SOCIAL SECURITY, AGEING AND INCOME DISTRIBUTION IN AUSTRALIA

Anthony King, Agnes Walker and Ann Harding

Discussion Paper no. 44

August 1999

National Centre for Social and Economic Modelling
• Faculty of Management • University of Canberra •

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ISSN 1320-3398
ISBN 0 85889 779 2

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Key words

ageing; income distribution; pensions; superannuation

Abstract

This paper describes recent major changes in the social security system for the aged in Australia, and looks at important policy shifts in the retirement incomes arena. The Australian retirement incomes system still differs radically from the systems of most other countries by relying heavily on a means-tested income maintenance system rather than on social insurance. After describing developments within the Australian retirement incomes system, this paper examines the trends in the incomes of the aged over the 1980s and 1990s. It considers changes in the level, composition and distribution of aged incomes and how the incomes of the aged in Australia compare with the incomes of others in the population.

Author note

Anthony King is a Senior Research Fellow and Agnes Walker an acting Senior Research Fellow at NATSEM. Ann Harding is the inaugural Director of NATSEM and Professor of Applied Economics and Social Policy at the University of Canberra.

Acknowledgments

This paper was presented at the international conference 'Family, Social Policy and Financial Strategy' organised by Academia Sinica of Taiwan. It was held in Taipei on 16–17 April 1999.

The paper draws heavily on previous NATSEM research on aged incomes, notably the Australian contribution (King, Bækgaard and Harding 1999) to the recent comparative study undertaken by the UK Institute of Fiscal Studies at the request of the Institute of Chartered Accountants of Australia (Johnson 1998), and the examination of trends in the incomes of Australia's aged reported in issue 9 of NATSEM's *Income Distribution Report* (King 1998b).

General caveat

NATSEM research findings are generally based on estimated characteristics of the population. Such estimates are usually derived from the application of microsimulation modelling techniques to microdata based on sample surveys.

These estimates may be different from the actual characteristics of the population because of sampling and nonsampling errors in the microdata and because of the assumptions underlying the modelling techniques.

The microdata do not contain any information that enables identification of the individuals or families to which they refer.

Contents

1 The retirement incomes of Australians in an international context

1.1 The Australian retirement incomes system

The Australian system is frequently described as being built on three pillars — the age pension, voluntary superannuation and compulsory superannuation.

The age pension

The age pension has been the mainstay of Australian retirement incomes since its introduction in 1909. It is a flat-rate means-tested pension with eligibility governed by age and residency criteria.

Men become eligible for the age pension when they are 65 years old. The corresponding age for women stood at 60 years until July 1995. Since then, the age thresholds for men and women have been in the process of being equalised by gradually increasing the eligibility age for women. Equality will be reached in 2014.

The age pension is a flat-rate scheme in the sense that, unlike the public schemes in most other OECD countries, payments are not related to a person's earnings over their lifetime. But they are subject to a means test that includes both an income test and an assets test. The income test affects the entitlements of about a third of claimants, while the assets test affects considerably fewer. As a result, about two-thirds of age pensioners receive the maximum rate of payment (Centrelink 1998).

Over 80 per cent of the population of qualifying age receive a social security pension or a similar payment from the Department of Veterans' Affairs (Department of Social Security 1997, pp. 51–2).

Voluntary superannuation

The history and complexities of Australian superannuation have been well documented by Bateman and Piggott (1997). Three broad phases can be identified:

- post-war voluntary superannuation
- award superannuation from 1986
- the Superannuation Guarantee from 1992.

The first phase saw tax-encouraged occupational superannuation expand its coverage, though with a marked concentration among certain groups. By the mid-1980s, less than half of the workforce was covered by 'voluntary' occupational superannuation — including notably high proportions of public sector employees, males, full-time workers and those in higher income 'white collar' occupations. This limited coverage proved a major impetus for the subsequent developments in compulsory superannuation.

Compulsory superannuation

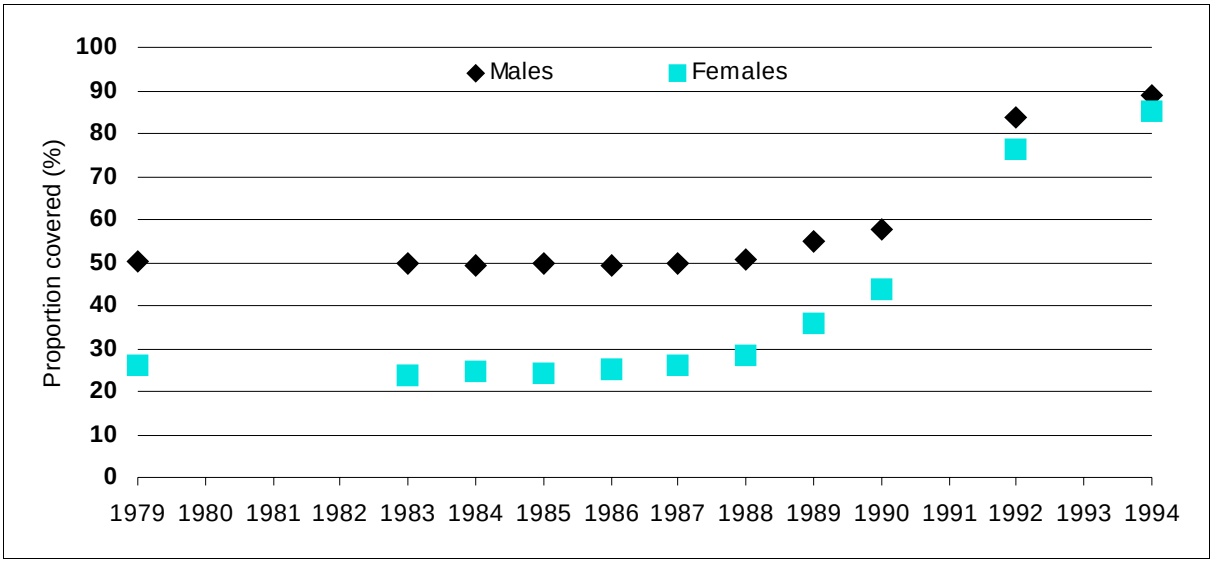
Productivity Award Superannuation was introduced in 1986 as part of the Accord between the trade unions and the Labor Government, with industrial awards requiring employers to pay an amount equal to 3 per cent of earnings into employees' superannuation. Although the contribution rates were low, this tier of superannuation greatly expanded the coverage of superannuation.

Difficulties in increasing the contributions under Productivity Award Superannuation led to the introduction of the Superannuation Guarantee legislation in 1992. The legislation effectively compels employers to make superannuation contributions for their employees. The rate of contribution was initially 3 per cent of an employee's salary, but it will be 9 per cent by 2002-03. For 1998-99, the contribution rate is 7 per cent.

The scheme applies to all employees other than those on very low earnings. The self-employed are not covered, though there are tax incentives to encourage them to make superannuation contributions. The Superannuation Guarantee was projected by the government to boost private savings by up to 1 per cent of GDP a year in the ten years to 2005, eventually building to 1.5 per cent of GDP (Budget Paper 1994, p. 2.49)

The scale of the recent superannuation developments is clearly visible in trends in superannuation coverage, particularly for women (figure 1). From a situation in the early 1980s, when about 50 per cent of males and 25 per cent of females were covered, coverage rates began to increase

Figure 1 **Superannuation coverage of employees**



Data source: ABS, *Employment Benefits*, Cat. no. 6334.0, Canberra.

after the introduction of Productivity Award Superannuation in 1986. Since the introduction of the Superannuation Guarantee, coverage rates have approached 90 per cent and there is now very little difference in coverage between employed males and females.

1.2 Australia's pension system compared with the systems of other countries

Australia's pension system is unique by world standards because only people with private income and wealth below a set level qualify for a government-provided pension. Indeed, a recent study by Johnson (1998) comparing the pension systems of ten major OECD countries (G7 plus Australia, New Zealand and the Netherlands) notes that:

> Australia sits by itself as the only one of the ten countries, indeed the only major country of which we know, in which the public pension system consists entirely of a means-tested benefit for pensioners. (p. 4)

The principle underlying the Australian system is that a public 'safety net' should be available for those elderly whose private incomes and assets fall below set levels (that is, levels seen by government as marking inadequacy). Assistance is gradually withdrawn as incomes and assets exceed the set levels.

The other nine countries studied by Johnson either have an earnings-related public system backed by comprehensive social insurance

arrangements, a simple flat-rate system through which all pension-aged citizens receive a flat-rate pension, or a combination of the two. France, Germany and Italy have combinations of the two in which the earnings-related part dominates. This reflects the expectation by their citizens that, when they grow old, they will be entitled to maintain their incomes at levels similar to those they enjoyed when they were still working.

