This paper presents income inequality statistics for Australia calculated from the published results of two official income surveys of 1968-69 and 1973-74. These results suggest firstly that the level of household income inequality in Australia has been previously understated. Secondly, it is noted that there was little, if any, change in inequality over the period. However, when families are classified by number of income earners an unambiguous decline in inequality within these groups occurs. These observations are related to other changes in the economy.

- 10. Murray, D. 'Sources of Income Inequality in Australia, 1968-69', Economic Record, 54 (1978) 159-169. (Ab. prov.)
 - 1. Income Unit: Wage and salary earners
 - ii. Time Period: 1968-69
 - iii. Data: Income Distribution, 1968-69: Consolidated and Revised Edition, Australian Bureau of Statistics, Canberra (6505.0)
 - iv. Inequality Measure: Gini coefficient, Theil coefficient

This article uses decompositions of Theil and Gini income-inequality coefficients to examine the extent to which inequality of earned income between males and females in Australia may be explained by factors such as age, education and work force participation. It is suggested that education and age, singly and jointly, explain a major part of inequality. The author concludes that, having allowed for these factors, sex appears to have a limited residual importance.

- 11. Podder, N. 'The Distribution of Household Income in Australia', Economic Record, 48 (1972) 181-200. (Ab. prov.)
 - i. Income Unit: family, family member and equivalent income (i.e., equivalent income based on reference unity of family consisting of husband and wife only)
 - ii. Time Period: 1966-68
 - Data: Edwards, H.R., Drane, N.T., and Yates, R.C., The Australian Survey of Consumer Expenditures and Finances 1966-68, Macquarie University and University of Queensland
 - iv. <u>Inequality Measure</u>: Gini coefficient, share of total disposable income accruing to lowest/highest quintile, coefficient of variation, standard deviation of logs

This paper examines the size distribution of income of Australian households. In addition, as families differ in size and composition, the family income distribution is transformed to take account of differences of family composition and on this basis inequality measures have been computed. Families have been subdivided into homogeneous groups on the basis of certain socio-demographic characteristics and the distribution of income within each group is examined. It is found that factors like size of the household, age of the head of the household, occupation of the household, etc., affect the inequality of incomes.

- 12. Podder, N. and Kakwani, N.C. 'Distribution and Redistribution of Household Income in Australia', in <u>Taxation Review Committee:</u>

 Commissioned Studies (AGPS, Canberra, 1975). (Ab. prov.)
 - i. Income Unit: family
 - ii. Time Period: 1966-68
 - iii. Data: Edwards, H.R., Drane, N.T., and Yates, R.C., The Australian Survey of Consumer Expenditures and Finances 1966-68, Macquarie University and University of Queensland
 - iv. Inequality Measure: Gini coefficient, quintile shares

This study investigates the impact of personal income tax and various government cash benefits on the distribution of household income in Australia. It is found that government cash benefits go much further than income tax in redistributing income. Significant reductions in inequality of incomes are achieved by transferring substantial amounts of income to families in the very low income ranges through the payments of various types of pension. Also, it is found that income inequality is lessened in much the same degree when imputed rent from owner occupied houses is added to original family income as it is when allowance is made for the effect of income tax on household income.

- 13. Ternowetsky, G.W. 'Taxation Statistics and Income Inequality in Australia: 1955-56 to 1974-75', Australian and New Zealand Journal of Sociology, 15 (1979) 16-24. (Ab. prov.)
 - i. Income Unit: wage and salary earner
 - ii. Time Period: 1955-57 1974-75
 - 111. Data: Reports of the Commissioner of Taxation
 - iv. Inequality Measure: Gini coefficient, per cent of population

receiving less than average income

This paper looks at the distribution of income in Australia from 1955-56 to 1974-75, and attempts to assess whether the pattern of income inequality changed over the period. More specifically the author seeks to test the theory that economic development leads to greater income equality. By analysing taxation statistics to show changes in the proportions of below average and above average income earners, the author argues that there is substantial support for the hypothesis that economic development leaves a proportion of the population behind, and that the redistribution which does occur is primarily restricted to the middle and top income earners in Australian society. The paper concludes that over the twenty years studied, the pattern of inequality in Australia was exacerbated by market mechanisms rather than reversed.

