

4th International Research Conference on Social Security

Antwerp, 5-7 May 2003



"Social security in a long life society"

Measuring the value of unpaid household, caring and voluntary work of older Australians

***Matthew GRAY, David de VAUS and David STANTON
Australian Institute of Family Studies
Australia***

International Social Security Association

Research Programme

Case postale 1, CH-1211 Geneva 22

Fax: +41 22 799 8509

e-mail: issarc@ilo.org

Web: www.issa.int

Measuring the value of unpaid household, caring and voluntary work of older Australians

David de Vaus, Matthew Gray and David Stanton

Paper presented to the International Social Security Association Fourth International Conference on Social Security, “Social Security in a long life society”, Antwerp, 5-7 May 2003.

David de Vaus is Senior Research Advisor at the Australian Institute of Family Studies and Associate Professor at the Department of Sociology at La Trobe University. Matthew Gray is a Principal Research Fellow at the Australian Institute of Family Studies and David Stanton is a former Director of the Institute.

Correspondence to:

Matthew Gray, Australian Institute of Family Studies, 300 Queen Street, Melbourne, 3000, Victoria, Australia. Email: matthewg@aifs.gov.au; Telephone: +61 3 9214 8741; Facsimile: +61 3 9214 7839.

1. Introduction

Like most countries throughout the world, Australia is experiencing the well documented demographic transition of population ageing. Just a few statistics illustrate the magnitude of this transition. In 1976, 9 per cent of the Australian population were aged over 65. By 2001 this had risen to 12 per cent and is projected to reach 18 per cent by 2021 and 25 per cent by 2041 (ABS 1999b). The proportion of the very old population (aged 85 plus) is projected to treble from 1.5 per cent to over 4 per cent between now and 2042 (Commonwealth of Australia 2002).

Population ageing is the result of two parallel demographic patterns: increased longevity and declining fertility. As people live longer, and there are fewer young people being born, older people inevitably become a larger proportion of the population.

Australians' life expectancies are among the highest of OECD countries, and this is expected to continue. In the past 40 years, Australians' life expectancies have increased by more than 8.3 years for men and 7.6 years for women. Based on recent trends, men born in 2042 are projected to live to 82.5 years, an average of 5.3 years longer than those born in 2002. Women born in 2042 are projected to live to 87.5, 4.9 years longer on average (Commonwealth of Australia 2002).

The fertility rate in Australia has declined from a high of 3.55 in 1961 to an all time low of 1.73 in 2002 – well below replacement levels. This rate has been projected by the Treasury (Commonwealth of Australia 2002) to decline to 1.6 by 2042 - a level at which some demographers argue a nation will find it extremely difficult to ever recover to replacement level fertility.

Population ageing is usually portrayed as a problem or, more politely, as a 'challenge'. In 1994, the World Bank brought out its recipe for "averting the old age crisis" (World Bank 1994). It has since become almost commonplace to refer to pension schemes as being in crisis, and to assert that they will not survive the impact of demographic ageing. Frequently discussions are framed in terms of the 'burden' of older people and an ageing population. The OECD has outlined a number of principles for action for *Maintaining Prosperity in an Ageing Society*. These principles focus upon encouraging later retirement and increased employment for older workers, fiscal consolidation, the development of advance-funded pension systems and improving the cost-effectiveness of health and long-term care (OECD 1998). Others see the long-term strategy on ageing in terms of ensuring that people everywhere are able to age with security and dignity and to continue to participate in their societies as citizens with full rights (see Sigg (2002) for a discussion of the different views).

There are two main reasons population ageing is seen to be a problem. One reason is economic and the other is social.

The economic consequences are the most widely canvassed 'problem' of an ageing population. The main reason for the anticipated economic costs of population ageing stems from greater financial dependency of older people and the consequent costs to government (and in turn the taxpayer). This dependency is normally expressed in

terms of the aged dependency ratio– the ratio of the population aged 65 and over to those aged 15-64. The population aged over 65 is deemed to be dependent since they typically are not available for work and frequently require income support and draw on other forms of government expenditure (e.g. health).¹

Between 1971 and 2002 the aged dependency ratio has risen from 14 per cent to 19 per cent. The Australian Retirement Income Modelling taskforce projects this ratio to increase to 30 per cent by 2031 and 41 per cent by 2042 (Commonwealth of Australia 2002) with most of the increase occurring between 2010 and 2030 as the baby boomers reach retirement age (Walker 1997).

Increasing aged dependency ratios are widely considered by governments to impose an increased financial burden on governments, and thus taxpayers, for health and income support. Treasury projects that between 2001 and 2041 health and aged care expenditure will increase from 4.7 per cent to 9.9 per cent of GDP and age and service pensions will increase from 2.9 per cent to 4.6 per cent of GDP (Commonwealth of Australia 2002)

These increased outlays must be met by taxation which will be levied on a relatively smaller workforce. It is projected that while there are currently more than five people of working age for every person aged over 65 this will halve by the middle of the century to just 2.5 people of working age for each person aged over 65 (Access Economics 1999).

While this increase in the aged dependency ratio will be partly compensated for by a decline in the child dependency ratio due to declining fertility there will nevertheless be a net increase in the overall dependency ratio (i.e. child and aged dependency ratios). More importantly, it has been estimated that the outlays associated with people aged over 65 are about four times greater than those associated with dependent children (Department of Community Services and Health 1990).

Alongside population ageing and increases in the aged dependency ratio, two other important developments have occurred in Australia that potentially exacerbates the ‘burden’ of an ageing population.

The first of these is the declining labour force participation of older people – especially among men. The average retirement age for men in Australia is 58. Partly as a result of economic restructuring in the 1980s and 1990s older men are withdrawing from the workforce earlier and at increasing rates. Participation rates for men aged 55-59 have declined from 91 per cent in 1970 to 75 per cent in 2003 (ABS 2003) and are projected to decline to 70.7 per cent by 2011 (ABS 1999a). Even though the declining rates for men have been compensated somewhat by the increasing rates of workforce participation of women in this age group, the workforce participation of men and women aged 55 and over are low by comparison with similar OECD countries (Bishop 1999).

1. It has frequently been pointed out however that this ratio has many problems and can unfairly perpetuate negative stereotypes of older people. The simple ratio does not take account of the contribution of older people who remain in the labour force or that of younger people not in the labour force. Nor does it recognise the degree of financial independence of many older people.

The second trend is the pressure on governments to maintain balanced budgets without overtly increasing taxation (Commonwealth of Australia 2002). This pressure to maintain a balanced budget is often couched in terms of generational equity (Rawls 1971). This has led governments to try to contain expenditures – especially in areas of escalating or projected expenditure growth such as health and income support.

