Trends in Household Wealth-Adjusted Income in Australia

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Wealth-adjusted income combines monetary income, household taxation, the value of in kind social services, and the value of annuitized net worth. The Australian Bureau of Statistics has two data sets from which wealth-adjusted income can be calculated, one from 2003–04 and one from 2009–10. In this paper we examine trends in the distribution and the age structure of equivalent household wealth-adjusted income in these data sets. The only previous similar Australian study was described by Travers and Richardson in *Living Decently* (1993). The only comparable recent study is that by Wolff and Zacharias ('Household wealth and the measurement of economic wellbeing', *Journal of Economic Inequality*, 2009) using US data from 1983, 1989, 1995 and 2001. We will draw comparisons with the findings of these studies.

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I. Income, wealth and wealth-adjusted income

Income and wealth are often presented in socio-economic studies as separate items, with even in the best studies only correlations to indicate their degree of relatedness (Jannti et al 2008). Yet it is obvious that they are both primary components of economic well-being and need to be treated in an integrated fashion. Some households are low on income but high on wealth; others are the reverse; while some are low and some are high in both dimensions. How then to rank them? One proposal, put forward by Wolff and Zacharias (2009), is to measure 'wealth-adjusted income'.

Wealth-adjusted income is a subset of economic well-being, since more comprehensive measures would also count the value of leisure and the value of household production as further dimensions of economic well-being. Analysis of this more comprehensive sort has been pioneered Travers and Richardson in Australia in the early 1990s and more recently by researchers – including Wolff and Zacharias – at the Levy Economics Institute of Bard College, New York. Travers and Richardson, following Becker, termed their unit of analysis 'full income'. The Levy Economics Institute has crafted its own index, the Levy Institute Measure of Economic Wellbeing, or LIMEW (Wolff, Zacharias and Caner, 2004). Analysis of wealth-adjusted income is more narrowly focused than these and takes no account of the value of leisure or of household production. Its aim is to provide a single index for that part of economic well-being that has a straightforward monetary value. Its method is to convert net worth from a stock to a flow by annuitization.

Wealth-adjusted income is income plus annuitized net worth. The income component in the analysis of Travers and Richardson and in the LIMEW index includes the value of social transfers in kind. Here this income component will be referred to as 'final income', following the usage of the Australian Bureau of Statistics. Final income is defined as private income plus government cash transfers minus income taxes (that is, disposable income) plus the value of non-cash social expenditures on health, education and housing, minus indirect taxes. The ABS includes income from five kinds of assets in private income: own unincorporated business income; income from

investments; income from superannuation, annuities and private pensions; net imputed rent; and 'other regular income'. Wolff and Zacharias use two income measures: 'money income' and 'SCF Income'. The latter is income as defined in the Survey of Consumer Finances, which is before-tax or gross income; the former is SCF Income minus realized capital gains, net of losses. However, these are not a complete reflection of a household's income status; final income is a far preferable measure of income. Thus, in this paper we will be examining the combination of final income and annuitized net worth, which we will call 'wealth-adjusted final income'.

In the ABS surveys, household net worth is the sum of assets and liabilities. Assets include tangible fixed assets such as dwellings and their contents, vehicles, and machinery and equipment used in businesses owned by households; intangible fixed assets; business inventories of goods; non-produced assets such as land; and financial assets such as bank deposits, shares, superannuation account balances, and the outstanding value of loans made to other households or businesses. Liabilities include mortgages; investment loans; credit card debt; borrowings from other households; and debt on other loans such as personal loans to purchase vehicles and study loans.

There are two possible methods of annuitizing net worth. On the *fixed rate annuity method* (also known as the *bond coupon method*) wealth-adjusted final income is calculated as the sum of final income, minus income from assets, plus the annuitized value of net worth using a fixed interest rate. This was the method used by Travers and Richardson (1993). On the *lifetime annuity method* the annuitized value of net worth is calculated as a function of net worth, an interest rate and the number of years until death. This method is that of Wolff and Zacharias (2009). In this calculation the annuity is constant across time and is sufficient to exhaust the initial net worth at death. This method entails that a given net worth increases in value with age, since there are fewer years of remaining life across which it will be spread. This is the method we will follow here. Australian Bureau of Statistics' life expectancy figures (ABS 2013, Cat No 3302.0) show that life expectancy at age 85 is 6 years for men and 7 years for women, so we have set the year of death as 92.

Travers and Richardson used a fixed rate of 5% (1993, 31), while earlier studies varied widely in the choice of rates from 4% and 10% (Weisbrod & Hansen, 1968; Wolfson, 1979), to 6% (Taussig, 1973), to 3% (Wolff, 1990). Wolff and Zacharias (2009, 90–92) used actual historical rates of return for each asset class. However, they found that their median and mean results for wealth-adjusted income for all households were virtually the same as that obtained using a single interest rate (of 3%) for all asset types. They say (2009, 92): 'It is clear that the variance of wealth levels across households is much more important than the variation of rates of return'. In the present study three interest rates are used: 3%, 4% and 5%.

To calculate wealth-adjusted income we annuitize net worth and add the annuity to final income minus the five types of asset-derived income mentioned above. Early studies of wealth-adjusted income (Weisbrod & Hansen, 1968; Wolff, 1990) included the equity value of the home in the sum to be annuitized. However, Wolff and Zacharias (2009, 89) excluded this from the annuity calculation and counted the value of the home only in the form of imputed rent. In defence of this decision they argued (2009, 89) that 'Housing is a universal need and owning a house frees the owner from the obligation of paying rent, leaving that much more resources for spending on other needs. Hence, benefits from owner-occupied housing are reckoned in terms of the replacement cost of the services derived from it, i.e. a rental equivalent'. However, this takes no account of the implicit value of housing that goes beyond merely providing accommodation, and which is to that extent also a store of wealth. For that reason, here we will follow the older method of counting the full value of housing as an asset, while deducting the value of imputed rent.