The schemes in the United States, the United Kingdom, Japan and Canada are also combinations. However, in the North American countries the earnings-related component provides much lower income replacement rates for high income earners than for low earners. In the United Kingdom the basic flat-rate component dominates, as the earnings-related pension was only recently introduced. Japan also has a combined system with a flat pension and an earnings-related pension on top.

New Zealand and the Netherlands have purely flat-rate public pension schemes, and in both countries the pension is paid only on the basis of past residence in the country. No direct contributions to the pension scheme are required.

One consequence of the Australian means-tested 'safety net' type of system relative to the other countries' more generous schemes is that older Australians receive, on average, lower public pensions than their counterparts in the other countries (see table 1).[1]

This has been seen by some as being a 'negative' consequence of an Australian-type system. However, on the important question of the future sustainability of various countries' schemes Australia scores well — its spending on public pensions as a share of GDP being the lowest among the ten countries studied (table 2). In this respect Khan (1999, p. 3) concludes that:

> the Australian social protection … system has been more successful than most other OECD systems in adapting to social and economic changes … while providing social protection to those mostly in need. It has provided full protection at the lowest cost (as share of GDP) of any OECD country.

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1 Readers should note that all figures referenced to Johnson (1998) should be taken as indicative. Johnson states that, while all efforts have been made to ensure that the figures have been calculated on a similar basis, differences will inevitably remain, resulting especially from data limitations.

Whether existing public systems will still be affordable in decades to come as populations age significantly is now being questioned throughout the developed world. Many countries are searching for alternatives in the hope of finding arrangements that will lead to costs being contained while still being acceptable to their communities (Walker 1998). Common themes in recent changes to public pension systems have been shifts towards greater reliance on private provision, and cuts in unfunded public provision. Bringing about changes of this kind has proved difficult and in many countries the pace of change has been slow as a result.

Table 1 **Gross pension replacement rates, selected countries**

	Gross pension rates relative to gross average life earnings
	%
Australia[a]	25
Canada	37
France	79
Germany	45
Italy	72
Japan	49
Netherlands	32
New Zealand	33
United Kingdom	26
United States	38

[a] The figure for Australia is only loosely comparable with the figures for other countries as it simply reflects the base rate of the age pension as a proportion of average weekly earnings. This will tend to exaggerate the differences between Australia and other countries.

Source: Johnson (1998, p. 4).

Table 2 **Public spending on pensions as a proportion of GDP, selected countries, 1995**

Australia	2.6%
Canada	5.2%
France	10.6%
Germany	11.1%
Italy	13.3% (including 2.1% on disability pensions)
Japan	6.6%
Netherlands	5.9%
New Zealand	5.4% (gross)
United Kingdom	4.5% on pension benefits, plus 1.1% on means-tested benefits
United States	4.1% (plus 3.5% on Medicare and means-tested programs)

Source: Johnson (1998, p. 5).

Because of Australia's 'safety net' type of system — with its relatively low level of public spending on pensions — adjustment over the next two decades to the expected increase in the rate of population ageing[2] is likely to be less difficult than in many other developed countries. The challenge that recent Australian governments have set themselves has been to promote an increase in the level of future retirement incomes, while limiting the future demands on the public purse. The mechanisms introduced for meeting this challenge are the Superannuation Guarantee with its compulsory private savings and the tax-encouraged voluntary superannuation saving arrangements.

2 Trends in the incomes of Australia's aged

We will need to wait some decades to see any dramatic impact on the incomes of the aged from the major recent developments in superannuation in Australia. Still, there are many other factors determining aged incomes and these are well illustrated by an examination of trends since the 1970s. There are a number of reasons why we might expect the incomes of the aged to have changed over the past 25 years.

- Recent retirees are much more likely than those retiring 25 years ago to have spent a substantial proportion of their working lives covered by superannuation.
- A large part of the working lives of recent retirees would have coincided with the long economic boom following the Second World War. In contrast, the prime working lives of earlier retirees also spanned the Depression and the Second World War.
- There have been important changes in labour force participation — particularly for women — and changes in longevity.
- While the age pension has arguably been the most constant and stable element of the Australian social security system during this century, payment provisions have been subject to many changes.
- Finally, there have been changes in the environment for investment.

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2 Currently Australia has a younger population than most other developed countries. However, its population has been projected to age rapidly in the next few decades. By 2050 Australia's age structure is expected to catch up with that of the United Kingdom (Walker 1998, section 2).

Broadly, we can expect these changes to have caused:

- an increase in the incomes of the aged, driven by increases in the age pension and by more widespread supplementary private incomes;
- a reduction in the role of the age pension, as private retirement incomes come increasingly into play; and
- a greater dispersion of aged incomes as there is less reliance on the flat-rate age pension.

The incomes of the aged are correspondingly examined here in terms of their levels, composition and distribution.

The key data source used is the series of income surveys undertaken by the Australian Bureau of Statistics (ABS) that date back to 1968-69. In doing so, a number of issues of comparability arise. These particularly concern the use of annual or weekly income data. For the earliest surveys, only annual income data are available. For the surveys from 1990 on, both annual and weekly income data are available though, for a number of reasons, the annual income data from the most recent surveys are not compatible with the annual income data from the other surveys. Our analysis of trends is thus based on annual income data for the early years and weekly income data from 1982 onwards.[3] Another important aspect of the income surveys is that they do not cover the population living in institutions such as nursing homes. Hence, this analysis examines the incomes of only the aged living in private dwellings. Further technical detail on this examination of trends is provided in the appendix.

2.1 Trends in the levels of the incomes of Australia's aged

Age pension

As mentioned earlier, the vast majority of Australia's aged rely on the publicly provided age pension as their principal source of income. Movements in the value of the pension thus have a direct and important impact on the trend in the level of aged incomes.

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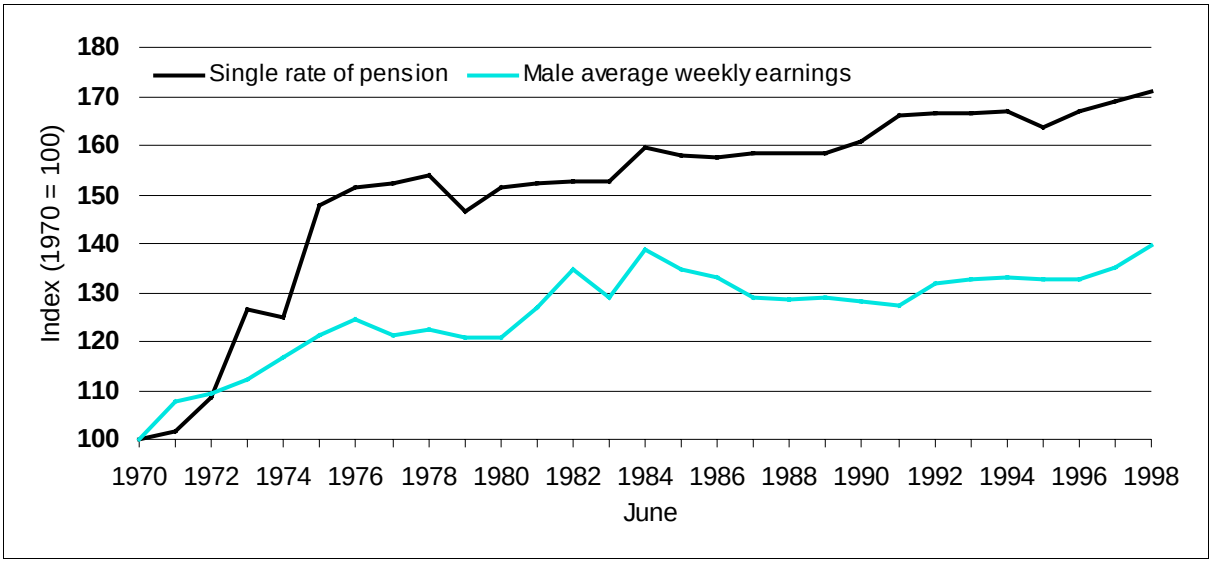
[3] A comparison of trends using both weekly and annual income data, where available, suggests that this change in the nature of our time series has no significant bearing on the results presented.

Figure 2 **Real growth in the age pension and male average weekly earnings, 1970 to 1998**



Data sources: ABS, *Average Weekly Earnings, States and Australia*, Cat. no. 6302.0; ABS, *Consumer Price Index*, Cat. no. 6401.0; Department of Social Security.