The recent Intergenerational Report prepared by the Australian Treasury argues that:

The projections in this report suggest that, if policies are not adjusted, the current generation of taxpayers is likely to impose a higher tax burden on the next generation. The required adjustment in taxes and spending is about 5.0 per cent of GDP by 2041-42, or \$87 billion in today's dollars. Governments will need to exercise sound policy management to minimise the tax burden transferred to the next generation, particularly if Australia is to keep its position as a lower taxing and spending country. (Commonwealth of Australia 2002: 1)

In the context of the financial implications of an ageing population, some ageing theorists (Preston 1984a; Thomson 1989; Laslet and Fishkin 1992; Saint-Etienne 1993; Sgritta 1997) have argued that population ageing will have profound social implications.

In particular, these theorists argue that the financial strains that are predicted to flow from population ageing have profound implications for generational equity and intergenerational solidarity. They paint a picture of an emerging intergenerational competition and conflict replacing a former intergenerational solidarity. They see the situation developing in which the generations compete for limited resources with this competition replacing the 'generational contract' whereby there was an implicit understanding that the younger and middle-aged generations would provide for the needs of the elderly. More specifically, these theorists argue that population ageing means that:

- a greater proportion of the population will require income and health support from the state;
- the taxation base to support this expenditure will become smaller;
- the shrinking taxation base will mean either that the taxation burden on this smaller base will have to increase, or expenditure will have to be diverted from spending on younger generations (e.g. family support payments, education etc) to the older and increasingly numerous population of older people;
- the competition for limited resources will see the ending of the 'generational contract' - that is, the general acceptance by the younger generation that the young and active will provide for the needs of the elderly (Bengston and Achenbaum 1993);
- the result of this is expected to be increasing age polarisation and age group consciousness; and
- this, in turn may lead to conflict between the generations and thus undermine a social cohesion.

In the politics of arguments about generational equity the older generation (the 'greedy geezers') is frequently seen to be the guilty party that has managed to obtain an unfair share of government expenditure at the expense of younger generations. Thomson (1992) asks

'Why should the young adults of the 1990s and beyond feel bound to pay for the welfare state of their predecessors?...Why should they not argue that there is now no contract between generations, because it has been voided by the behaviour of their elders (Thomson 1992: 231).

The elderly have been painted as the winners and younger people as the losers. Pressure groups such as 'Americans for Generational Equity' complain that the retired are taking more of government funds than is their due. Preston (1984b) has pointed to the sharp increases in child poverty and the rapid decline in poverty among older people in recent decades and attributes this partly to the lobbying power and self interest of older people. He wrote

"Let's be clear that the transfers from the working-age population to the elderly are also transfers away from children..." 1994a, b

The conservative writer Peter Peterson has argued that:

"From a society that once felt obliged to endow future generations, we have become a society that feels entitled to support from our children. Unless this mind set changes, Americans may one day find that all they really are 'entitled to' is a piece of the national debt" (Peterson 1999:11).

In summary, the demographic transition of population ageing has largely been framed in negative terms – terms in which older generations are largely regarded as a cost or a burden. Population ageing in the context of limited government resources has also been seen as undermining generational equity, and the competition between generations for government resources has been accused of leading to generational conflict, the outcome of which has been unfair and harmful for younger generations.

This portrayal of older people as a cost and as takers represents an unbalanced view of the contributions of older people. While the direct cost to government of providing services to older people can be calculated, this approach neglects:

- the contributions of older people earlier in the life course (Marshall and Mueller 2002); and
- the ongoing contributions of older people in later life.

This paper seeks to provide more balance to the debate about the cost of older people in an ageing society and to estimate the financial value of some of the ongoing contributions of older people that are not measured in national accounts.

Others have, of course, noted the ongoing contributions of older people. In framing the National Strategy for an Ageing Australia the then Minister for Aged Care acknowledged that

People continue to make significant contributions as they age through a range of activities including volunteering and care giving - both of which substantially reduce the demand on Government outlays. (Healthy Ageing Taskforce 2000 p 13)

Previous surveys have found that 37 per cent of volunteer work is contributed by people aged 55 and over (ABS 2001) and that 21 per cent of principal carers of people with disabilities are themselves aged over 65 (ABS 1998b). Older people are, in fact, more likely to be givers of care than receivers of care (Healthy Ageing Taskforce 2000). Furthermore 21 per cent of children aged under 11 receive some child-care from grandparents and 41 per cent of children who receive some sort of child-care obtain at least some of this care from grandparents (ABS 2000). In addition to these contributions are financial transfers from older to younger family members in the form of gifts, loans and inheritances.

However, much of the debate about ageing is still framed almost exclusively in terms of the financial cost of older people. In this context the National Strategy for an Ageing Australia recommended that researchers:

- undertake research on the costs and benefits of an ageing population; and
- extend research into the volunteer/community contribution of older people.

In an attempt to provide some preliminary data so that the debate about the 'cost' of older people can be properly framed, this paper seeks to estimate the financial value of the unpaid contributions of older people – both to their family and to the wider community. In so doing it will bring data to bear on the image that older people are takers and are 'greedy geezers'. If the financial value of the unpaid work of older people can be estimated we can more properly frame comments about the 'cost' of older people in an ageing population.

This paper uses data from the 1997 Australian Time Use Survey to estimate the amount and value of unpaid work of different age groups. The Australian time use data provides detailed information on for whom a task or activity is undertaken. This allows us to distinguish between unpaid work which is undertaken for family in a person's own household, for family members not living in a person's own household, and for friends, neighbours and others in the community. The ability to determine accurately for whom unpaid work is undertaken is not available on most time use surveys.

The rest of this paper is structured as follows. The next section discusses the measurement and definition on unpaid work and the data used. The third section discusses the valuation method used, and the fourth section presents estimates of the value of unpaid work. In the fifth section estimates of the value of caring for a sick spouse are outlined. The penultimate section presents information on the incidence of unpaid work, and the final section makes some concluding comments.

2. Measurement of unpaid work - method and data

2.1 Defining unpaid work

Determining what activities should be classified as being unpaid work is difficult and contentious. However, international statistical standards provide definitions which can be used to define different types of unpaid work. The international statistical standard that establishes the conventional definitions is set out in *System of National Accounts 1993* (SNA93). We use conventions in defining unpaid work.

A widely accepted principle for determining the scope of total unpaid work is the ‘third person’ or ‘market replacement’ criterion.

‘Household production consists of those unpaid activities which are carried on, by and for the members, which activities might be replaced by market goods or paid services, if circumstances such as income, market conditions and personal inclinations permit the service being delegated to someone outside the household group’. (Goldschmidt-Clermont 1982: 4)

Under this criterion a household activity would be considered as unpaid work if an economic unit other than the household itself could have supplied the latter with an equivalent service.

This definition is consistent with Aas’s (1982) concept of committed-time activities, which are activities to which a person has committed him/herself because of previous acts or behaviours or community participation such as having children, setting up a household or doing voluntary work. The consequent housework, care of children, shopping or provision of help to others are committed-time activities.

In summary, unpaid work is defined in this paper as comprising unpaid household work and volunteer and community work. Unpaid household work consists of domestic work about the house, child-care and shopping and associated communication and travel.