Finally, we adjust for household size. Travers and Richardson applied an equivalence scale only to final income and not to net worth. Wolff and Zacharias report wealth-adjusted income only as non-equivalised. Yet comparisons between household types of varying average composition can be valid only if equivalised. In the second half of this article we are comparing age groups across the life cycle (which involves important changes in household size), and for that purpose equivalisation is

necessary. Thus, we will report equivalent wealth-adjusted final income (EWFI) in addition to wealth-adjusted final income (WFI) *simpliciter*.

The analysis is based on the ABS household expenditure surveys (ABS, Cat. No. 6537.0) for 2003–04 (n=6957) and 2009–10 (n=9774), which are the only ABS surveys that report both household final incomes and net worth.[3] Section II examines trends in the level of equivalent wealth-adjusted final income for all households. Section III examines trends in the distribution of equivalent wealth-adjusted final income for all households. Previous studies of wealth-adjusted income have found that this analysis changes our understanding of life-cycle economic well-being. Section IV therefore examines trends across the life-cycle in closer detail, tracking levels and distribution by age of household head. A comparison is drawn with the findings of Wolff and Zacharias (2009). Section V summarises the findings of the paper.

II. Trends in equivalent wealth-adjusted final income: all households

Table 1 shows the components of equivalent wealth-adjusted final income comparing the ABS 2003–4 and 2009–10 data. All dollar values in this and later tables and figures are expressed as 2015 Australian dollars[4], using the standard CPI deflator.

Both incomes and wealth grew at a remarkable rate in this six year period: final incomes by 43 per cent, net worth by 30 per cent.[5] Annuitized net worth also grew by 34 per cent, while wealth-adjusted final income grew by 40–43 per cent.

Lines 8, 9 and 10 in Table 1 illustrate the relation between income and wealth. Line 8 shows that annuitized net worth constitutes between 34 and 43 per cent of wealth-adjusted final. Line 9 shows the same relation from a different angle, the fraction of income from private earnings and government transfers in wealth-adjusted income. Clearly, it is not a minor factor and may make a

[3] HILDA (Household Income and Labour Dynamics Australia) surveys report wealth for 2002, 2006, 2010 and 2014, but only report disposable income, not final income.

[4] With the exception of Figure 4, in which American dollars are used.

[5] HILDA data show mean net worth growing by 37 per cent between 2002 and 2010, while mean disposable income grew by 27 per cent in the same period.

considerable difference in calculations of inequality and poverty rates. However, as line 10 shows, some of this factor is already captured in final income, which includes five kinds of asset-derived income (items 2a–2e). The point of measuring wealth-adjusted final income is to take account the value of net worth as a stock, over and above its value as an income flow. These figures (line 10) suggest that its mean value is in the 16–24 per cent range, or roughly one-fifth of wealth-adjusted final income.

Table 1: Equivalent wealth-adjusted final household income, 2003–04 and 2009–10

(AUD2015 per household per week)

		2003–04	2009–10	Per cent increase
1	Final income	1365	1957	43
2	Income from assets[6] (2a + 2b + 2c + 2d +2e = 2)	333	422	27
2a	Own unincorporated business income	105	106	1
2b	Income from investments	73	105	44
2c	Income from superannuation, annuities and private pensions	46	58	26
2d	Net imputed rent	93[7]	125	34
2e	Other regular income	15	28	87
3	Final income minus asset-derived income (1 – 2 = 3)	1033	1534	48
4	Net worth	644245	836936	30

[6] No account is taken of taxation on 2a and 2b, on the assumption it will make little difference.

[7] The ABS included imputed rent in the 2003-04 survey on an experimental basis. We have taken it to be a valid figure. In the 2009-10 survey it was no longer considered experimental.

	Annuity interest rate	3%		4%		5%	
		03–04	09–10	03–04	09–10	03–04	09–10
5	Annuitized net worth	602	808 (+ 34%)	681	910 (+ 34%)	765	1017 (+ 33%)
6	Wealth-adjusted final income (3 + 5 = 6)	1635	2343 (+ 43%)	1714	2445 (+ 43%)	1797	2522 (+ 40%)
7	Equivalent wealth-adjusted final income (6 equivalised using modified OECD method)	983	1410	1033	1473	1085	1539
8	Annuitized net worth as a percentage of wealth-adjusted final income (5*100)/6	37	34	40	37	43	40
9	Final income minus asset-derived income as a percentage of wealth-adjusted income (3*100)/6	63	65	60	63	57	61
10	Final income as a percentage of wealth-adjusted final income (1*100)/6	83	84	80	80	76	78

Source: ABS Cat. No 6537.0, 2007, 2012, microdata and calculations therefrom.

III. Trends in the distribution of equivalent wealth-adjusted final income: all households

Table 2 shows the results of our analysis of the distribution of equivalent wealth-adjusted final income for the two data sets. Inequality has increased at the top end, as shown by increases in the top 1%, top 10% and top quintile shares, but decreased at the bottom end, as shown by the bottom

10% and bottom 25% shares. If we take the Gini coefficient as the best indicator, we see little change. Equivalent final income shows an equalising trend in the Gini scores but the opposite trend in the Q5/Q1 ratios and the top 1% share. Equivalent net worth generally shows a trend towards greater inequality, most notably in the Q5/Q1 ratio, though the Gini score shows little movement and the top quintile share actually falls slightly.