3. The Distribution of Wealth in Australia

There are many reasons why the distribution of wealth should be regarded as more important than the distribution of income. Both directly and indirectly, wealth has income generating effects. Property owners in occupation enjoy the benefits of free rent, and as absentee landlords their assets become a source of income. Wealth holders may borrow against their assets, overspend their current incomes and finance new investments, which in turn enlarge their incomes. Despite attempts to define poverty in income terms (see, for example, the Social Welfare Policy Secretariat's Report on Poverty Measurement) wealth remains the prime determinant of economic wellbeing.

Yet in Australia, as in other countries, relatively little is known about the distribution of wealth in comparison with what is known about income distribution. This results both from a relative lack of direct matricey data, and from the fact that indirect sources, such as death duty tatistics, do not provide comprehensive information for the full range of the wealth distribution.

The only comprehensive sources of Australian data on wealth distribution are the 1915 War Census, estate duty statistics, and the Survey

of Consumer Finances and Expenditures 1966-67 (SCFE). An indirect indication of wealth distribution can also be derived using data on investment income. Useful estate duty statistics are not available beyond 1977-78, because the Australian government substantially reduced death taxes in 1977 and eliminated them altogether in 1979. In addition, between 1975 and 1981 the states also abolished death duties, but since each state had assessed the duty payable on a different basis these data were in any case of limited use.

The estate duty method, the 1915 War Census and the SCFE (1966-67) survey have all been used to estimate the degree of wealth inequality in Australia. Fortuitously, there are four studies based on estate duty data which not only overlap with each other but also with the SCFE time period, allowing the possibility of comparative evaluation.

3.1 Review of Major Studies and their Findings

Until 1978, The Estate Duty Assessment Act 1914-1976 required that at death a return be lodged detailing the deceased's total assets and liabilities for probate purposes. The estimation of a wealth distribution from these data is not straightforward. It requires, infer alia, that certain assumptions be made about mortality distributions and about the total value of the non-dutiable estates. In using the estate multiplier method, Raskall, Berry, Gunton and Ablett have treated these assumptions quite differently and have therefore produced rather different results. To provide a basis for assessing the validity of these alternative estimates the estate duty method, though tedious, must first be described in

^{45.} Raskall, P., 'The Distribution of Wealth in Australia 1967-72', Planning Research Centre, University of Sydney, 1977.

^{46.} Berry, M.J., 'Inequality', in Australian Society: A Sociological Introduction, A.F. Davies, S. Encel and M.J. Berry (eds.), 3rd ed. (Melbourne, Longman Cheshire, 1977).

^{47.} Gunton, R., A Distribution of Personal Wealth in Australia, 1967-68,
Paper delivered at 43rd ANZAAS Congress, Brisbane, May 1971.

^{48.} Ablett, J.R., The Distribution of Wealth and the Case for Annual Net Worth Taxation, CEDA Monograph No. M72, July, 1982.

some detail.

Estate duty statistics provide data on the age, sex and net worth of each returnee. These data may be used to construct a table which records the numbers of deceased in each wealth class (e.g. \$20,000 - \$20,999) for each age-sex cohort (e.g., females 50-59 years).

To convert these data into estimates for the population it is assumed that within each age-sex cohort the dead represent a random sample for the living. For example, for females aged 50-59 the annual death rate is 7.04 per thousand. Suppose that, in 1970, there were 141 deaths amongst females in that age group reporting wealth levels between \$20,000 and \$29,999. Then the population estimate would be that there are

$$(141 \times 1000/7.04 = 2000)$$

two thousand females aged 50-59 in the Australian population in that wealth class.

Aggregating these estimates over the full range of age-sex cohorts for each wealth class Raskall produced the population estimates in column 2 of Table 8 below. He then estimated the total wealth holdings for each wealth class by multiplying the number of people in each wealth class by the average net value of the estate, as revealed by the assessment statistics. These are recorded in column 3 of Table 8.