It should be stressed that in estimating the value of the unpaid work of older people we do not pretend to measure all the financial contributions of older people. In addition to unpaid work, older people contribute to other generations through intergenerational transfers of money, gifts and through inheritances. This paper only measures the contribution of unpaid work.

The categories of unpaid household work used in this paper are outlined in Table 1.

Table 1. Unpaid Household Work Activities

	Definition
Food & drink preparation & clean-up	Includes the cooking and serving of meals, and washing dishes.
Laundry, ironing & clothes care	Includes washing, ironing, mending and making clothes.
Other housework	Includes cleaning the bathroom/toilet, vacuuming, dusting and tidying.
Gardening & lawn care, cleaning grounds etc, & pet care	Includes gardening, pool care and feeding and tending to animals
Home maintenance	Includes repairs or improvements to the home, equipment, and motor vehicles and chopping wood.
Household management, associated communication & travel	Includes paperwork, bills, budgeting, organising, packing, selling household assets and disposing of rubbish.
Child-care, associated communication & travel	Includes the physical, emotional and educational care of children and general interaction with, and supervision of children.
Purchasing, associated communication & travel	Includes the purchasing of a wide range of goods and services for people – purchasing durables and consumer goods and purchasing repair services, administration services, child-care, domestic and gardening services etc. (excludes window shopping and purchasing personal care such as visiting the doctor or getting hair cut)
Adult personal care	Includes the physical care of adults (excludes emotional care)
Volunteer work, associated communication & travel	Includes doing favours for others and active involvement in various forms of unpaid voluntary work.

In our analysis we consider the amount and value of each of these categories of unpaid work provided by age group and gender. The age groups used are: 15 to 24 year; 25 to 44 years; 45 to 54 years; 55 to 64 years; 65 to 74 years; and 75 years plus. These age groups have been chosen to reflect different ‘life stages’.

2.2 1997 Time Use Survey

The analysis in this paper is based upon the 1997 Australian Time Use Survey conducted by the Australian Bureau of Statistics (ABS). The survey was collected over four periods during 1997 in order to balance seasonal influences which affect time use patterns. After sample loss, over 4,550 households (8,600 persons) were selected at random for inclusion in the survey.² The final number of respondents was

2. The survey was conducted on a multi-stage area sample of private dwellings. All persons within the selected dwellings were included in the survey, subject to scope and coverage provisions. The survey covered residents of private dwelling in urban and rural areas across all States and Territories of Australia. The survey excludes certain non-Australian diplomatic personnel, overseas residents in Australia and members of non-Australian defence forces (and their dependants) stationed in Australia. Also excluded were some 175,000 persons living in remote and sparsely settled parts of Australia. The exclusions of these persons will have only a minor impact on any aggregate estimates that are produced.

7,260. Information about the household and each of its members aged 15 years or more was collected. A diary was then left for each person over 15 years to be completed on two successive specified days. Fully completed questionnaires and diaries were obtained for 84.5 per cent of all persons who were asked to respond. About 2 per cent of respondents provided only a single diary day. We exclude these individuals from our analysis.

The survey contains a range of information on household characteristics, demographic, human capital and other person level information and detailed information about time use for two days using a time use diary. The diary provided detailed information about every episode of time use over the two-day period. Each episode has seven dimensions: what it is; who it is being done for; when it begins; when it ends (and by derivation how long it lasts); whether anything else is being done at the same time; where it takes place; and who else is present.

Information on up to two simultaneous activities was collected. Respondents report according to their perception of how the activities should be described. The same activity can be coded differently depending on the purpose or context described in the diary. The secondary activity is usually the activity recorded in answer to the question ‘What else were you doing at the same time?’ In some cases, multiple activities are entered in the primary activities column of the diary. This requires a determination by coding staff as to whether they occurred at the same time or sequentially. Only one secondary activity can be recorded for each episode.

A more detailed discussion of the Time Use Survey can be found in ABS (1998).

An unusual feature of the 1997 Australian Time Use Survey is that it contains information on ‘for whom’ an activity was undertaken. This allows us to separate unpaid work and caring according to who the activity was undertaken for. This is of particular importance when considering the unpaid work older Australians do for people outside their own home. The ‘for whom’ categories used in this paper are:

- for people in your household (including self, kids and other household members);
- for family members not living in the respondent’s household); and
- for friends and other community members.

3. Valuation methods

In the literature, two basic approaches to measuring unpaid work are identified: the ‘direct’ or ‘output’ method; and the ‘indirect’ or ‘input’ method. The first method involves the measurement of output by direct observation of prices and requires data on the quantities of services produced. While this method is conceptually superior because it adopts the same approach that is used to value market production, in general, the necessary data are not available. We therefore use the ‘indirect’ or ‘input method’.

‘Indirect’ or ‘input’ methods involve valuing output in terms of the cost of inputs and require information about the time spent on household work. There are two broad approaches to the application of the input method.

- The *market replacement cost* approach, i.e. what it would cost households in wages to hire others to do the household and caring work for them; and
- The *opportunity cost* approach, i.e. what household members would have earned in wages had they spent the same amount of time on paid work as actually spent on unpaid work.

Given that employment rates are low amongst older Australians, the opportunity cost approach to valuing their unpaid work is clearly inappropriate. We therefore use the market replacement cost approach. There are several variants of the market replacement cost approach which have been developed in the literature. These include: individual function replacement cost approach; housekeeper replacement cost approach; and replacement cost hybrid approach.

The individual function replacement costs assigns values to the time spent on unpaid work by household members according to the cost of hiring a market replacement for each individual function. It is not easy to determine an appropriate market rate of pay for household activities because commercial rates may embody a level of skill, responsibility or capital not required or reflected in household work. The application of commercial wage rates is also inappropriate where there are differences in productivity between households and the market sector due to economies of scale or the availability of expensive equipment in commercial operations. The housekeeper replacement cost approach values the time spent on unpaid household work by household members according to the cost of hiring a housekeeper to undertake the relevant tasks. The replacement cost hybrid approach uses the housekeeper wage to value unpaid household work and commercial wages to value adult-care and voluntary work.

In this paper we use the replacement cost hybrid approach to value unpaid work. Unpaid household work is valued using the wage rate for "Domestic housekeepers".³ The value of volunteer and community work is derived using the individual function replacement cost approach, based on wage rates. The wage rates used are given in Table 2. All dollar values used in this paper are in Australian dollars.

3. The tasks identified in this occupation include: preparing, cooking and serving meals and refreshments; purchasing food and household supplies; washing dishes, kitchen utensils and equipment, sweeping and washing floors and vacuuming carpets, curtains and upholstered furnishings; dusting and polishing furniture, and cleaning mirrors, bathrooms and light fixtures; and washing and ironing garments, linen and household articles.