Table 2 also shows relative income poverty rates, using the standard measure of percentage below half median income. The poverty rate for equivalent final income fell from 5.7% in 2003–04 to 4.2% in 2009–10. The poverty rate for equivalent wealth-adjusted final income shows little change. The bottom 10 per cent share of total income rose for both income measurements (though not for equivalent net worth).

In general we can say that equivalent wealth-adjusted final income grew rapidly in this six-year period, though with little or no growth in inequality.

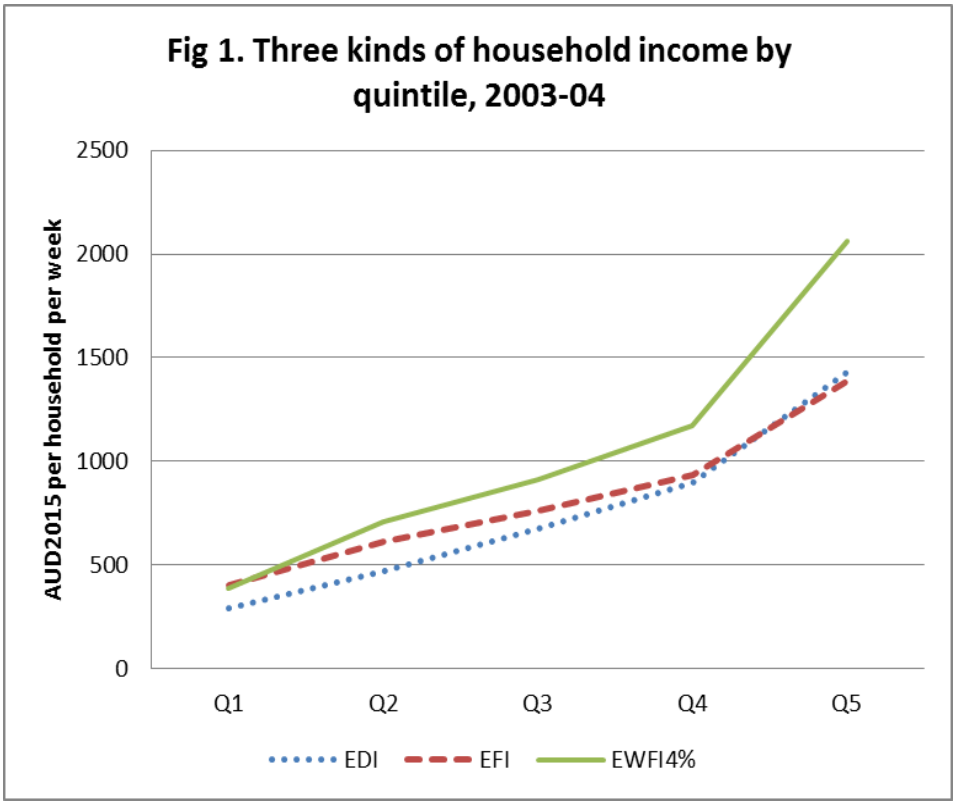
Table 2: The distribution of equivalent wealth-adjusted final income, equivalent final income and equivalent net worth, 2003–04 and 2009–10

	Equivalent wealth-adjusted final income (4% annuity rate)		Equivalent final income		Equivalent net worth	
Year	2003–04	2009–10	2003–04	2009–10	2003–04	2009–10
Q5 (% share)	39.1	39.6	33.9	34.8	59.2	58.8
Q4 (% share)	22.5	22.1	22.8	21.6	21.1	21.8
Q3 (% share)	17.5	17.1	18.5	18.1	12.5	13.5
Q2 (% share)	13.6	12.9	15.0	15.3	6.1	5.3
Q1 (% share)	7.4	7.8	9.8	10.3	1.2	0.7

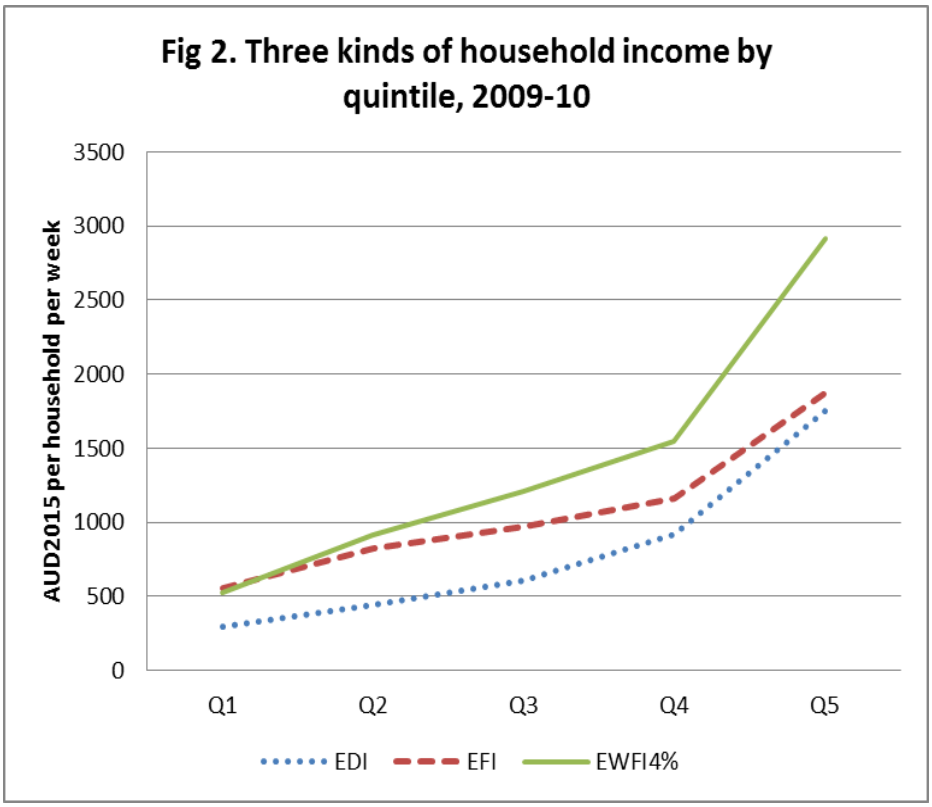
Q5 / Q1	5.3	5.0	3.5	3.4	49	84
Q4+Q5 / Q1+Q2	2.9	3.0	2.3	2.2	11	13.4
Top 10% share (%)	24.7	25.3	20.0	21.1	42.4	42.5
Top 1% share (%)	5.8	6.5	3.6	4.2	12.3	14.8
Bottom 50% share (%)	29.2	29.0	33.6	34.7	12.7	11.7
Bottom 25% share (%)	10.4	10.9	13.2	14.3	2.1	1.3
Bottom 10% share (%)	2.3	3.0	3.6	4.3	0.2	0.1
Per cent below half median	10.0	9.0	5.7	4.2	30.2	34.0
Gini coefficient	0.315	0.314	0.242	0.232	0.573	0.583