But since estates of lower value are exempt from duty (during 1967-72 only estates worth more than \$10,000 were dutiable) a substantial proportion of the Australian population is excluded from this table. On Raskall's estimate there were, in 1970, only 823,500 dutiable persons in Australia; these represented 10.53 per cent of the adult (over 20 years) population for that year. The final step in the construction of a wealth distribution therefore involves making an independent estimate of the total wealth owned by that part of the population excluded from duty by statutory exemption.

Clearly, the validity of the results achieved using the estate ultiplier method will depend on three things:

- the extent to which estate duty returns provide a comprehensive and accurate valuation of personal net worth at the time of death;
- (2) the assumption that the dead represent a random sample of the living for a given age cohort; and
- (3) the accuracy with which the net worth of the non-dutiable population can be estimated.

The first of these largely involves assessing the degree of estate duty avoidance. Since this activity is more attractive to the very wealthy than to the moderately wealthy, ignoring it would lead to an underestimate of the degree of inequality. It should also be noted that since certain classes of assets, such as annuities and options, cease on death, they are excluded from estate duty statistics even though they constitute part of 'live' wealth.

If it were true that those who died each year represented a random sample of the living in the same age-sex cohort, then the use of a general mortality multiplier for each cohort would result in valid estimates. But as there is clear evidence that wealthier people live longer than those with little wealth, lower mortality rates than the general ones for each cohort should be used on statistics which exclude the lower wealth classes. Unfortunately, whilst mortality rates by social class are available in the UK there are at present no comprehensive measures for the Australian population. And since the use of general mortality multipliers understates the numbers in the higher wealth classes, their use results in an underestimate of the amount of wealth owned by these classes.

The third problem: i.e., the estimation of the net wealth of the non-dutiable population, is more difficult than the other two. This problem was handled differently in each of the studies discussed in below.

^{49.} Lydall, H.F., and Tipping, D.G., 'The Distribution of Personal Wealth in Britain', Bulletin of the Oxford Institute of Economics and Statistics, 23 (1961).

3.1.1 Studies Based on Estate Duty
Estimates and Investment Income

Raskall's report is the most extensive and systematic of the Australian studies on wealth distribution available to date. As indicated in Table 8, he estimated that 10.53 per cent of Australia's 1970 population fell into the 'dutiable' category, and that their net wealth amounted to \$40,434 M. But this was a conservative estimate. First, the use of general mortality multipliers produced an underestimate of the numbers in the upper wealth classes. Second, duty is levied on estates assessed at dollar values at the time of death. Since the assessment of large estates often takes several years, the final value struck will represent an underestimate of the proportional value of that estate when the return is finally submitted. Third and most important is the effect of avoidance. Atkinson showed that in 1966, about 40 per cent of the value of dutiable estates in Britain had been avoided through the use of gifts and discretionary trusts. Raskall proposed that it was reasonable to assume a total of 20 per cent avoidance from the real value of estates in Australia.

Taking the effects of avoidance, differential mortality rates and processing lags together, Raskall expanded his estimate of estate-duty-determined wealth by 25 per cent, from \$40,434 M to \$50,543 M. In order to express this figure as a proportion of total wealth, an independent estimate of domestic net personal wealth is required. A wide variety of sources, including the records of the State Valuers-General, the motor vehicle registration authorities, ABS Census data, and Reserve Bank reports were used to compile the estimate summarised in Table 9. On the basis of this estimate, the dutiable 10.53 per cent of the Australian population owns 59 per cent of the aggregate wealth. The final step is to estimate the distribution of wealth among the remaining 90 per cent of the population. For this Raskall used a method of graphical extrapolation, which assumes that the shape of this part of the distribution is the same as the shape of the distribution for the top ten per cent.

Atkinson, A.B., Unequal Shares - Wealth in Britain (Penguin, Harmondsworth, 1974).