Table 2. Wage rates used for the valuation of unpaid work, gross amounts

Unpaid work activity	\$/hr
Household work	\$12.15
Domestic housekeepers	
Adult-care	\$14.04
Personal care workers and nursing assistants	
Volunteer work	\$13.73
Average of all unpaid occupations	
Associated communication	\$15.99
Secretaries and personal assistants	
Associated travel	\$14.59
Automobile drivers	

Notes: Wages are gross wages and in 1997 dollars.

Source: ABS (1997), *Employee Earnings and Hours, Australia*, Catalogue No. 6306.0, ABS, Canberra.

Gross wages rather than net wages are used. This is consistent with the approach adopted by the Australian Bureau of Statistics and the recommendations of Eurostat. From a practical point of view, net wage statistics are generally not available on an occupational basis.

Whether the estimates based on these approaches will underestimate or overestimate the value of unpaid work depends on the relationship between the productivity of households and the market sector.⁴ Of particular significance for the estimates of the value of unpaid work by age is that the length of time taken to undertake a variety of unpaid work activities may increase with age. There are several reasons for thinking this may occur. First, declining physical and mental health may lead to a reduction in productivity in at least some older people. Second, the way in which tasks are undertaken may change. For example, shopping may become a social outing as much as being done to purchase things which are needed. In other words, activities such as shopping may contain an increasing component of recreation.

In order to estimate effectively how productivity varies with age (or any other characteristic) measures of time and other inputs and outputs are needed. This data is not generally available on time use surveys. What is measured is time inputs but there are not measures of outputs.

The overlapping of activities is an important dimension of time use. A number of studies have shown that overlapping activities are neither isolated phenomena nor a trivial issue. The inclusion of overlapped activities can provide a more accurate estimate of an individual's economic contribution, particularly in the area of non-market production of goods and services (Bittman 1996; Apps and Rees 1996; Bener'ia 1996; Folbre 1997). The overlapping of activities is particularly significant for child-care activities which can be combined with a wide range of household tasks such as cleaning and cooking as well as household management. We therefore combine both primary and secondary time use.

4. For a discussion of this issue see Fitzgerald and Wicks (1990).

4. Value of time use

4.1 Total value unpaid work

We begin with the total value of unpaid work. Table 3 shows the per capita annual value of unpaid work by gender and age. It also shows the total value for the entire age group. Focussing first on the per capita estimates, the value of unpaid work is higher for females than males for all age groups. As expected, for women the value of unpaid work is highest for the age group 25 to 44 years being \$45,917 per annum. The per capita value of unpaid work decreases with age to be \$19,932 per capita for the 75 and over age group. The value of unpaid work decreases only slowly after age 45.

For men, the value of unpaid work is very similar for all age groups aged 25 years and over, ranging from \$16,255 for those aged 45 to 54 to \$19,788 for those aged 25 to 44 years. The very large fall in the value of unpaid work for women for age groups aged 45 years and older is largely due to a reduction in the amount of child-care provided.

Table 3. Value of unpaid work by age and gender, Australia 1997

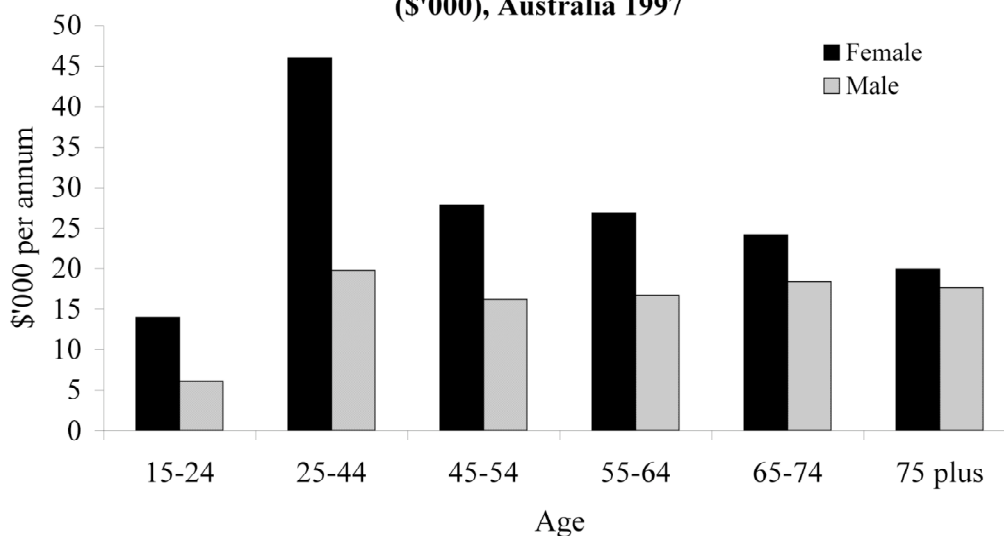
Age	Female		Male	
	Per capita	Population (\$'000)	Per capita	Population (\$'000)
				\$ per annum
15-24	13,990	17,495,225	6,088	7,989,511
25-44	45,917	129,989,730	19,788	55,023,270
45-54	27,812	32,432,272	16,255	18,937,288
55-64	26,828	21,624,138	16,741	14,247,534
65-74	24,192	16,109,310	18,357	10,307,197
75 plus	19,932	7,530,766	17,636	4,799,695

Source: Australian Time Use Survey 1997.

When considered in aggregate, the value to the Australian economy drops away with age at a faster rate than does the per capita estimates due to the relatively small proportion of the population in the older age groups. The total amount of unpaid work however remains substantial.

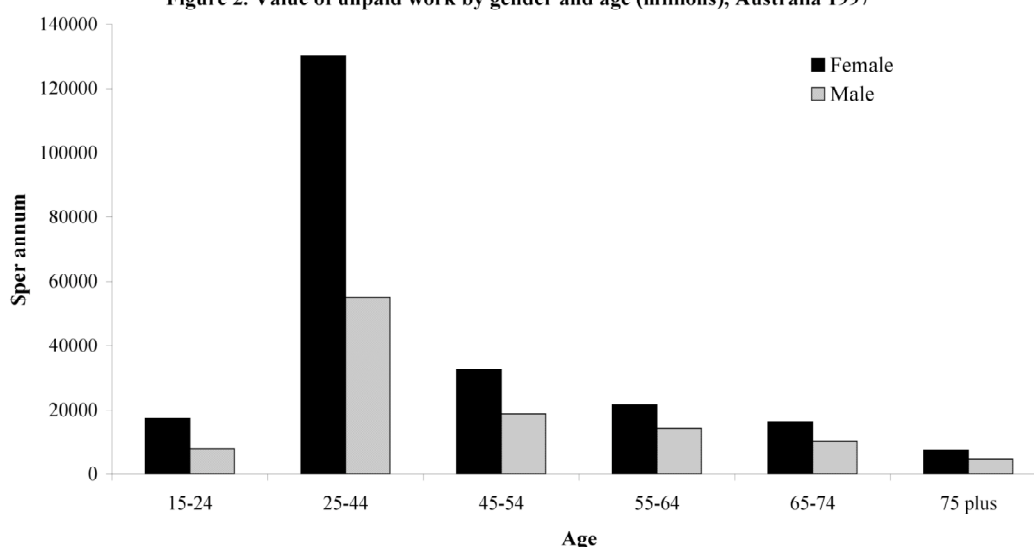
The above information is shown graphically in Figures 1 and 2.