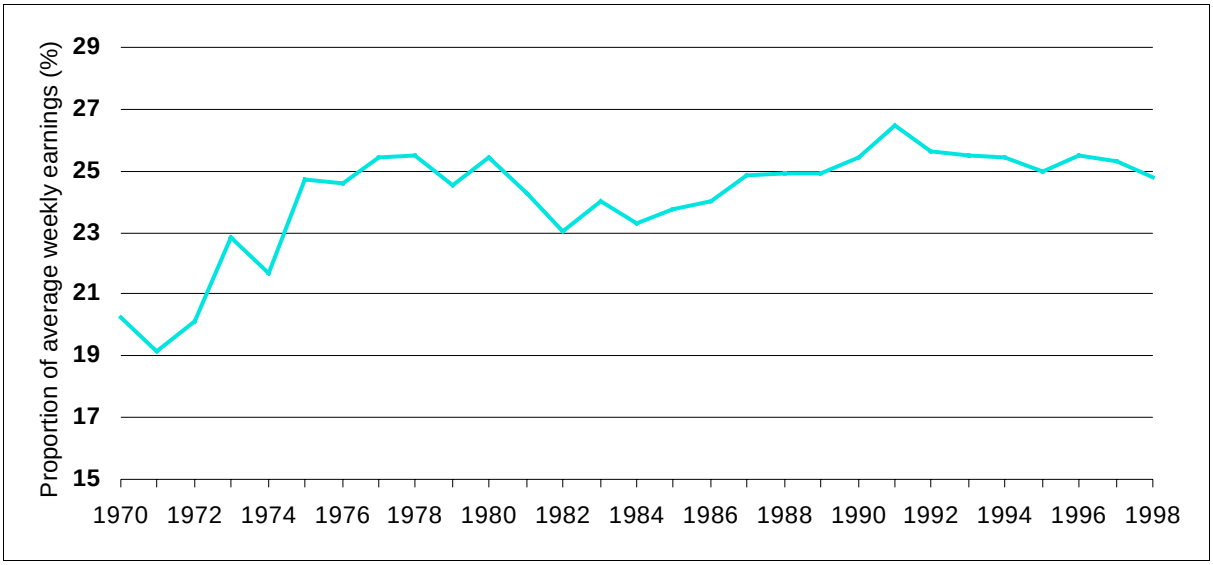
Figure 2 shows that the real value of the age pension increased by some 70 per cent between 1970 and 1998. Most of this increase occurred during the early 1970s following recognition that pensions were falling behind other incomes. Since the mid-1970s the age pension has been indexed — initially to the consumer price index and since 1997 to male average weekly earnings.

Figure 2 also shows the growth in real earnings over the period since the introduction of price indexation of the pension in the mid-1970s. Had the pension level been set solely according to price indexation, its value relative to average earnings would have fallen. However, ad hoc increases in the pension around a broad political target of setting the pension at 25 per cent of earnings saw the pension maintain its relativity with earnings over the period (figure 3). The 25 per cent relativity with average earnings now provides the basis for pension indexation.

Total incomes of the aged

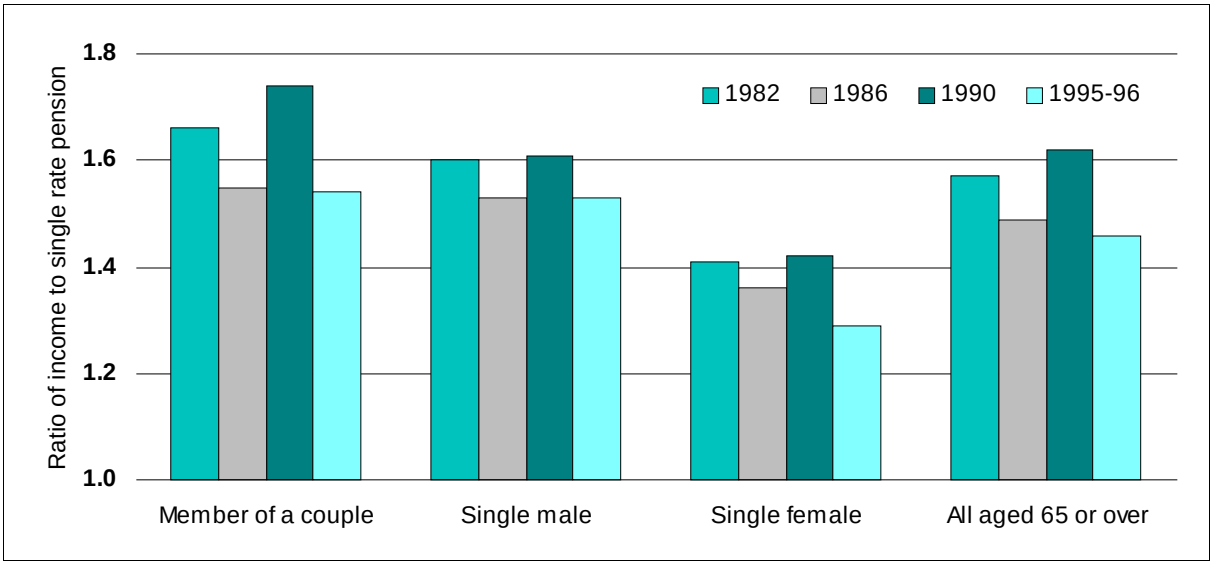
While the age pension is the largest income component for Australia's aged, many also have private incomes that either supplement or replace their age pension entitlement. Indeed, figure 4 shows that the average gross income of Australia's aged population is close to 1.5 times the basic

Figure 3 **Single pension as a proportion of male average weekly earnings, 1970 to 1998**



Data sources: ABS, *Average Weekly Earnings, States and Australia*, Cat no. 6302.0; Centrelink; Department of Social Security.

Figure 4 **Ratio of the gross income of Australians aged 65 or over to the single rate pension, by family type, selected years** Based on equivalent gross weekly unit income



Data source: ABS income surveys.

pension rate. To take account of family structure, the incomes in figure 4 are expressed in equivalent terms using the equivalence scale that is implicit in social security rates of payment (see the appendix).

Figure 4 also shows that the equivalent incomes of members of aged couples are slightly higher than those of single aged men, and that the

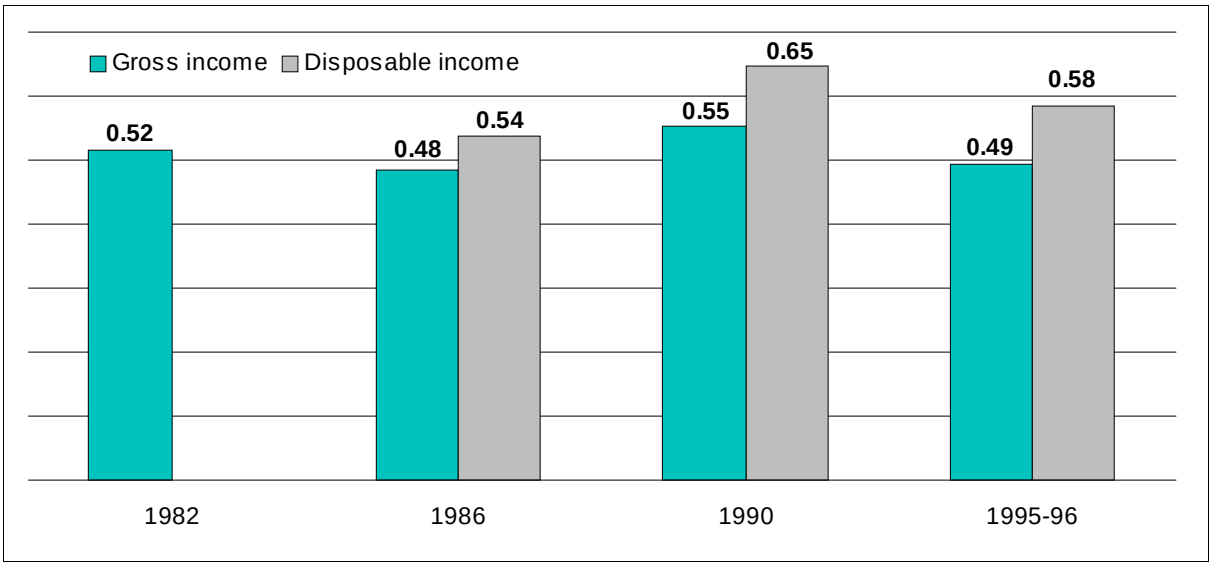
incomes of both groups are markedly higher than the incomes of single aged women. There is an age effect at work here — single women tending to be older — but the pattern also reflects women's low labour force participation and superannuation coverage before retirement. The distinctive time profile shown in figure 4 is now discussed in the context of a comparison of the incomes of the aged and others in the population.