Table 8

Total Estimated Wealth Holdings by Wealth Class

	Av. Net	Est. Pop.	Est. Wealth	Pop.	Pop.
	Value	Age 20	By Class	(1970	Reverse
		by Wealth		Figures)	Cum.
		Class			
	\$'000		\$M.	Z	%
19,999	15.0	174,105	2,612	2.23	10.54
20,000	24.9	233,793	5,821	2.99	8.31
30,000	34.6	124,773	4,317	1.60	5.32
40,000	44.8	75,278	3,372	0.96	3.72
50,000	54.8	50,464	2,765	0.65	2.76
60,000	69.0	59,596	4,112	0.76	2.11
80,000	89.2	34,279	3,058	0.44	1.35
100,000	109.7	19,176	2,104	0.25	0.91
120,000	129.1	14,028	1,811	0.18	0.66
140,000	167.2	18,979	3,173	0.24	0.48
200,000	251.1	13,670	3,433	0.17	0.24
350,000	412.5	2,873	1,185	0.04	0.07
500,000	670.0	1,685	1,129	^r 0.02	0.03
1,000,000+	1,950.0	791	1,542	0.01	0.01
				10.53	
		823,490	40,434	7,820,068	

Source: Raskall, 1977, p.15.

Raskall's estimate of the distribution of wealth in Australia is summarised in Table 10. These figures indicate that the top 1 per cent of wealth holders own 22 per cent of wealth, the top 5 per cent - 45.5 per cent of wealth, and the top ten per cent - 58.5 per cent of total wealth. With respect to the bottom 90 per cent, the figures suggest an average wealth of \$5,022 per person in 1970. For these data, the Gini coefficient of concentration is 0.7017.

 $^{{\}sf Gunton}^{51}$ used Commonwealth Estate Duty statistics together with Queensland Succession Duty data to estimate the distribution of wealth in

Table 9

Composition of Net Wealth in Australia

	\$M	×
Residential Land and Buildings Other Household Real Assets	31,000	36.18
- Consumer Motor Vehicles	5,555	6.48
- Consumer Durables	1,764	2.06
Domestic Non-Farm Business Shares Farm Assets and Inventories	18,626 2,601	21.74
Government Liabilities to Private Sector	2,001	3 6 0 1
- Notes and Coin	1,216	1.42
- Central Bank Deposits	1,327	1.55
- Government Securities	7,076	8.26
Superannuation and Insurance Policies	16,517	19.28
	85,682	100.00

Source: Raskall, 1977, p.25.

Australia in 1967-68.

As with Raskall's study, the mortality multiplier method was used to estimate the numbers of persons in each wealth class. Unlike Raskall, Gunton did attempt to allow for the longetivity associated with higher levels of wealth; Scandinavian data on the differential mortality rates of the wealthy were used to adjust the Australian multipliers. No adjustments were made for estate duty avoidance. It follows that despite the use of adjusted mortality multipliers Gunton's calculations of the total wealth holdings of the dutiable population represent, if anything, an under-estimate of total wealth.

Prior to abolition in 1975, the Queensland State Succession Duty $^{\rm allowed}$ a complete exemption only on estates of less than \$3,000. Gunton

^{51.} Gunton, R., A Distribution of Personal Wealth in Australia, 1967-68,
Paper delivered at 43rd ANZAAS Congress, Brisbane, May 1971.

Table 10
Inequality Measures

Share of	Per Cent
Lowest Quintile	1.036
2nd Quintile	3.833
3rd Quintile	7.461
4th Quintile	15.486
5th Quintile	72.184
Top 10 per cent	58.500
Top 5 per cent	45.500
Top l per cent	22.000
Concentration Coefficient	0.7017
Mean Wealth*	\$10,957

^{*} Defined to include sums under life policies and superannuation equities. Source: Raskall, 1977, p.30.

adjusted the Commonwealth Estate Duty data by assuming that the number of estates in Queensland worth between \$4,000 and \$19,999 was one-seventh of the total for Australia. (In 1967 the population and number of deaths in Queensland were both a little over 14 per cent of those in Australia as a whole.) The number and mean value of estates in the range \$1 - \$3,999 was then estimated by extrapolation. Using these procedures Gunton estimated that the number of wealth holders in 1967 was 3,964,000. The distribution of wealth amongst this population is presented in Table 11. If the proportion of the population owning no wealth were incorporated into this table a rather different distribution would obviously be obtained. Harrison 52 recalculated Gunton's data on this basis; his revised wealth distribution is presented in Table 12.