Figure 1. Per capita value of unpaid work by gender and age (\$'000), Australia 1997



Source: Australian Time Use Survey 1997.

Figure 2. Value of unpaid work by gender and age (millions), Australia 1997



Source: Australian Time Use Survey 1997.

4.2 Value of unpaid work for people inside and outside of own household

An important distinction is between unpaid work done for people living in a person's own household and unpaid work for people living outside a person's own household. Table 4 shows the average per capita value of unpaid work done for people outside their own household and the proportion of total unpaid work which is done for people outside own household.

For both males and females the age pattern of unpaid work outside of own household differs to that for total unpaid work and for unpaid work in the household. For females unpaid work outside own household increases with age to reach a maximum at 55 to 64 years (\$3,365 per annum) and for males it is highest for those aged 65 to 74 years

(\$2,387 per annum). Unpaid work done for people outside own household remains substantial for females aged 75 years plus (\$1,642 per annum). For males, the value of unpaid work outside own household drops off very rapidly for those aged 75 years and over (\$814).

Table 4. Per capita value of unpaid work outside and inside of own household by gender and age, Australia 1997

	Outside household		Proportion of unpaid work outside household	
	Female	Male	Female	Male
	\$ per annum		Per cent	
15-24 years	1,332	921	9.5	15.1
25-44 years	2,069	1,544	4.5	7.8
45-54 years	2,603	1,094	9.4	6.7
55-64 years	3,365	1,906	12.5	11.4
65-74 years	2,219	2,387	9.2	13.0
75 years plus	1,642	814	8.2	4.6

Source: Australian Time Use Survey 1997.

The proportion of unpaid work done for people outside own household varies between 5.4 per cent for females aged 25 to 44 years to 12.5 per cent for those aged 55 to 64 years. Amongst females aged 75 years plus 8.2 per cent of unpaid work is for people outside of own household. For males, the age group with the higher proportion of unpaid work for those outside of own household is those aged 15 to 24 years (15.1 per cent) and the maximum is amongst those aged 65 to 74 years (13.0 per cent). Amongst males ages 75 years plus only 4.6 per cent of unpaid work is for people outside of their own household.

4.3 Value of unpaid care – child-care and adult-care

This section presents estimates of the value of child-care and adult-care. When considering the value of caring activities, it is important to bear in mind that not all people do these activities and so the average value of the activity for those who actually do the activity can be much higher than the average per capita for each age group. We thus present estimates both of the average per capita value of unpaid caring and the average value of unpaid caring amongst people who actually provide unpaid care.

We first consider child-care. There are very strong gender differences in the value of unpaid child-care provided (Table 5). As expected the value of unpaid child-care is the highest for those aged 25 to 44 years being \$26,157 for females and \$9,904 for males. For females, the value of unpaid child-care drops rapidly for older age groups but remains substantial up until the age of 65 to 74 years when it is \$2,138 per annum. The difference in the average per capita value and the average amount of unpaid child-care of those who undertake some care increases with age. This reflects the decreasing proportion undertaking any child-care as age increases. Amongst older Australians who do unpaid child-care the average value of the child-care provided is very substantial. There is a similar pattern for males, although the value of the unpaid child-care provided is much lower.

Given the relatively small numbers doing unpaid adult-care, it is necessary to collapse the age categories into two groups (15-54 and 55 years plus) in order to obtain statistically stable estimates.

It is important to recognise that adult-care refers only to the physical care of adults (things such as helping with eating, washing, dressing and so on). People who assist another adult who is in poor health or disabled may be doing things such as cooking, shopping and cleaning for that person. These activities are not captured by the category “adult-care” but are captured in the category of household work.

A higher proportion of females than males do adult-care. For females, there is a slight increase in the proportion reporting doing adult-care for the older age group. The average amount of adult-care per capita is quite low, ranging from \$9 per annum for males aged 15-54 years to \$190 for females ages 55 years plus. However, when just those who did some adult-care are considered, the average amounts are much larger. For females, the average amount is \$4,334 per annum for those aged 15-54 years and \$4,267 for those aged 55 years plus. For males, there is an increase in the amount provided as age increases from \$2,741 to \$5,401 per annum.

Table 5. Unpaid caring by age and gender, Australia 1997

	Female			Male		
	All	Proportion doing activity	Only those who did activity	All	Proportion doing activity	Only those who did activity
	\$	Per cent	\$	\$	Per cent	\$
Child-care						
15-24 years	4,221	19.6	21,533	623	6.6	9,493
25-44 years	26,157	67.1	39,914	9,904	46.8	21,224
45-54 years	5,054	27.3	18,507	4,695	26.0	18,063
55-64 years	2,963	25.6	11,580	1,605	14.1	11,418
65-74 years	2,138	15.8	13,545	781	11.9	6,575
75 plus years	260	5.6	4,689	83	3.2	2,620
Adult-care						
15-54 years	35	3.1	4,334	9	1.4	2,741
55 plus years	190	4.6	4,267	91	1.7	5,401

Notes: For adult-care the age ranges are collapsed to 15 to 54 years and 55 years plus due to the relatively small cell sizes for those actually doing adult-care.

Source: Australian Time Use Survey 1997.

4.4 Value of volunteer work

For females, the value of volunteer work increases up to age 55 to 64 when it reaches a maximum of \$796 per annum (Table 6). The proportion of the females doing volunteer work follows a very similar pattern reaching a maximum of 24.8 per cent for those aged 65 to 74 years. For males, the maximum occurs at age 65 to 74 years when it is \$1,219 per capita. The value of volunteer work of those aged 75 years plus is similar to that for those aged 25 to 44 years and higher than for those aged 15 to 24 years.

Table 6. Value of volunteer work by age and gender

Age	Female			Male		
	All	Proportion doing activity	Only those who did activity	All	Proportion doing activity	Only those who did activity
	\$	Per cent	\$	\$	Per cent	\$
15-24 years	370	12.8	2,889	369	12.1	3,040
25-44 years	609	17.7	3,436	659	14.2	4,652
45-54 years	974	21.0	4,634	563	16.9	3,336
55-64 years	938	24.8	3,779	844	23.3	3,629
65-74 years	797	17.3	4,608	1,219	21.5	5,681
75 plus years	670	11.6	5,759	559	19.2	2,913

Source: Australian Time Use Survey 1997.

4.5 Unpaid work outside the household – family versus non-family

Unpaid work for people outside own household can be separated into that which is for family and that for non-family. Table 7 shows the per capita amount of household work, child-care, adult-care and volunteer work by age and gender.