Relativity between incomes of the aged and others

A comparison of the age pension rate with average male earnings provides only a summary measure of the relativity between the incomes of the aged and those of others in the population. Many aged people have incomes to supplement or replace the age pension and male earnings are just one component of incomes among the rest of the population.

Figure 5 provides a more comprehensive picture — comparing the total incomes of the aged with the total incomes of the population of prime workforce age (taken to be those aged 25–54 years) for selected years from 1982 to 1995-96. To take account of the different family structures in the two populations and of changing structures over time, the incomes

Figure 5 **Ratio of the mean income of Australians aged 65 or over to the mean income of 25–54 year olds, selected years** Based on equivalent weekly unit income



Data source: ABS income surveys.

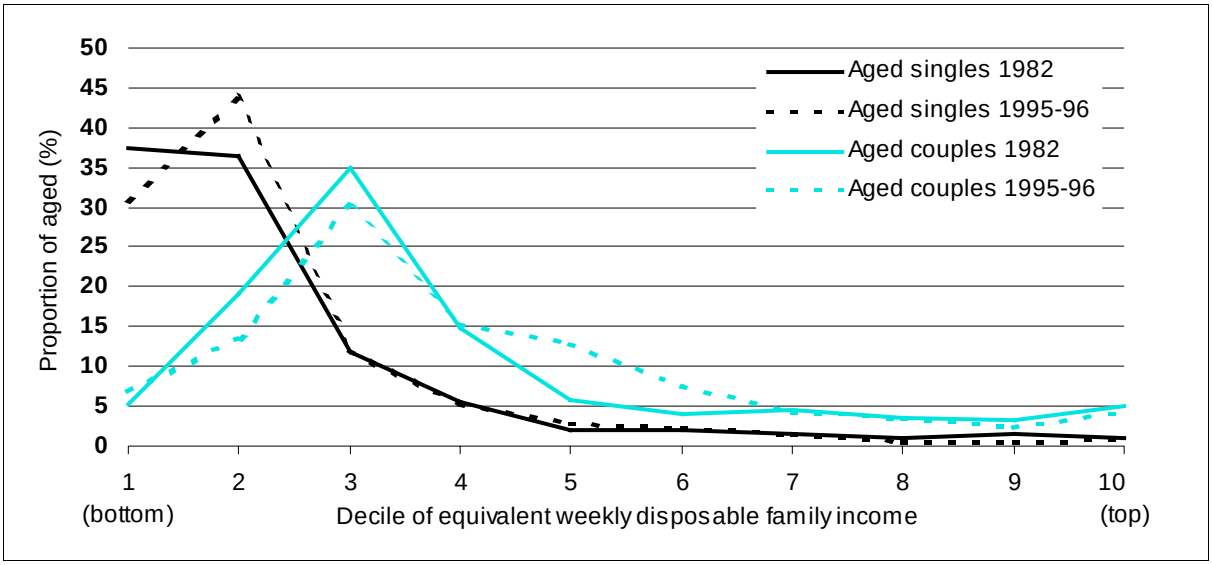
are expressed in equivalent terms using the equivalence scale that is implicit in social security rates of payment. The comparison is on an individual basis, with individuals given the equivalent income of their income unit.

Looking firstly at gross incomes, figure 5 shows that the relativity between aged and other incomes has remained reasonably constant since the early 1980s. The real increases in the pension have been needed just to keep pace with other incomes. After adjusting for family size, aged incomes before tax amount to about 50 per cent of the incomes of the prime age working population. The relative level of aged incomes appears better on an after-tax basis primarily because of the system of rebates, which effectively mean that social security incomes are free of income tax.

Within this broad stability, there is some clear movement in the relativities for the years shown in figure 5. Over the first part of the 1980s, the relative position of aged incomes declined and this can be attributed to the strong earnings growth during that period (figure 2). Their relative position then improved with a peak in 1990 before declining again, and this part of the profile can be related to movements in real interest rates and the returns on investments received by the aged population. Real interest rates rose to a notable peak around 1990 before declining to the low levels of today.

Another way of looking at these changes is to examine how the position of the aged in the income distribution has changed. Figure 6 shows the distribution of aged singles and aged couples across deciles of equivalent disposable (after-income tax) income. Ten per cent of the Australian population is in each decile, and the equivalence scale used is again that implicit in the Australian social security system. Figure 6 indicates that the position of aged couples relative to the rest of the Australian population in 1995-96 was markedly better than in 1982. In 1995-96 the proportion of aged couples in deciles 5 and 6 was noticeably higher, while the proportion lower down the income spectrum — in deciles 2 and 3 — was lower. The change in relative position was not as significant for aged singles, but there was still a substantial shift out of the first and into the second decile over the period.

Figure 6 **Distribution of aged singles and couples, by decile of equivalent weekly disposable family income, 1982 and 1995-96**



Data source: ABS income surveys.

The features of the investment environment discussed earlier (figure 5) are also very apparent when we look at trends in the composition of aged incomes (section 2.2). Before doing so, however, it is useful to consider two other factors that have an important impact on the relative economic positions of the aged and the rest of the population. These are housing costs and non-cash benefits.

The effects of high home ownership levels in Australia

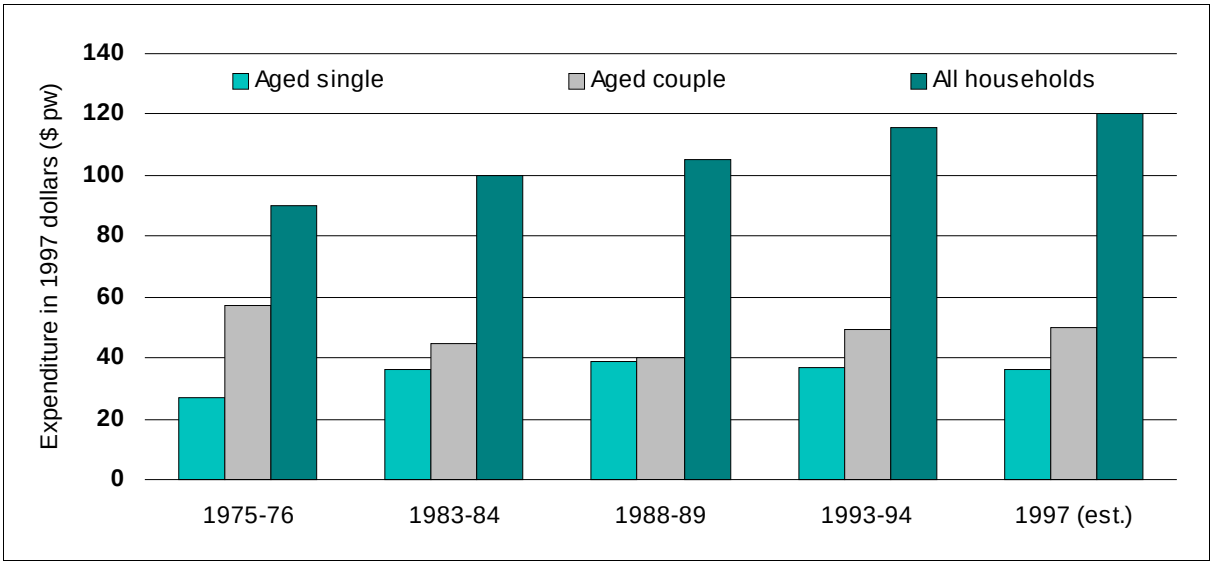
Taking account of housing costs, which are not included in the above analyses, can greatly alter the picture of the relative income position of the aged. On average, the aged tend to have low housing costs because a high proportion of them are in low cost tenures (homes they own outright or public rental properties) and a small proportion are in high cost tenures (homes they are purchasing or private rental properties).

Changes in the pattern of housing tenure and housing costs since 1975-76 have been examined by NATSEM (Percival 1998) using ABS household expenditure surveys. The examination (which excluded the institutionalised population) showed little change in the pattern of housing tenure for the aged. Almost 80 per cent of aged households are in homes that they own outright, with the remainder roughly evenly divided between homes they are purchasing, private rental properties

and public rental properties. For comparison, the level of outright home ownership across the whole population is about 40 per cent.