It should be noted that in relation to the top ten per cent of wealth holders Gunton's estimates indicate proportional wealth holdings slightly

^{52.} Harrison, A., The Distribution of Wealth in Ten Countries (London, HMSO, 1979) (U.K., Royal Commission on the Distribution of Income and Wealth, background paper to Report No. 7).

below but not inconsistent with those of Raskall. Harrison's recalculations attribute significantly greater wealth to this top ten per cent.

Table 11
An Estimate of the Distribution of Wealth
Amongst Australian Wealth Holders, 1967-68

Percentage of Estimated	Percentage of Estimated		
Total Wealth Holders	Total Wealth		
Top 50%	91.1%		
Top 25%	75.7%		
Top 10%	57.0%		
Top 5%	41.0%		
Top 1%	19.9%		

Source: Gunton, 1971, p.9.

Table 12
Distribution of Wealth in Australia
Amongst the Adult Population, 1967-68

Percentage of Total	Percentage of Estimated		
Adult Population	Total Wealth		
Top 47.5%	100.0%		
Top 25%	92.1%		
Top 10%	72.5%		
Top 5%	56.6%		
Top 1%	28.7%		

Source: Harrison, 1979, p.45.

In relation to the wealth holdings of the bottom 50 per cent, both estimates differ markedly from Raskall's. Gunton's succession duty method led to an estimate that the bottom 50 per cent of wealth holders own 8.9 per cent of the total wealth. But Gunton's wealth holders represent only about half of the total adult population, and since he made no independent

estimates of the total wealth holdings of the nation, it is difficult to guess what proportion of the wealth the other half owns. With the additional checks it contains, Raskall's method ought to produce the more reliable estimate; he suggested that the bottom 50 per cent own 16.8 per cent of the total wealth. Even this may be an overestimate, since the data from the SCFE survey, recalculated by Raskall to represent individuals rather than households, suggested that the bottom 53 per cent might own only 8.9 per cent of total wealth.

Berry's simple estimate of the distribution of wealth for the Estate Duty data of 1972-73 is presented in Table 13. He used a single mortality multiplier (9 in 1000) to estimate the size of the dutiable population from the estate data, and made no allowance for the effects of avoidance. The calculations were completed by assuming, with some support from the work of Podder and Kakwani that the average wealth of the non-dutiable population was \$5,824.

Table 13
Estimated Distribution of Wealth, 1972-73

Percentage of total	Percentage of estimated		
adult population	total wealth		
Top 10%	60%		
Top 5%	44%		
Top 1%	20%		

Source: Berry 1977, p.30.

Although this simple representation of wealth holdings does not discriminate amongst the bottom 90 per cent, what it says about the wealth

^{53.} Op. cit., p.29.

^{54.} Berry, M.J., 'Inequality', in Australian Society: A Sociological Introduction, A.F. Davies, S. Encel and M.J. Berry (eds.), 3rd ed. (Melbourne, Longman Cheshire, 1977).

^{55.} Podder, N., and Kakwani, N.C., 'Distribution of Wealth in Australia', Review of Income and Wealth, 22 (1976) 75-92.

holdings of the top 10 per cent is not inconsistent with the estimates 57 reported by Gunton and Raskall.

Ablett's analysis of the introduction of a wealth tax includes the most recent study of wealth distribution in Australia. The Estate Duty method was used to construct an estimate of the distribution of wealth in 1975-76. Unlike Raskall, Ablett made no attempt to estimate a distribution for the proportion of the population whose net worth fell below the dutiable minimum. His estimates, therefore, refer only to the upper segment of the distribution, containing approximately 5.5 per cent of the population. In addition, no attempt was made to take into account differences in social class mortality rates. This, combined with the likelihood of increased avoidance by the very wealthy, suggests that any conclusions drawn from Ablett's results with regard to the extent of inequality must be regarded as conservative. Given this caveat, Ablett's results are presented as Table 14.