The distinction between inside and outside household may not be an entirely accurate indicator of usual residence of recipient of unpaid work. For example, a grandparent may have a grandchild staying overnight temporarily and record the grandchild as an in household family member, even though the grandchild normally lives elsewhere.

For younger females and males the amount of unpaid household work done for non-family outside of own household is much larger than the amount done for family outside of own household. For example, for males aged 15 to 24 years the average per capita amount of household work done for family is \$76 dollars as compared to an average of \$522 for non-family.

For both females and males, as age increases, the amount of unpaid housework done for family members increases relative to the amount for non-family members. For both females and males there is a peak in the amount done for family outside of household and it becomes larger than the amount done for non-family.

For females, after the age of 65 the amount of unpaid household work done for family members outside of own household falls dramatically (from \$901 for those aged 55 to 64 years to \$389 for those aged 65 to 74 years). The amount of unpaid household work done by males for family members drops away dramatically for the 75-year plus age group. The amount of unpaid household work for non-family peaks at age 65 to 74 years and then also drops away for the 75-year plus age group.

The age pattern for child-care is quite similar with a maximum at age 55 to 64 years for both males and females. Interestingly, the mix between family and non-family child-care changes dramatically with age, with almost all of the unpaid child-care done outside of the household being done for family amongst the older age groups, whereas for the younger age groups a much higher proportion is done for non-family.

While we do not have direct evidence on why the amount of unpaid household work and child-care done outside of the household is largest for the age group 55 to 64

years, it is most likely an indication of the so called ‘sandwich generation’ who have both grandchildren and elderly parents and hence have heavy demands from family members. The pattern may also, in part, reflect early retirement.

Turning to the gender and age pattern for volunteer work, the majority is done for non-family members, particularly for males.

Table 7. Unpaid work outside own household by gender and age, Australia 1997

	Female		Male	
	Family outside household	Non-family outside household	Family outside own household	Non-family outside household
	\$ per annum			
Household work				
15-24 years	159	694	76	522
25-44 years	277	610	272	557
45-54 years	452	710	118	386
55-64 years	901	788	573	366
65-74 years	389	680	435	629
75 years plus	489	348	122	204
Child-care				
15-24 years	43	159	-	34
25-44 years	166	540	76	142
45-54 years	367	210	90	53
55-64 years	731	118	291	36
65-74 years	525	1	214	7
75 years plus	146	-	37	-
Adult-care				
15-24 years	7	7	-	-
25-44 years	11	9	1	17
45-54 years	66	6	4	0
55-64 years	32	13	1	-
65-74 years	-	18	13	-
75 years plus	24	45	-	49
Volunteer work				
15-24 years	61	200	32	257
25-44 years	139	317	178	301
45-54 years	203	589	102	340
55-64 years	161	621	139	500
65-74 years	65	541	184	905
75 years plus	80	510	117	285

Note: Household work is defined to include food and drink preparation and clean-up, laundry, ironing and clothes care, other housework, gardening and lawn care, cleaning grounds and pet care, home maintenance, household management and purchasing.

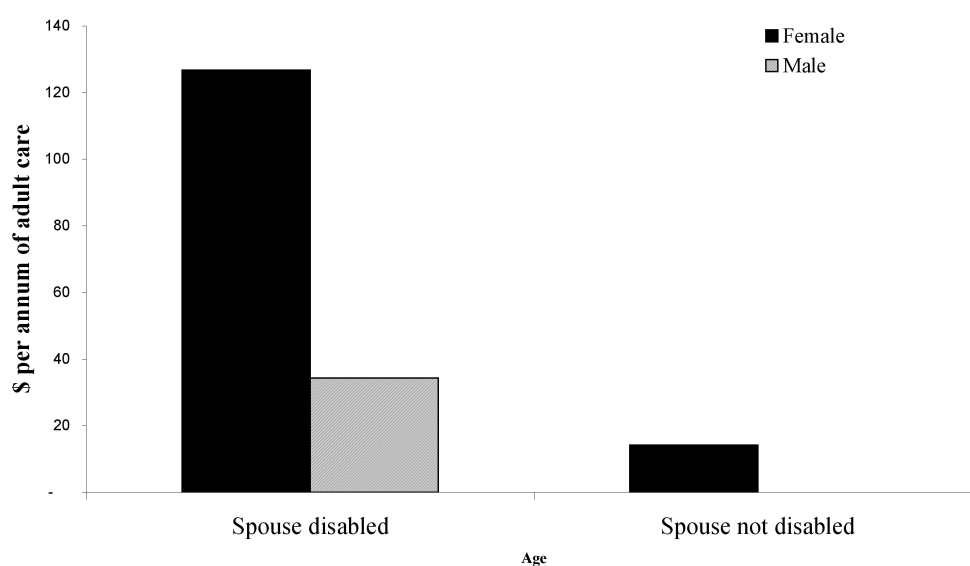
Source: Australian Time Use Survey 1997.

5. Caring for disabled spouse

Amongst older Australians the major caring contribution is for a sick or disabled partner. This potentially reduces the need for government expenditure providing care, although this must be offset against the fact that there are other provisions in the income support system that provide financial support to carers.⁵ There has also been a major expansion of home and community care services which has meant that the majority of older people requiring government funded care services now have access to those services in their own homes rather than in residential care. Currently, 12 per cent of people aged 70 and over receive government funded care services in the community, compared to 4 per cent in nursing home care and 3 per cent in lower level residential care (OECD 2000: 66).

In this section we present estimates of the value of adult-care provided to spouse by the disability status of spouse. As can be seen in Figure 3 the amounts are quite small on a per capita basis. However, as outlined above only a relatively small proportion of older Australians provided any adult-care and that amongst those who did any adult-care the average amount provided is much larger.

Figure 3. Within household unpaid household work and caring by older Australians in couple family



Source: Australian Time Use Survey 1997.

6. Incidence of unpaid work

Further analysis of unpaid work was conducted by focussing on the proportion who reported doing any unpaid work in the two diary days. An advantage of this shift in focus is that it provides a direct measure of incidence of unpaid work, albeit one that does not capture the intensity of usage of respective services.

5. For example, assistance is available with the costs of caring through a Carer Allowance, and carers maybe eligible for income support through a Carer Payment.

Table 8 shows the proportion of respondents who did unpaid work within own household and for people outside own household. The main point to be taken from Table 8 is that the proportion reporting doing unpaid work for people outside of household falls with beyond age 65 for females but only beyond age 75 for males.