Source: ABS Cat. No 6537.0, 2007, 2012, microdata and calculations therefrom.

Wealth is of course distributed more unequally than income. The Gini coefficient for equivalent final income was 0.242 in 2003–04 and 0.232 in 2009–10, while that for equivalent net worth was 0.573 in 2003–04 and 0.583 in 2009–10. The Gini coefficient for equivalent wealth-adjusted final income was 0.314 in 2003–04 and 0.315 in 2009–10. The addition of annuitized wealth to final income does increase inequality by a factor of one-third. Even so, the resulting figures are similar to the Gini scores for equivalent disposable income, which were 0.308 in 2003–04 and 0.355 in 2009–10. Figures 1 and 2 show the quintile distributions for equivalent disposable income (EDI), equivalent final income (EFI) and equivalent wealth-adjusted final income using a 4% annuity rate (EWFI4%). The most notable feature here is that the advantages of wealth (relative to income) show up most strongly in the top quintile; up to the fourth quintile point wealth is not a great advantage.



Legend: EDI = equivalent disposable income; EFI = equivalent final income; EWFI4% = equivalent wealth-adjusted final income, 4% annuity rate. Source: ABS Cat. No 6537.0 2007 microdata and calculations therefrom.



Legend: EDI = equivalent disposable income; EFI = equivalent final income; EWFI4% = equivalent wealth-adjusted final income, 4% annuity rate. Source: ABS Cat. No 6537.0 2012 microdata and calculations therefrom.

Wealth-adjusted final income is not nearly as unequally distributed as wealth. The explanation for this is that the correlation between the two distributions is only moderate. The assumption that income and wealth are closely correlated[8] is not borne out by the calculations shown in Table 3, with correlation scores lying around 0.5. The finding confirms the analysis of Travers and Richardson (1993, Table 1.4, 37) which found only a weak positive correlation between income and wealth.

Table 3: The correlation between equivalent final income and equivalent wealth-adjusted final income distributions, 2003–04 and 2009–10
(4% annuity)

	2003–04	2009–10
Correlation coefficient	0.477	0.506

Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.

IV. Equivalent wealth-adjusted final income across the life cycle

Studies that combine income and wealth generally find that the relative position of the elderly is improved relative to that when income alone is the unit of measurement (Weisbrod & Hansen, 1968; Taussig, 1973; Wolfson, 1979; Wolff, 1990).[9] Wolff and Zacharias (2009, 93–97) compare money income and wealth-adjusted income across the life cycle for America. The younger half of the population is shown as less well-off under the second measure than on the first, while the reverse is

[8] The assumption is made, for example, by Stilwell & Primrose 2009, 87: 'Not surprisingly, flows of income correlate strongly with stocks of wealth. Households with high incomes can more readily accumulate valuable assets, and those assets then commonly generate more incomes. Meanwhile, households with low incomes are less able to accumulate wealth and tend to be locked into a more disadvantaged position, sometimes into a vicious cycle of poverty.'

[9] Travers and Richardson's 1993 Australian analysis of full income – a concept which includes wealth-adjusted final income – found that full income increases steadily across the normal life cycle. They showed that typically young adults start out at 0.8 of median full income; that the median is reached around age 40; that full income peaks at age 60 at about 1.3 of the median; and that on average the elderly at no stage fall below the median (1993: 40). However, while they implied that this pattern is a function of the wealth component of full income, they did not quantify its contribution. Headey and colleagues' (2008: v) analysis of the HILDA data shows that asset holdings are heavily concentrated in the hands of older households — those within 20 years of retirement and those 10 to 15 years post-retirement.

true for the older half, especially so for those over age 65. They also found (2009, 94) a trend over time: 'because of the tilt in age-wealth profiles in favor of older household[s] over the years 1982 to 2000, wealth-adjusted income grows faster relative to money income for older groups than for younger ones'.

What can be said about Australia in the 2000s? Table 4 shows the relation between equivalent final income and equivalent wealth-adjusted final income by age, comparing 2003–04 and 2009–10, using a 4% interest rate. It shows that the gains in equivalent final income and equivalent wealth-adjusted final income were enjoyed most strongly by older households. Households over age 55 gained most strongly in equivalent final incomes, while households over age 45 gained most strongly in equivalent wealth-adjusted final income.