The implications for housing costs are shown in figure 7 where aged households are defined as those whose household reference person was over the age of 65 years if male or over 60 years if female. Part of the difference in costs between aged households and all households is due to the smaller household size of the aged population, but most of it is attributable to the different patterns of housing tenure. As well as the consistently low average housing costs of the aged, figure 7 shows a steady real increase in housing costs for all households, while real housing costs for the aged have remained reasonably flat by comparison.

Figure 7 **Weekly household expenditure on housing, selected years**

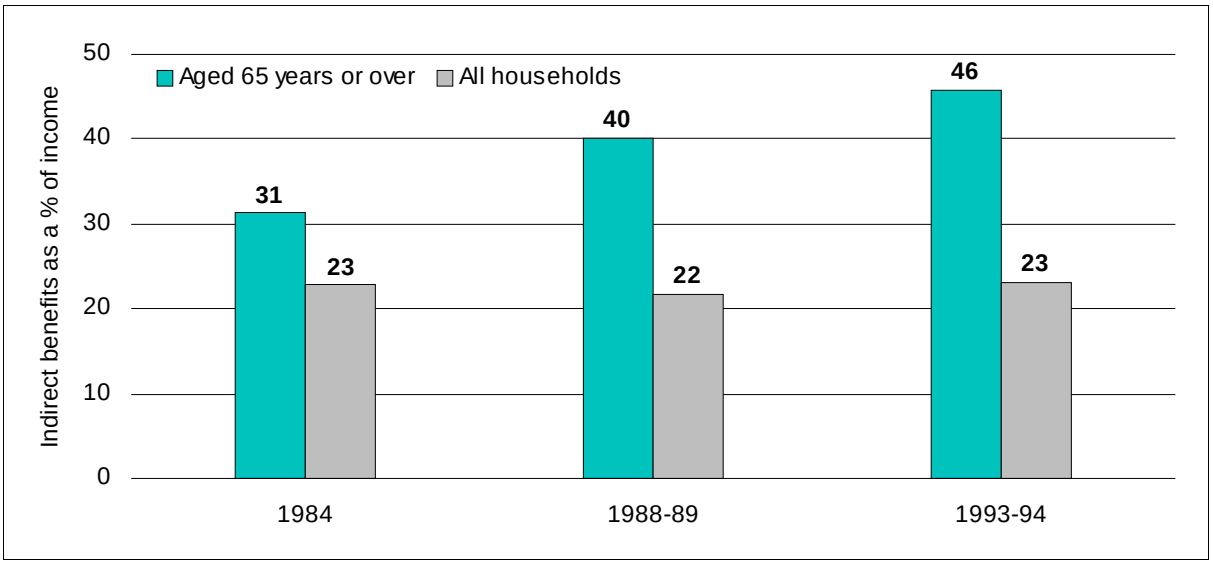


Source: Percival (1998).

Non-cash benefits

A further qualification to the picture of aged incomes comes from the value of non-cash benefits received by the aged. Non-cash benefits comprise the subsidised (or free) goods and services provided through government (for example, education, health and public transport). Estimates of the value of non-cash benefits have been made by the ABS, with education and health care standing out as the main components. The latter is obviously of particular importance to the aged.

Figure 8 **Average value of indirect benefits as a proportion of average disposable income, selected years**



Data source: ABS, *The Effects of Government Benefits and Taxes on Household Income*, Cat. no. 6537.0.

Figure 8 clearly shows the greater than average contribution (in percentage terms) of non-cash benefits to the full incomes of aged households. Non-cash benefits were estimated to have added 46 per cent to the disposable incomes of aged households in 1993-94, compared with 23 per cent for all households. Moreover, the relative importance of the social wage for the aged was markedly higher in 1993-94 than in 1984.

While the proportion by which the social wage supplemented the disposable income of the average Australian remained unchanged at around 23 per cent over the period 1984 to 1993-94, for older Australians it increased from 31 per cent to 46 per cent. This trend reflects, at least in part, an increase in the average age of the aged and the fact that the estimated value of health benefits rises as people get older.

2.2 Trends in the composition of the incomes of Australia's aged

At the beginning of section 2, we noted an expectation that recent trends in the composition of aged incomes would show a reduction in the role of the age pension as private retirement incomes have come increasingly into play. As table 3 and figures 9 and 10 show, this is only part of the story. Table 3 shows the composition of aged incomes for selected years since 1968-69, with figure 9 graphically illustrating the picture for government cash benefits and figure 10 the trends for earnings, superannuation/annuity and investment incomes.

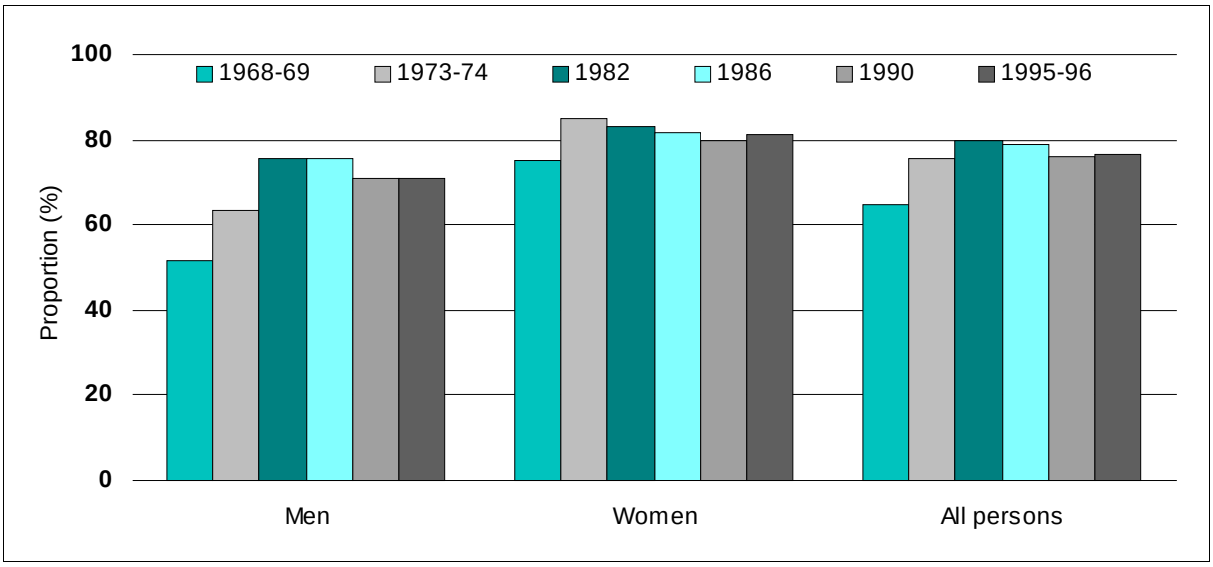
Table 3 and figure 9 show that around 75 per cent of Australia's aged had government cash benefits — principally the age pension — as their main source of income. Figure 9 indicates a slight downward trend in this proportion in the second half of the period from 1968-69 to 1995-96, though the most striking feature is the relatively steep increase between 1968-69 and 1982 in the proportion of the aged relying on government cash benefits as their main source of income. There were two main reasons for this increase. Firstly, labour force participation rates of the aged, particularly aged men, fell dramatically over this period. Secondly, it was a period of considerable liberalisation in the means testing of the age pension.

Table 3 **Principal sources of income[a] of Australians aged 65 years or over, selected years**

	1968-69	1973-74	1982	1986	1990	1995-96
	%	%	%	%	%	%
Government cash benefits	65.0	75.6	79.9	79.1	75.9	76.6
Earnings	15.7	12.2	4.1	2.7	3.2	3.6
Superannuation/annuity	5.8	3.9	4.8	5.1	5.7	8.7
Other investment income	12.3	7.7	10.6	13.0	15.0	11.0
Other	1.3	0.7	0.6	0.2	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

a Principal source of annual income for 1968-69 and 1973-74 and of weekly income for later years.
Source: ABS income surveys.

Figure 9 **Proportion of Australians aged 65 or over with government cash benefits as their principal source of income[a], by gender**



a Principal source of annual income for 1968-69 and 1973-74 and of weekly income for later years.
Data source: ABS income surveys.