Ablett also presents estimates on wealth distribution using the 'investment income approach'. This attempts to work backwards from data on investment income, using a 'yield multiplier' to determine wealth distribution. For example, consider a stock of assets with an average yield of 10 per cent. If investment income is, say, \$5,000, the stock of assets would be valued at $(1/0.10 \times \$5,000)$: \$50,000.

There are a number of potentially quite serious problems with this approach. First, different assets will often have different yields while investment data tends to be highly aggregated. Assumptions about the composition of assets producing investment income must therefore be made. Second, the composition of assets held by wealth units is unlikely to be invariant to the level of wealth. Third, a significant number of assets (e.g. consumer durables, works of art, etc.), do not generate a flow of income and are thus excluded from investment income data. Fourth, tax avoidance will lead to an understatement of investment income. Finally, raw investment income statistics provide no information on liabilities of wealth

^{56.} Op. cit.

^{57.} Op. cit.

^{58.} Ablett, 'The Distribution of Wealth'.

units, thus, only an indication of $\underline{\text{gross}}$ wealth can be obtained from this $\underline{\text{method}}$.

Table 14
The Distribution of Wealth, 1975-76

Population	Estimated Net	Worth
Cumulative %	Cumulative	%
0.44	4.72	
1.10	8.37	• •
4.06	18.61	
5.16	21.47	
6.72	25.07	
9.14	30.00	
12.84	36.52	
18.12	44.36	
21.75	49.06	
26.64	54.70	
32.27	61.45	
42.11	69.23	
54.59	78.55	:
69.06	87.50	
82.20	93.69	
100.00	100.00	

Source: Ablett (1983), Table 2.

Using unpublished data from the 'Household Expenditure Survey 1975-76', Ablett obtained average weekly household income from interest and dividends, cross classified by grade and main source of weekly income. Arbitrary assumptions were made to calculate the yield multipliers. For dividends, an average dividend yield figure of 8.01 per cent was chosen. For interest rates, three cases were tried:

Case 1: Average interest rate payable on State and Commonwealth securities in 1975-76. This was calculated as 6.31 per cent;

- Case 2: A range of rates were used which recognised probable differences between interest paid to each main source of income group as well as between households with different levels of income;
- Case 3: Similar to case 2 with the exception of assuming a higher level of interest rates for households earning above average weekly earnings.

Table 15 summarises Ablett's results. They suggest a considerable degree of inequality in the distribution of income generating (non-human) wealth, with the top 5 per cent of households owning over 40 per cent of dividend yielding and interest bearing wealth.

Table 15
Distribution of Combined Dividend Yield
and Interest Bearing Wealth

	Case 1	Case 2	Case 3
Top	% owned	% owned	% owned
1%	25	22	23
5%	45	41	42
10%	53	49	49
20%	66	63	63
50%	85	83	83
80%	96	95	95
100%	100	100	100
Gini Coeff.	.60	.56	. 56

Source: Ablett (1983), Table 4.

Conclusions

In the studies reviewed above the use of Estate Duty statistics provided an approximate but consistent indication of wealth holdings at the top end of the range. It would appear that the top ten per cent of the Population owns at least 60 per cent of the wealth, and that one-third of these assets are concentrated in the hands of the top one per cent. Owing to the absence of direct data, and the difficulty of extrapolation, the

nature of the wealth distribution at the lower end of the scale is relatively unclear. The bottom 50 per cent of the population probably owns between 8 per cent and 16 per cent of all assets.

3.1.2 Survey Data on the Distribution of Wealth

Soltow has analysed the wealth returns of the 1915 War Census. He found a substantial degree of inequality '... with the top 10 or 20 per cent of persons owning essentially all the individual real and personal estate'. Table 16 summarises the wealth distribution as revealed by the Census. Perhaps the most striking feature is that the top 0.5 per cent of males had just over 30 per cent of total wealth, while two-thirds of wealth was owned by 5 per cent of the population. Soltow compares this distribution with the United States in 1860 and finds 'that the general level of inequality was the same in both countries'.