Table 8. Proportion doing unpaid work by gender and age

	Years					
	15-24	25-44	45-54	55-64	65-74	75
	Per cent					
Female						
Own household	96.0	98.9	99.5	98.4	99.4	96.2
For people outside own household	41.2	49.5	52.0	51.8	41.7	31.6
Family outside own household	10.8	13.9	18.9	27.2	18.5	14.4
Non family outside household	34.9	42.4	41.8	34.8	32.0	20.9
Males						
Own household	83.8	93.5	94.4	96.0	99.2	99.2
Outside own household	28.7	32.7	30.8	37.4	34.9	28.2
Family outside own household	3.8	8.0	9.2	12.9	12.9	7.8
Non family outside household	26.0	28.0	23.7	28.7	28.1	22.0

Notes: The sum of family outside own household and non-family outside household is greater than for people outside own household given that people can do both types of outside own household.

Source: Australian Time Use Survey 1997.

In order to explore the characteristics of those who undertake unpaid work outside of household we present figures on the proportion undertaking various categories of unpaid work for different education levels (Table 9). Amongst the older age groups there are strong educational effects, with those with a level of educational attainment being much more likely to have done unpaid work for people outside their own household than are those with lower levels of educational attainment. The differences between education groups are also particularly pronounced for the younger age group. For volunteer work there is a similar pattern. There are few differences between education groups in the likelihood of undertaking child-care or adult-care.

Table 9. Incidence of unpaid work by educational attainment and age, Australia 1997

	Age				
	15-24	25-44	45-54	55-64	65 plus
	Per cent				
Outside own household					
Degree	52.3	46.6	50.2	57.0	60.8
Diploma	37.6	45.8	52.9	41.1	46.9
Vocational	47.8	38.6	42.3	40.5	33.9
Year 12	36.5	44.1	35.9	41.1	42.5
Year 10	27.0	38.9	34.4	44.2	31.4
Still at school	25.4	na	na	na	na
Volunteer					
Degree	23.9	16.9	29.9	26.4	39.8
Diploma	11.0	14.2	19.9	24.2	28.9
Vocational	11.5	12.7	16.3	25.9	14.8
Year 12	14.3	17.8	14.5	23.0	24.8
Year 10	13.2	18.2	17.6	23.1	14.1
Still at school	7.4	na	na	na	na
Child-care					
Degree	4.5	50.8	39.3	21.9	9.4
Diploma	11.9	58.5	29.8	19.2	8.9
Vocational	7.5	56.4	21.7	18.2	11.2
Year 12	8.5	55.0	24.4	12.2	14.2
Year 10	23.1	58.7	25.8	21.4	10.4
Still at school	17.8	na	na	na	na
Adult-care					
Degree	1.7	2.2	5.3	4.9	2.7
Diploma	1.4	2.4	6.4	2.3	1.2
Vocational	1.1	1.7	3.7	1.7	2.4
Year 12	1.0	1.1	2.1	3.8	3.8
Year 10	0.0	3.2	3.2	4.7	2.9
Still at school	1.1	na	na	na	na

Source: Australian Time Use Survey 1997.

7. Concluding comments

As the proportion of the Australian population aged 65 or older increases the direct financial costs to governments are expected to rise due to the income support and health costs associated with an older population. A focus on these financial costs has led to an unduly negative, problem-oriented view of population ageing that neglects the contribution of older citizens to the social and economic wellbeing of the nation. The fact that many of those aged 55 and older and most people aged 65 and older are no longer in the paid workforce has reinforced the negative view that older people are a burden rather than an asset. This undervaluing of the contribution of older people has direct parallels to the undervaluing of the unpaid contributions of women who leave the workforce to raise children or who raise children while continuing to work.

This paper has explored just one aspect of the financial contribution of older people and has demonstrated that, as an age cohort, older people make valuable financial contributions to the Australian society through the time they spend in unpaid caring in their own household, to their family members in other households and to non-family members in the wider community. In addition to these caring contributions provided by older people a considerable amount of unpaid voluntary work is contributed by older people.

We have shown that, based on time use data, men and women aged over 65 contribute almost \$39 billion per year in unpaid caring and voluntary work. If the unpaid contribution of those aged 55 to 64 is included this contribution rises to \$72 billion per annum. This compares to a total GDP for Australia in 1997 of around \$550 billion. At the individual level the unpaid work of older people is valued at between approximately \$20,000 to \$27,000 for older women and from just under \$17,000 to just over \$18,000 for older men. The bulk of this unpaid work is performed within the person's own home but older women undertake between \$1,600 and \$3,300 worth of unpaid work outside the home and older men undertake between \$800 and \$2,400 worth of 'external' paid work each year – depending on which age group of older people are considered.

If it were not for the unpaid work of older people at least some of the costs of providing care and the functions undertaken by volunteers would have to be born in one way or another by government. It is therefore important when considering the direct financial costs of an ageing population that the unpaid work of this older section of the population be taken into account. In other words, instead of focussing just on the costs of an older population it is important to take into account the positive contributions and savings generated by the unpaid work of older people. As the size of this population increases the total value of these contributions will increase.

Unpaid work patterns in later life are gendered. Older women contribute more than older men on both a per capita and aggregate level. For example, of those aged 65-74 women contribute \$24,192 per annum compared to men who contribute \$18,357. At a national level women of this age contribute over \$16 billion per year while men contribute \$10.3 billion. This discrepancy between the value of the national contribution of older men and women is due to both the lower per capita contribution of older men and the fact that there are fewer older men than older women.

Women aged 65 to 74 are relatively more active within their household than are similarly aged men – 9 per cent of these women's unpaid work is outside the home compared to 13 per cent for similar aged men. For the men and women aged 75 and over this pattern reverses. When older women undertake unpaid work outside the home they are more likely than men to be working for family members who live outside their own household by providing child-care, household work or adult-care. In contrast, older men tend to make their outside the home contributions through voluntary work.

All age groups undertake a much greater proportion of their unpaid work within their own household than outside their household. Of unpaid work undertaken for people outside the person's own home most child-care and adult-care is undertaken for family members. However, work for people outside the persons own household is by

no means confined to helping family members. As far as household work beyond their own household is concerned, older men and women spend more time doing household tasks for non-family members than for family members. Volunteer work is predominantly for non-family members.

In addition to the financial value of the unpaid work of older people it is also important to recognise the social importance of these activities. The unpaid labour of people can act as a social glue that helps cement society together. Much of the unpaid work of older people provides support that would be difficult to provide using market based services. The sense that someone cares, the flexibility of the support provided by many unpaid workers and feeling that people are not doing things only for financial gain can all provide something additional to the simple financial contribution of the unpaid work.

While an ageing population may require some increased expenditure on the older age cohorts this should not simply be viewed as a one-way public transfer of funds to older people. The public expenditure of funds must be balanced against the private transfers from older people to other family members and the wider community through their unpaid work. While some theorists and activists have argued that the public transfer of funds towards older generations is a threat to intergenerational solidarity, their concerns neglect the impact of the private transfers of older people to younger generations (via intra family transfers) and through their contribution to the wider community.