Table 4: Equivalent wealth-adjusted final income and equivalent final income by age, 2003–04 and 2009–10

(AUD2015 per household per week)

	Equivalent wealth-adjusted final income (4% annuity rate)			Equivalent final income		
	2003–04	2009–10	Per cent increase 2003–04 to 2009–10	2003–04	2009–10	Per cent increase 2003–04 to 2009–10
15–24	697	840	21	714	959	34
25–34	920	1182	28	872	1136	30
35–44	946	1260	33	851	1159	36
45–54	1078	1574	46	876	1203	37
55–64	1097	1625	48	725	1204	66

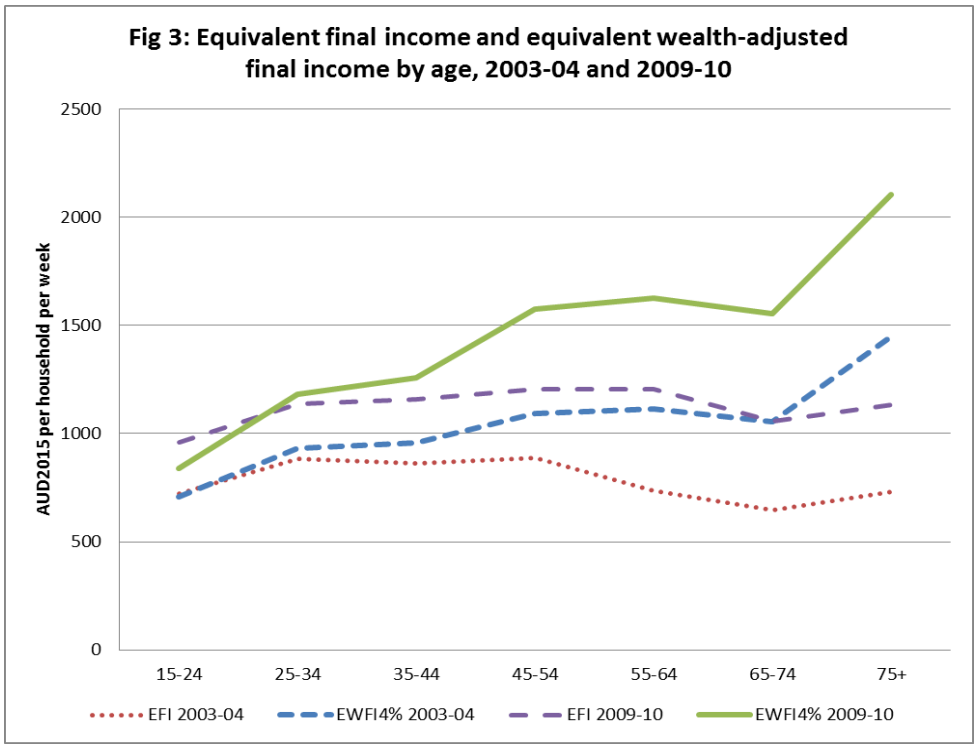
65–74	1039	1555	50	636	1056	66
75+	1426	2107	48	721	1132	57
15–44	925	1188	28	858	1132	32
45+	1148	1672	46	773	1164	65
15–54	977	1316	35	868	1155	33
55+	1180	1724	46	706	1142	62
All	1047	1473	41	811	1150	42

Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.

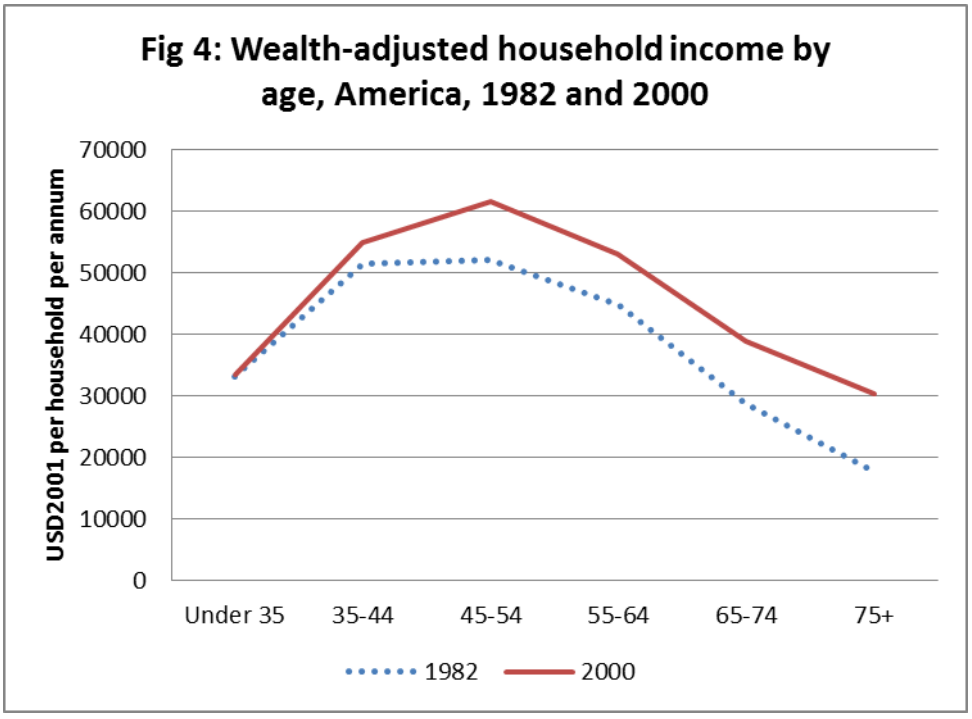
Figure 3 shows in visual form the pattern for equivalent wealth-adjusted final income (using a 4% annuitization interest rate) across the life cycle. This highlights a striking difference between the two measures: equivalent final income is roughly flat across the life cycle, while equivalent wealth-adjusted final income increases steadily with age. Neither follows the classical inverse-U shape postulated by the Life-Cycle Hypothesis (Modigliani 1966; Jappelli & Modigliani 1998, in Modigliani 2005), which supposes that a phase of accumulation in the first half of life will be followed by a process of decumulation in later life.