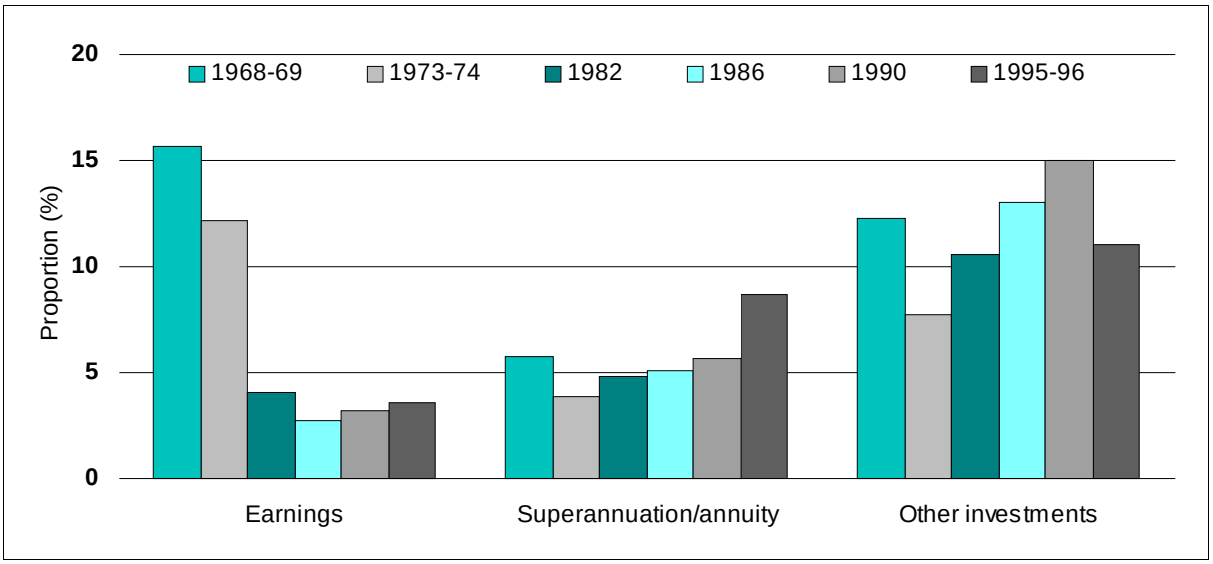
At the other end of the period there were relatively slight declines in the importance of government cash benefits in 1986 and 1990 and a slight increase in 1995-96. This reflects the changes in the investment environment, which were described earlier and which are more clearly seen when we look at the changing role of other income sources (figure 10).

Figure 9 also shows different pictures for men and women. Aged women are notably more dependent on government cash benefits than are their male counterparts, largely reflecting their lower involvement in superannuation.

Figure 10 shows the trends in the proportions of the aged who have earnings, superannuation/annuity or other investments as their principal source of income. The decline in the role of paid employment among the aged in the 1970s is quite evident. Figure 10 also suggests that superannuation/annuity and other investments also became less important during the early part of the 1970s, though examination of absolute incomes suggests this was not the case and that what we are seeing here is really the corollary of the liberalised entitlement to the age pension.

While the age pension remains the main source of income for around three-quarters of Australia's aged, this dominance is slowly being whittled away as the greater coverage of post-war superannuation bears

Figure 10 **Proportions of Australians aged 65 or over with earnings, superannuation/annuity, and other investments as their principal sources of income[a]**



[a] Principal source of annual income for 1968-69 and 1973-74 and weekly income for later years.

Data source: ABS income surveys.

fruit. Incomes from superannuation pensions and annuities now provide the main income source for a small but growing proportion of the aged — almost 9 per cent in 1995-96 (table 3). Although figure 10 shows only a gradual increase in the role of superannuation/annuity income, it should be noted that most superannuation is taken as a lump sum and when invested appears as income from interest, dividends and so forth. The importance of these other investment income sources doubled between 1973-74 and 1990, by when they were the main source of income for 15 per cent of Australia's aged. Their importance, however, has since fallen in line with the decline in interest rates.

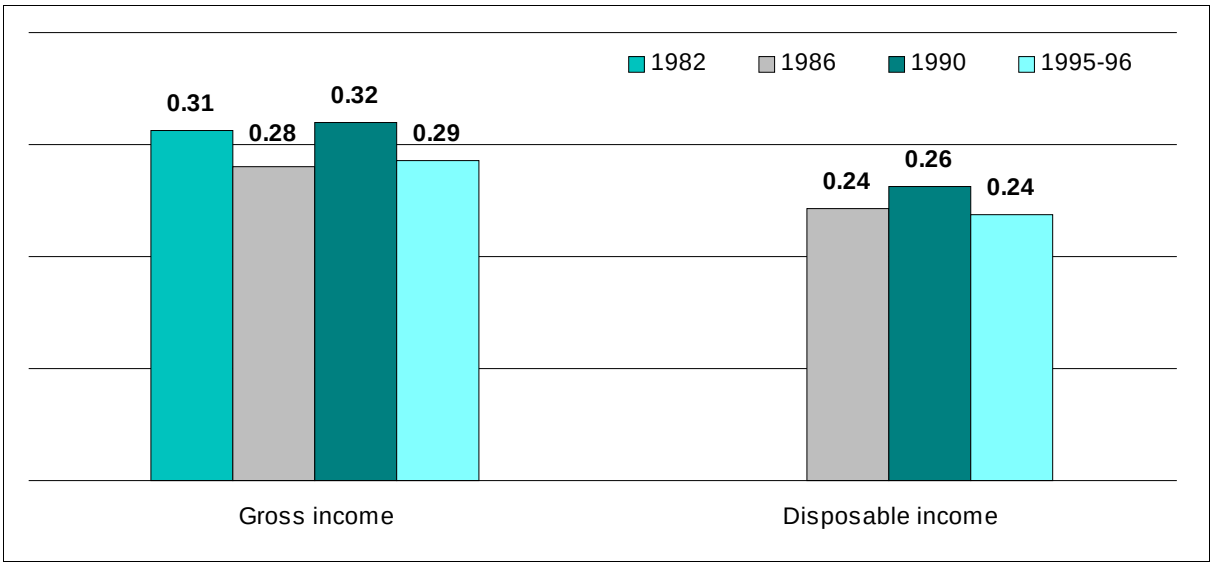
2.3 Changes in the distribution of the incomes of Australia's aged

Measures of inequality

Changes in the distribution of incomes among Australia's aged are summarised in figures 11 and 12 using the Gini coefficient and the related Lorenz curve.

Figure 11 shows Gini coefficients for equivalent weekly income in before-tax and after-tax (when available) terms. As with the analysis shown in figure 5, this distributional analysis is on an individual basis, with individuals assigned the equivalent income of their income unit.

Figure 11 **Gini coefficients of equivalent unit weekly income for Australians aged 65 or more**

