and Katz, I. (2010). *Parents' Education and Children's Outcomes: Is the Gradient Getting Steeper?* . Paper presented at Australian Institute of Family Studies
  Conference, Melbourne, 7-9 July 2010.
- Rose, N. (1989) Governing the Soul: The Shape of the Private Self, Routledge, London.

- Rothman, S. (2003), The changing influence of socioeconomic status on student achievement: Recent evidence from Australia LSAY Conference Papers, 4 January 2003, Australian Council for Educational Research,
  - http://research.acer.edu.au/cgi/viewcontent.cgi?article=1002&context=lsay\_conference.
- Rowntree, S. (1901) Poverty: A Study of Town Life, Macmillan, London.
- Salmon, J., Timperio, A., Cleland, V. and Venn, A. (2005), 'Trends in children's physical activity and weight status in high and low socio-economic status areas of Melbourne, Victoria, 1985–2001', Australian and New Zealand Journal of Public Health, 29(4), 337-342.
- Treasury (2007), *Intergenerational Report*, April 2007, Australian Treasury, Canberra. <a href="http://www.treasury.gov.au/documents/1239/PDF/IGR">http://www.treasury.gov.au/documents/1239/PDF/IGR</a> 2007 final report.pdf.
- Treasury (2010), *Australia to 2050: Future Challenges*, April 2007, Australian Treasury, Canberra. <a href="http://www.treasury.gov.au/igr/igr2010/report/pdf/IGR-2010.pdf">http://www.treasury.gov.au/igr/igr2010/report/pdf/IGR-2010.pdf</a>.
- Wake, M., Hardy, P., Canterford, L., Sawyer, M. and Carlin, J. B. (2006), 'Overweight, obesity and girth of Australian preschoolers: prevalence and socio-economic correlates', *Int J Obes*, 31(7), 1044-1051.
- Warren, N., Harding, A. and Lloyd, R. (2005), 'GST and the Changing Incidence of Australian Taxes: 1994-95 to 2001-02', *eJournal of Tax Research*, 3(1), July 2005, <a href="http://search2.austlii.edu.au/au/journals/eJTR/2005/2005.html">http://search2.austlii.edu.au/au/journals/eJTR/2005/2005.html</a>.
- Whiteford, P., Redmond, G. and Adamson, E. (2011), 'Middle class welfare in Australia: how has the distribution of cash benefits changed since the 1980s?', *Australian Journal of Labour Economics*, 14(2), 81-102.