As shown in Figure 4, Wolff and Zacharias (2009, 96, Table 6) found such a U-shaped pattern, with wealth-adjusted income peaking around age 50 and falling to below that of the under-35 age group. Wolfson's earlier analysis of Canadian wealth-adjusted incomes for 1969–70 (Wolfson 1979, 135, Table 3) shows the same pattern. There is one important difference between these studies and ours: they do not count the value of social transfers in kind, including government health expenditure which is heavily biased towards the elderly. Our analysis captures this in the equivalent final income results, and these are flat across age; the difference between this flat result and the rising line for equivalent wealth-adjusted income must be accounted for by the additional value of

annuitized net worth. Two other factors affect the comparison between our work and that of Wolff and Zacharias: they did not count the full value of home ownership, and they did not equivalise their findings. These may also make a difference to the comparison being suggested here.

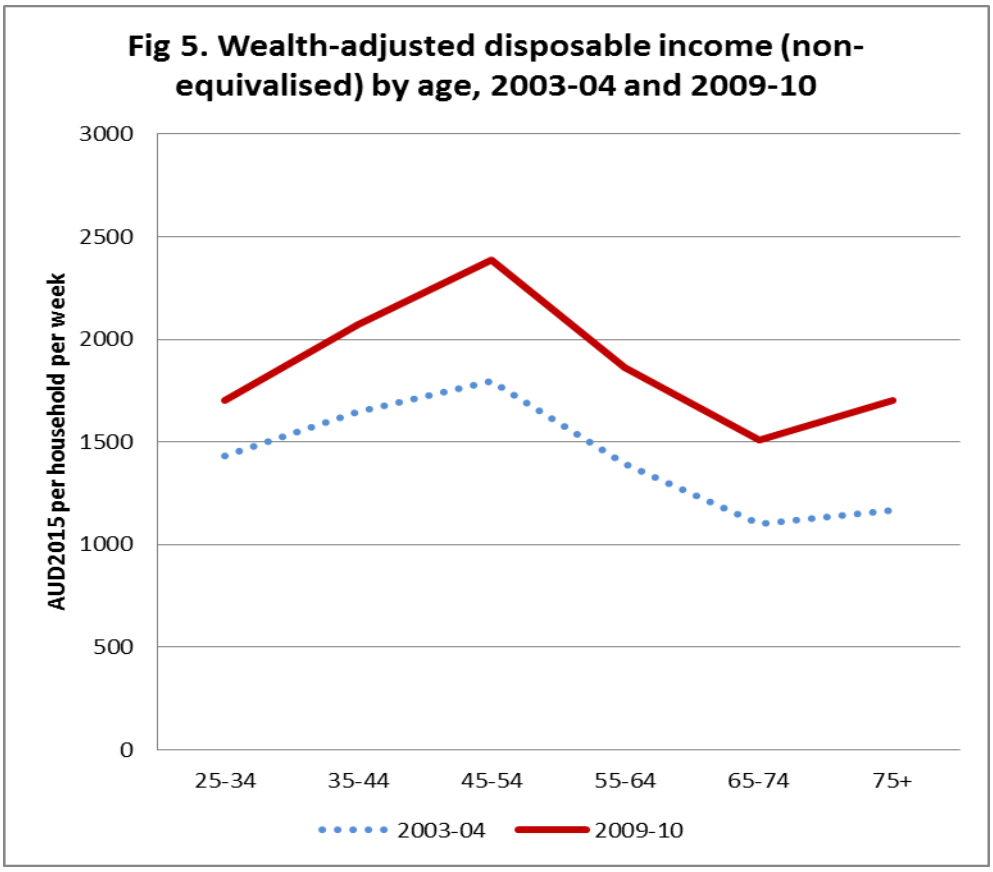


Legend: EFI = equivalent final income; EWFI4% = equivalent wealth-adjusted final income, 4% annuity rate. Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.



Source: Based on Wolff & Zacharias, 2009, 96, Table 6.

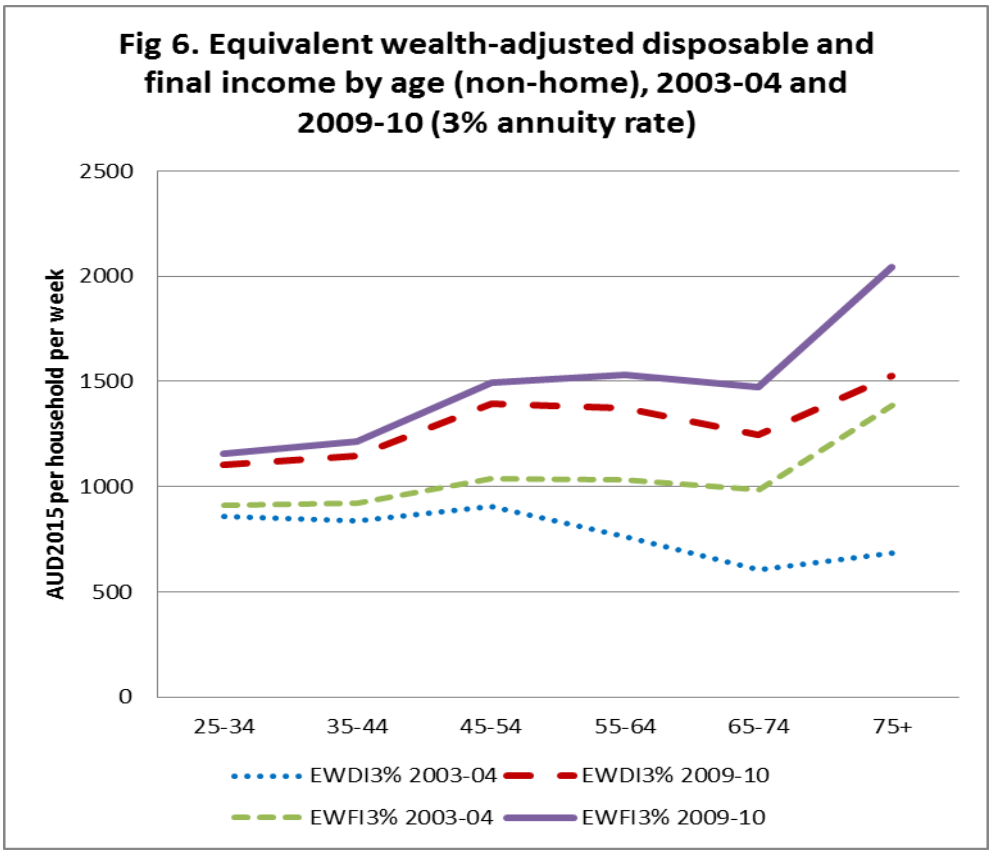
In Figure 5 we show an Australian analysis that is reasonably comparable to the analytical methods of Wolff and Zacharias. In Figure 5 the income type is disposable income, not final income; there is no equivalisation; the annuitization interest rate is 3%; and the annuity calculation does not include the net value of the home, though imputed rent is include in the income calculation. Clearly, the outcome is quite similar in shape to that portrayed in Figure 4. The differences between Figure 3 and Figure 5 are the result of the factors that distinguish the methods used to derive Figure 3 from the methods used by Wolff and Zacharias. Increasing the annuity interest rate to 4 or 5 per cent makes no appreciable difference to the shape of Figure 5.



Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.

Equivalisation, however, does make a difference, since household size is strongly age-related. Figure 6 shows an equivalised version of Figure 5. Here the pattern has flattened out across the age range, showing that the peak at around age 50 in Figure 5 is merely the effect of our failure

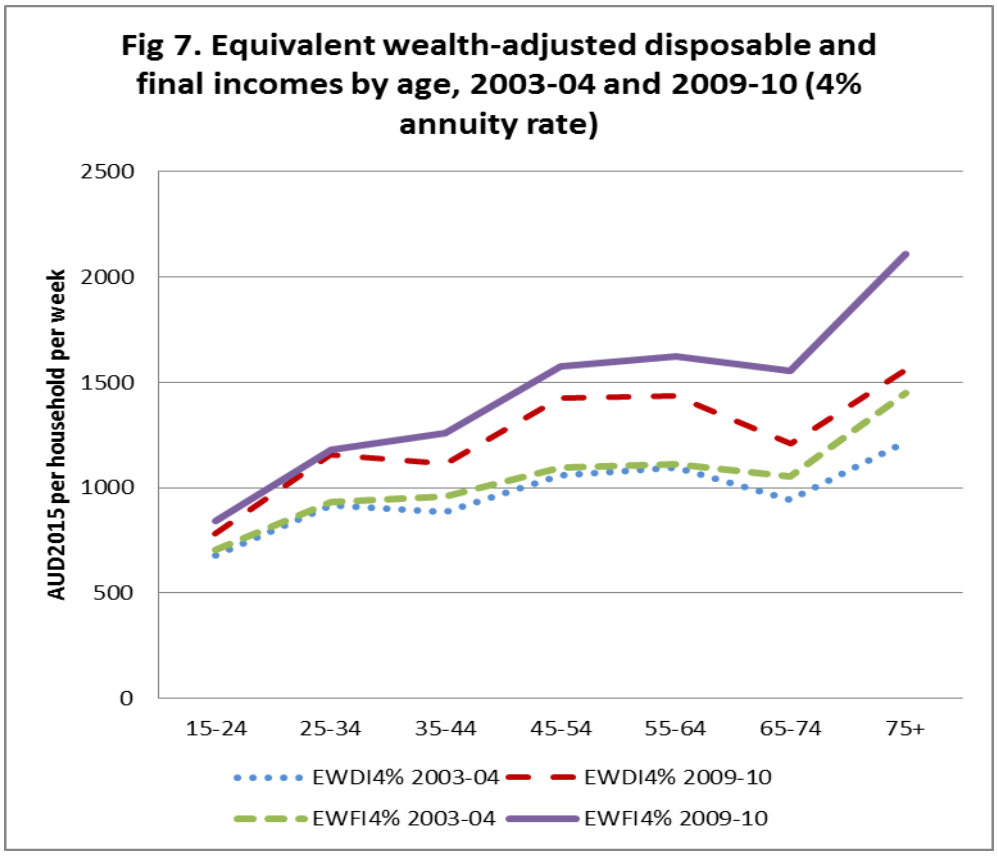
to equivalise. Equivalent wealth-adjusted disposable incomes for 2003–04 fall with age, while those for 2009–10 show a rise. Also shown in Figure 6 is the pattern for equivalent wealth-adjusted final income (using a 3% annuity interest rate). Presumably, the difference between the disposable and final income patterns across age is a consequence of the two ways of counting the value of the home in the annuitisation (that is, as imputed rent and as net value) and of the difference between disposable and final incomes (that is, the extra value of social transfers in kind minus the value of indirect taxes on the household). These values are both heavily weighted towards the older age groups. The importance of counting them is shown clearly in Figure 6.



Legend: EWDI3% = equivalent wealth-adjusted disposable income, 3% annuity rate; EWFI3% = equivalent wealth-adjusted final income, 3% annuity rate. Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.