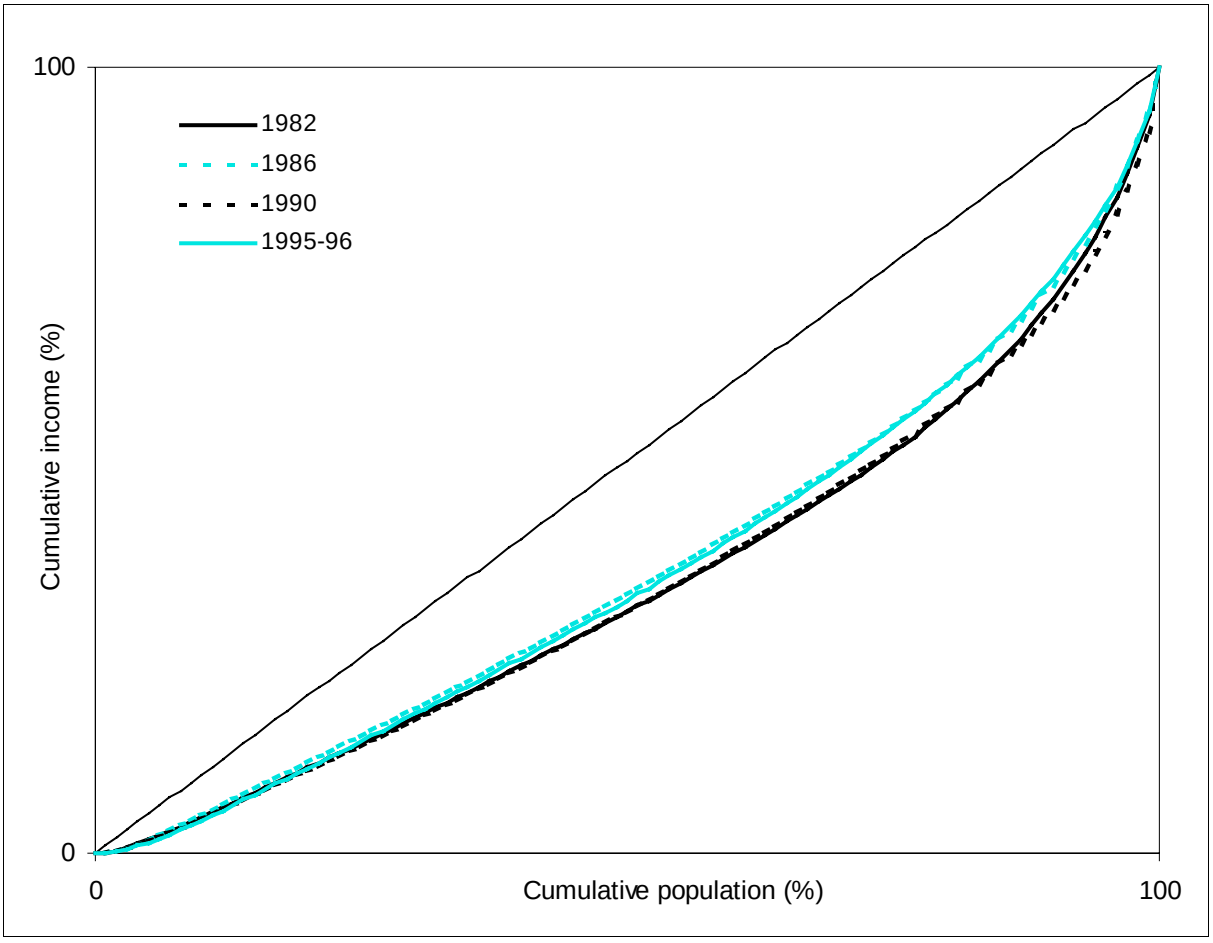


Data source: ABS income surveys.

There is no clear overall trend in the Gini coefficients for either before-tax or after-tax incomes for the years shown. This finding can be held up against the expectation of a greater dispersion of incomes among the aged as private retirement incomes take on a greater role. Such a dispersion is, however, illustrated for the 1986–90 part of the period where the high investment returns at the time saw an increase in inequality before this was reversed with the shift to lower investment returns.

Figure 12 presents the information on the distribution of gross incomes in figure 11 in a more graphic way. As the Lorenz curves move closer to the diagonal, inequality decreases. Over the whole period, such a move is the picture shown by figure 12, indicating greater equality among aged incomes — at least over the upper half of the income distribution. What is also apparent, though, is the increase in inequality resulting from the increase in investment income in 1990.

Figure 12 **Lorenz curves of equivalent gross unit weekly income for Australians aged 65 or more**



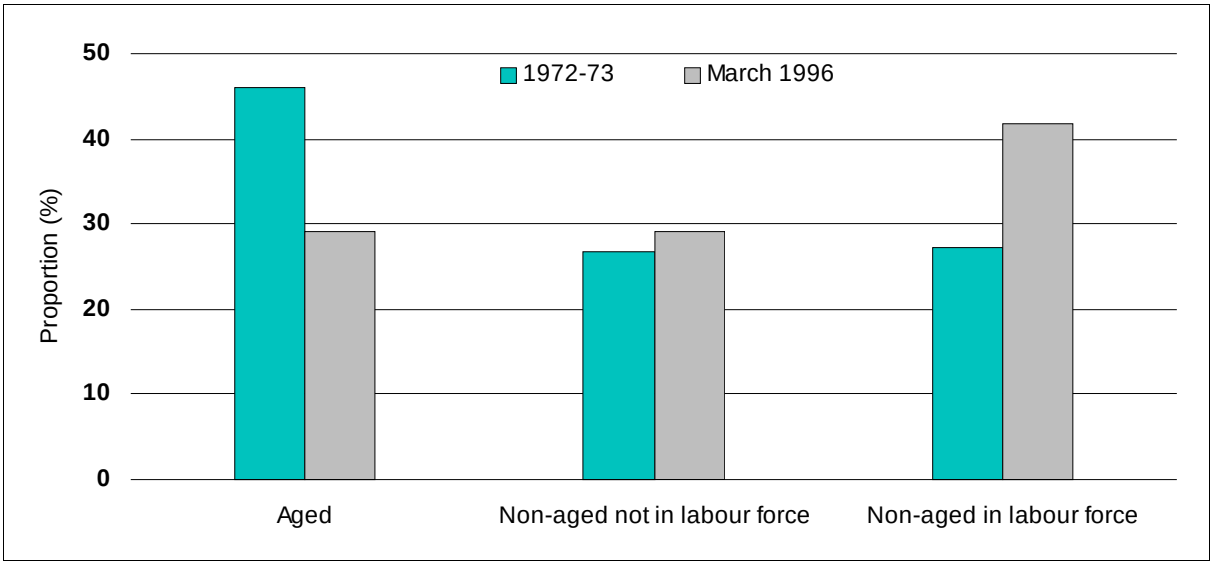
Data source: ABS income surveys.

Poverty

Another way to look at the trend in the distribution of aged incomes is to look at poverty trends, which place aged incomes in the broader context of income distribution Australia-wide. Figure 13 shows the estimated composition of Australian poverty in 1972-73 and 1996. In the early 1970s the aged made up almost 50 per cent of Australia's poor, but by 1996 this proportion had dropped to 29 per cent.

While the aged are clearly still well represented among the poor, the largest group among the poor is now the unemployed (non-aged people in the labour force).

Figure 13 **Composition of income units in poverty, aged and others by labour force status, Australia, 1972-73 and 1996**



Data source: King (1998a).

3 The incomes of Australia's aged in perspective

How do the levels and the distribution of the incomes of the aged in Australia compare with other countries? The recent comparative study of retirement income systems undertaken by Johnson (1998) also included a comparison of the levels and distribution of aged incomes. Summary findings from this comparison are presented in table 4.

Table 4 **Relative levels and distribution of aged incomes in selected countries in the mid-1990s**

	Income[a] of couple pensioners[b] as proportion of income of all non-pensioners	Ratio of the 90th to the 10th percentiles of couple pensioners'[b] incomes[c]
	%	Ratio
Australia	68	2.5
Canada	85	2.8
France	103	3.5
Germany	92	3.3
Italy	81	3.6
Netherlands	84	2.7
United Kingdom	83	3.3
United States	85	5.1

[a] Equivalent after-tax income. [b] The term 'pensioner' includes anyone aged 60–64 years who is retired and anyone aged 65 years or over, with pensioner status of couples determined by the characteristics of the male partner (Johnson 1998, p. 41). [c] After-tax income.

Source: Johnson (1998, tables 4.2 and 4.3).

Table 4 shows that in Australia pensioners receive a lower proportion of the average incomes of non-pensioners than do pensioners in the other countries studied, but that the income distribution of pensioners is more equal in Australia than in the other countries.[4] This latter result clearly reflects the high level of dependence on the flat-rate means-tested pension in contrast with the earnings-related payments that pensioners commonly receive in the other countries.

The level of concentration of the incomes of Australia's aged is further highlighted in figure 14, which is drawn from the Australian contribution to the comparative study reported by Johnson (1998) and thus employs the same definition of a 'pensioner'.

Figure 14 indicates the location of the Australian aged in the population-wide income distribution, with distinction among the aged between single men, single women and couples. If, for example, the income distribution of aged couples matched that for the population as a whole, then 10 per cent of aged couples would be found in each decile.

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4 In interpreting the figures in table 4, the reader should note that the difference between, say, a ratio of 2 and a ratio of 3 is a big one in this context. For the 90:10 percentile ratio to rise from 2 to 3 would require, for example, the incomes of richer pensioners to rise by 50 per cent with no rise at all in the incomes of poorer pensioners.

Figure 14 **Proportion of pensioners[a] in each decile of equivalent after-tax income in Australia, 1995-96**

a The term 'pensioner' includes anyone aged 60–64 years who is retired and anyone aged 65 years or over, with pensioner status of couples determined by the characteristics of the male partner.

Data source: King, Bækgaard and Harding (1998).

Figure 14 shows that nearly two-thirds of Australia's 'retired' people are in deciles 3–5 of equivalent after-tax income, indicating that most of Australia's elderly are not poor — but nor are they rich.

In interpreting these findings, however, it should be remembered that, had the wealth of Australia's aged been also accounted for, their position relative to the Australia-wide income distribution would have seemed considerably better. As seen earlier, much of the wealth of Australia's aged comes from their high level of home ownership. Also, they receive a higher share of government non-cash benefits than do Australians generally (section 2).

The concentration of retired people in deciles 3–5 is evident for all three groups of the retired, though couples are slightly more spread across the income distribution than are singles. Reflecting their higher dependence on the age pension, aged single women are very highly concentrated in decile 3 and have a lower representation than single men and couples in the upper income deciles. While 71 per cent of aged single women are in deciles 3–5 and 8 per cent are in deciles 7–10, the corresponding figures for single men are 64 per cent and 11 per cent.