Nor should the expenditure on income support and health for older people be regarded as an expenditure that pays no dividends. These public expenditures on older people can enable older people themselves to yield an investment return that favours younger family members and the wider community through their unpaid work and other transfers of goods, gifts, cash and inheritance. Were it not for the support older people receive from the public sector they would be in a weaker position to give something back. It can be argued that the public support provided to older people strengthens the social glue that binds the generations together. To reduce this support could jeopardize the ability (and willingness?) of older people to make the transfers to their families and the wider community. It is possible that reducing expenditure on the elderly in the name of generational equity and generational solidarity could have the effect of undermining the equity and solidarity that is currently generated by the private transfers from older people (Attias-Donfut and Arber 2000).

While the value of unpaid work of older people overall is substantial some older people contribute much more in this way than others. Of women aged 65 to 74, 58 per cent undertake no unpaid work outside their own household and two thirds of those aged 75 plus do no unpaid work outside the home. The comparable figures for older men are 65 per cent and 72 per cent respectively.

While there are many reasons why some older people undertake considerable outside unpaid work while others do little, the challenge for research is to learn why there are such wide variations – why some contribute a lot while others contribute little. The challenge for policy is to identify ways of encouraging contributions from a wider range of older people and to remove barriers to their contributions. By so doing we can realise more of the potential benefits of an ageing society, enable more older

people to participate in a society characterised by active and positive ageing and further enhance inter-generational solidarity and generational equity.

References

- Aas, D. (1982), "Designs for large scale time use studies of the 24 hour day", In Z. Staikov (ed.) *It's About Time: Proceedings of the International Research Group on Time Budgets and Social Activities*, Sofia.
- Access Economics cited in Bishop, B (1999), *Employment for Mature Age Workers: Issues Paper*, Commonwealth of Australia, Canberra.
- Apps, P. and Rees, R. (1996), "Labour supply, household production, and intra-family welfare distribution", *Journal of Public Economics*, 60(2), 199-219.
- Attias-Donfut, C. and Arber, S. (2000). "Equity and solidarity across the generations", In S. Arber and C. Attias-Donfut (eds.) *The Myth of Generational Conflict*, Routledge, London.
- Australian Bureau of Statistics (ABS) (1998a) *Time Use Survey Users Guide, 1997*, Catalogue No. 4150.0, ABS, Canberra
- Australian Bureau of Statistics (ABS) (1998b) *Survey of Disability, Ageing and Carers, Australia, 1998*, Confidentialised Unit Record File.
- Australian Bureau of Statistics (ABS), (1998c), *How Australians Use Their Time 1997*, ABS Catalogue No. 4153.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (1999a), *Labour Force Projections, Australia, 1999-2016*, Catalogue No. 6260. ABS, Canberra.
- Australian Bureau of Statistics (ABS) (1999b), *Population Projections 1999 to 2101*, Catalogue No. 3222.0 ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2000a), *Child Care Australia, 1999*, Catalogue No. 4402.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), (2000b), *Unpaid Work and the Australian Economy 1997*, ABS Catalogue No. 5240.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2001), *Voluntary Work Survey, 2000* Catalogue No. 4441.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2003), *Labour Force, February*, Catalogue No. 6203.0, ABS, Canberra.
- Bener'ia, L. (1996), "Thou shalt not live by statistics alone, but it might help", *Feminist Economics*, 2(3), 139-142.
- Bishop, B. (1999) *Employment for Mature Age Workers Issues Paper*, Commonwealth of Australia, Canberra.
- Bittman, M. (1996), *Recent Changes in Unpaid Work*, Occasional Paper, Catalogue No. 4150.0, ABS, Canberra.
- Bengston, V., Achenbaum, L. and Andrew, W. (eds.) (1993), *The Changing Contract Across Generations*, de Gruyter, New York.

- Commonwealth of Australia (2002), *Intergenerational Report 2002-03*, Commonwealth of Australia, Canberra.
- Department of Community Services and Health (1990), *The Impact of Population Ageing on Commonwealth and State Social Security Outlays: 1987-1988*, Policy Development Division.
- Fitzgerald, J. and Wicks, J., (1990), "Measuring the value of household output: A comparison of direct and indirect approaches", *Review of Income Wealth*, Series 36, No. 2: 129-41.
- Folbre, N. (1997), "A time (use survey) for every purpose: Non-market work and the production of human capabilities", Paper presented at the Conference on Time Use, Non-market Work and Family Well-being, November 20-21, Washington DC.
- Goldschmidt-Clermont, L. (1982), *Unpaid Work in the Household*, International Labour Organisation, Geneva.
- Healthy Ageing Taskforce (2000), *Commonwealth, State and Territory Strategy on Healthy Ageing*, Commonwealth Department of Health and Aged, Care, Canberra.
- Laslett, P. and Fishkin, J. (eds.) (1992), *Justice Between Age Groups and Generations*, Yale University Press, New Haven.
- Marshall, V. and Mueller, M. (2002), "Rethinking social policy for an aging workforce and society: Insights from the life course perspective", *Discussion Paper No. W18*, Canadian Policy Research Networks http://www.cprn.ca/docs/work/rspa_e.pdf.
- OECD (2000), *Reforms for an Ageing Society*, OECD, Paris.
- OECD (1998), *Maintaining Prosperity in an Ageing Solution*, OECD, Paris.
- Peterson, P.G. (1999), *Gray Dawn. How the Coming Age Wave Will Transform America – and the World*, Random House, New York and Toronto.
- Preston, S.H. (1984a), "Children and the elderly: Divergent paths for America's dependents", *Demography*, 21(4): 435-57.
- Preston, S.H. (1984b), "Children and the elderly in the U.S.", *Scientific American*, 251(6): 44-9.
- Rawls, J. (1971), *A Theory of Justice*, The Belknap Press of Harvard University Press, Cambridge, MA.
- Saint-Etienne, C. (1993), *La Generation Sacrifree: les 20-45*, Plon, Paris.
- Sgritta, G. B. (1997). Solidarites etatique versus solidarite familiale. La quation des generations, In J. Commaille and F. de Singly *La Question Familiale en Europe*, Paris, La Documentation Francaise.
- Sigg, R. (2002), "The challenge of ageing for social security", *International Social Security Review*, 55(1), 3-9.
- System of National Accounts, (1993), Inter-Secretariat Working Group on National Accounts, Commission of the European Communities-Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank.

- Thomson, D. (1989), "The welfare state and generation conflict: winners and losers", In P. Johnson, C. Conrad and D. Thompson. (eds.) *Workers versus Pensioners: Intergenerational Justice in an Ageing World*, Manchester University Press, Manchester.
- Thomson, P. (1992), "Generations, justice and future collective action", In P. Laslett and J. S. Fishkin (eds.) *Justice between age groups and generations*. Yale University Press, New Haven.
- Walker, A. (1997), "Australia's ageing population: how important are family structures?", *NATSEM Discussion Paper no 19*, National Centre for Social and Economic Modelling, University of Canberra, Canberra.
- World Bank (1994), *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, Oxford University Press, Oxford and New York.