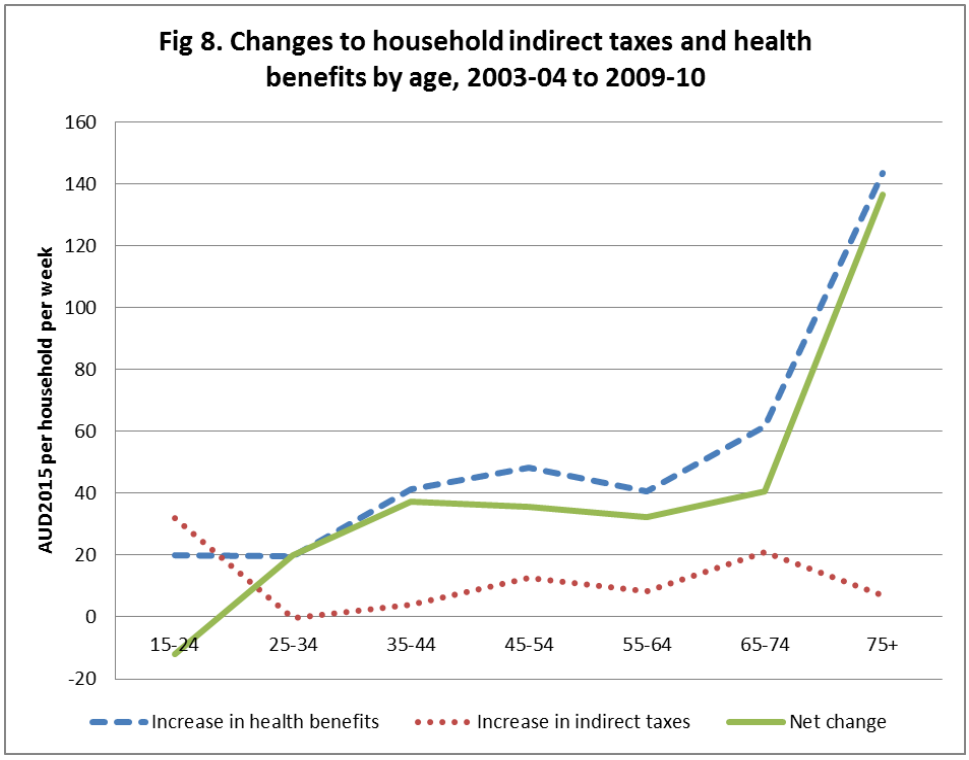
Finally, returning to our standard analysis (that used to derive Figure 3), in Figure 7 we compare equivalent wealth-adjusted disposable and final incomes, with a 4% annuity rate and with home equity values included. What is most striking here is the difference between the 2003–04 pattern and that for 2009–10. In 2003–04 there is not much difference between EWDI and EWFI,

except in the oldest age group. By contrast, in 2009–10 there is a large difference between the two, especially after mid-life. EDWI and EWFI differ only in the inclusion of social transfers in kind and indirect taxes in the computation of final incomes. Thus, the only possible explanation for the divergence between the 2003–04 and 2009–10 patterns is changes in these two variables.



Legend: EWDI4% = equivalent wealth-adjusted disposable income, 4% annuity rate; EWFI4% = equivalent wealth-adjusted final income, 4% annuity rate. Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.

Figure 8 shows how these two have changed in the period. Health benefits have increased far more for the elderly than for the young, while indirect taxes have increased only a little more for the elderly than for the young. The net change is strongly age-related, and the scale of the change in a mere six years is substantial. The tendency of health spending to drift towards the elderly, independent of demographic factors, was examined in an earlier paper (Tapper & Phillimore, 2014). Here it is shown from another angle.



Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.

Turning now to trends in distribution, in Table 5 we examine the Gini scores by age in the two data sets. There is a clear pattern in the Table 5 figures: for both indicators, inequality tends to increase in the age groups below age 55 and to decrease in the older age groups. The lack of change in the overall Gini scores (as shown in Table 2) conceals a noteworthy change when these scores are disaggregated by age. In this period the younger half of the population was becoming more unequal, the older half less unequal.

Table 5: The distribution of equivalent final income and equivalent weight-adjusted final income (4% annuity rate) by age, 2003–04 and 2009–10 (Gini coefficients)

	EWFI4%		EFI	
	2003–04	2009–10	2003–04	2009–10
Under 25	0.265	0.278	0.216	0.210

25–34	0.272	0.295	0.217	0.246
35–44	0.279	0.359	0.221	0.258
45–54	0.297	0.313	0.234	0.262
55–64	0.385	0.300	0.303	0.284
65–74	0.309	0.309	0.213	0.171
75+	0.326	0.310	0.162	0.126
All	0.315	0.314	0.242	0.232

Legend: EFI = equivalent final income; EWFI4% = equivalent wealth-adjusted final income, 4% annuity rate. Source: ABS Cat. No 6537.0 2007, 2012, microdata and calculations therefrom.

V. Conclusion

This paper examines the relation between income and wealth in Australia in the six-year period between 2003–04 and 2009–10, using 'wealth-adjusted final income' and 'equivalent wealth-adjusted final income' as a metric that integrates income and wealth. Our main findings for all households are:

- in this period average final incomes grew by 43 per cent, while wealth-adjusted final income grew by 40–43 per cent (Table 1);
- there was little change in the overall distribution of both final income and wealth-adjusted final income (Table 2);
- the correlation between final income and wealth-adjusted final income was about 0.5 (Table 3).

Concerning the age structure of income and wealth we found that:

- the gains in wealth-adjusted income in this period were much greater for older households (over age 45) than for younger households (Table 4 and Figure 3);

- equivalent wealth-adjusted final income increases with age in both surveys (Table 4 and Figures 3 and 7);
- equivalent wealth-adjusted income became more equally distributed amongst older households (age 55 and older) but less equally distributed amongst younger households (Table 5).

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