4 Summary and findings

Australia's public pension system

Australia's publicly funded pension scheme, the age pension, is a non-contributory flat-rate means-tested system, with eligibility governed by age and residency criteria. Both the incomes and the assets of the aged are means tested. Some 80 per cent of Australians who qualify by age receive either all or a portion of the full age pension. A recent study that compared the pension systems of ten major developed countries found the Australian scheme to be unique.

In preparing for more rapid population ageing over the next two decades, successive Australian governments have made several changes to the retirement income system. These changes — which include a shift toward greater self-provision and, for women, an increase in the age of eligibility for the public pension — are in line with policy shifts observed in many other developed countries.

International comparisons

Unlike in most other developed countries, where at least a part of the public pension system serves to maintain the incomes of the elderly at levels similar to their average lifetime incomes, a key aim of the Australian system is to provide a public 'safety net' for those with low private incomes and/or assets.

The three key consequences of Australia's unique public pension system are that:

- older Australians receive, on average, lower public pensions than their counterparts in other major developed countries (with indicative figures of 25 per cent of average life earnings in Australia compared with close to 50 per cent in Japan and Germany and over 70 per cent in France and Italy);
- Australia's system is more sustainable over time because public spending on pensions as a proportion of GDP is lower than in other major developed countries (2.6 per cent of GDP in 1995, compared with 4–7 per cent in Japan, the Netherlands, New Zealand, Canada,

the United Kingdom and the United States, and over 10 per cent in Italy, Germany and France); and

- inequality among Australia's aged is lower than in other major developed countries (a ratio of 2.5 between the 90th and 10th percentiles of aged couple incomes, compared with a ratio of close to 3 for Italy, France, Germany, the United Kingdom and Canada, and with a ratio of over 5 for the United States).

Some see lower pension rates as a negative feature of the Australian system and, indeed, such rates do make life less comfortable for the aged who have low or no private income. However, it was precisely these low rates that provided one strand of the motivation of successive governments to strengthen Australia's private superannuation system, with the aim of increasing retirement incomes.

Trends in the incomes of Australia's aged

In our analyses of changes in the incomes of Australia's aged over time we used the income surveys undertaken by the Australian Bureau of Statistics between 1968-69 and 1995-96. Our results show the following.

- The real value of the age pension increased by some 70 per cent between 1970 and 1998, driven by increases in pension rates which have just kept pace with the rises in the incomes of working age Australians. Thus the relativity between aged and other incomes remained broadly unchanged over the period.
- The dominance of the publicly funded age pension is slowly being whittled away as the greater coverage of post-war superannuation bears fruit. Incomes from superannuation pensions and annuities now provide the main income source for a small but growing proportion of the aged — almost 9 per cent in 1995-96. If we add investment income other than superannuation to this, then the proportion was nearly 20 per cent in the same year.
- The amount by which indirect (non-cash) benefits (including publicly provided health care costs) supplement the disposable incomes of the elderly rose from 31 to 46 per cent in the decade to 1994, while the corresponding amount for the average Australian household remained unchanged at 23 per cent. This trend is due in part to an increase in the average age of Australia's elderly.

- The distribution of aged incomes since the early 1980s does not yet clearly show the expected dispersion of aged incomes resulting from lesser reliance on the flat-rate age pension. Instead, what stands out is the impact of the changing environment for investment over the period.
- While the elderly are still clearly represented among Australia's poor, they now account for a smaller proportion (29 per cent in 1996 compared with almost 50 per cent in 1972-73). In particular, the position of aged couples has improved markedly since the early 1980s relative to the Australia-wide income distribution.
- The gross equivalent incomes of Australia's aged amount to about half of the incomes of the prime age working population. Most of Australia's elderly are not poor, but nor are they rich as nearly two-thirds of them are in deciles 3–5 of equivalent after-tax income.

Concluding remarks

The private incomes of the elderly are expected to increase in the future due to the introduction of tax-encouraged superannuation savings and, in 1992, the Superannuation Guarantee. However, while these measures are expected to boost private savings by up to 1 per cent of GDP a year over the decade to 2005, we will need to wait several more years before they have a considerable impact on the incomes of the aged.

As for most developed countries, the major challenge for Australia has been, and is likely to continue to be, the bringing about of higher levels of retirement incomes while limiting the demands on the public purse. Because of its unique and flexible retirement income system Australia is expected to have less difficulty than most other countries in meeting this challenge from accelerated population ageing.

Appendix: Technical notes

The key data source for analysing trends in aged incomes in this paper is the series of income surveys conducted by the Australian Bureau of Statistics. In using this series, a number of compatibility issues arose. The way in which these were addressed, together with other technical aspects of the analysis, follow.

The ABS income distribution surveys

Income distribution surveys were undertaken by the ABS every four or five years from the late 1960s until a move in 1994-95 to an annual income survey. Data from the early income surveys (1968-69, 1973-74 and 1978-79) are readily available only in the hard copy publications issued by the ABS, which means that analysis of these data is constrained by the published classifications and definitions. Data from the more recent income surveys are available in detailed unit record form, which allows any analysis to be quite flexible.

Not all of the income surveys were used in the analysis presented here. The 1978-79 survey was omitted because of difficulties in attaining compatibility with classifications used in the publications from the earlier surveys. Among the recent annual income surveys, data from only the 1995-96 survey are used. Data from the 1994-95 survey were examined and showed very similar results to those from the 1995-96 survey, while the detailed 1996-97 data were not available at the time of analysis.

The data used were thus taken from the income surveys for 1968-69 (ABS 1975), 1973-74 (ABS 1976), 1981-82 (ABS 1985), 1985-86 (ABS 1988) and 1989-90 (ABS 1991) and from the 1995-96 issue of the continuous income survey (ABS 1997).

Annual and weekly incomes

Income analyses based on annual and weekly incomes will produce different results because of the generally higher volatility of weekly incomes. The early income surveys collected information on only annual

incomes, while the more recent surveys provide both annual and weekly income data.

For the purposes here, annual income was the preferable basis. However, the annual income data from the continuous income survey do not appear to be compatible with the data from earlier surveys. The ABS excludes from annual data those people or families who have experienced a significant change in circumstances during the year in question. These exclusions, though, appear to be far less restrictive under the continuous income survey than they were in previous years and show considerable numbers in 1995-96 with extremely low annual incomes.

For this reason, the annual income data for 1995-96 are not believed to be compatible with the data from earlier years and we were obliged to conduct the comparison over the 1981-82 to 1995-96 period using weekly income data.

In doing so, it should be noted that the differences between weekly and annual income data are somewhat less for the aged than for other groups due to the stability of their incomes. Also the ABS data on weekly incomes use information on annual incomes for those income components, such as interest and dividends, that are received only infrequently.

Currency of weekly and annual income data

The weekly income data refer to the period when the survey was undertaken. These periods are respectively late 1982, late 1986 and late 1990 for the 1981-82, 1985-86 and 1989-90 surveys, and 1995-96 for the 1995-96 survey. The annual income data from the 1968-69 and 1973-74 surveys refer to the respective financial years.

Income recipients

The published data used from the 1973-74 and 1978-79 surveys refer to only 'income recipients' — that is, people with some income. Accordingly, where data from later surveys are compared with these, it is also on an income recipient basis. This removed about 2 per cent of people from the analysis of trends in principal sources of income.

Equivalent incomes

The equivalence scale used was based on the relativities implicit in social security rates of payment. The reason for choosing this scale was to control for variations in the structure of the aged population when considering changes in the income distribution. The scale used assigned 1.0 point to a single person, 1.67 to a couple and 0.3 for each dependent child.

Disposable incomes

The disposable income data used were based on the information on tax paid provided in the ABS datasets. Tax data are not available for the 1981-82 survey and are available on only an annual basis for the 1985-86 survey. In the 1985-86 case, weekly disposable income was calculated using the annual tax data. Testing this technique for later years showed that it would have no significant effect on the comparison of weekly disposable incomes.

Principal source of income

There are some differences in the original classifications used for the principal source of income. Being unable to change the hard-copy classifications, consistency was sought simply by aggregating categories rather than by reclassifying the principal source of income. This will have some effect on the results, but it is believed that it will not alter the picture presented in any significant way.

Negative incomes

Prior to the continuous income survey, ABS estimates of total income excluded negative income components (such as negative income from rent or self-employment). For consistency in the comparison, negative income components were set to zero when using the 1995-96 data.

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