During the Survey of Consumer Finances and Expenditures (1966-68) 2,757 households were interviewed for information on household finances, including information on incomes and assets. Like many surveys of wealth holdings, the SCFE encountered problems of non-random non-response so that high income families tended to be under-represented in the final analysis. Harrison notes that this problem very probably resulted in the shares of top wealth holders in Australia being appreciably understated.

This conclusion is substantiated when the results of the survey (presented here in Table 17) are compared with the figures derived by Raskall, Gunton and Berry, discussed above. The SCFE results show that the top 10% owned only 36.5% of the wealth in 1966, a figure considerably lower than the estimate of approximately 58% derived by more reliable methods. Harrison notes further that the SCFE figures are appreciably lower than equivalent shares in other OECD countries and that caution should therefore be exercised in basing any policy conclusions on this information.

^{59.} Soltow, L., 'The Census of Wealth of Men in Australia in 1915 and in the United States in 1860 and 1870', Australian Economic History Review, 12, No. 2 (1972) 125-141.

^{60.} Harrison, Distribution of Wealth.

Table 16

The Distribution of Wealth Among Adult Males in Australia in 1915

Population	Total Wealth		
(cumulative %)	(Cumulative %)		
0.0052	0.31		
0.0090	0.38		
0.022	0.52		
0.049	0.66		
0.114	0.81		
0.143	0.85		
0.190	0.89		
0.288	0.95		
0.433	0.98		
0.819	1.00		
1.000	1.00		
Summary Measures			
no. of males (milli	lons) 1.38		
arithmetic mean £665			
Gini coefficient 0.861			
Source: Soltow (1972), p.132.			

Table 17
The Distribution of Wealth in Australia, 1966, Based on SCFE Data

	%	%	Z	%	%	Z
Top	1	5	10	20	30	40
Own	9.26	24.57	36.45	53.51	66.11	76.23
Top	50	60	70	80	90	100
Own	84.55	91.29	96.26	90.09	100.05	

Note: This distribution is one of household units, not individuals. Source: Harrison, 1979, p.48.

- 3.2 Annotated List of References on the Distribution of Wealth in Australia
- 1. Ablett, J.R., The Distribution of Wealth and the Case for Annual Net Worth Taxation, CEDA Monograph No. M72, July, 1983.
 - i. Wealth Unit: individual
 - 11. Time Period: 1975-76
 - iii. Data: a) Estate Duty statistics
 - b) investment income
 - iv. Inequality Measure: percentile shares, Gini coefficient

This paper is primarily concerned with assessing arguments about the desirability of an annual tax on net worth (i.e., total stock of assets less liabilities). In order to analyse the equity aspects of the wealth tax debate, as well as to derive possible tax yields, the author calculates the distribution of wealth in 1975-76. This is done in two ways: first using estate duty statistics and second, using data on the distribution of investment income. The author concludes that although the extent of inequality in wealth holdings is a cause for concern, wealth taxes are not an efficient option.

2. Harrison, A. The Distribution of Wealth in Ten Countries (London, HMSO, 1979) (United Kingdom, Royal Commission on the Distribution of Income and Wealth. Background Paper to Report No. 7.)

As its title suggests, this paper provides information on the distribution of wealth in ten countries, namely the USA, Canada, Australia, New Zealand, Denmark, Sweden, Belgium, France, West Germany and Ireland. For each country, the author reviews the various methods of data collection — estate—based estimates, sample surveys, investment income data, wealth tax statistics — discussing their strengths and weaknesses, and secondarily presents the results of the study concerned. The paper does not attempt to make any general comparison of the distribution of wealth between these ten countries.

- 3. G.H. Knibbs, The Private Wealth of Australia and Its Growth, Commonwealth Australian Bureau of Statistics, Melbourne, 1918.
 - i. Wealth Unit: individual

- 1i. Time Period: 1908-1915
- iii. Data: Australian War Census (1915), probate returns for Victoria (1908-1915) and NSW (1911-1915)
- iv. Inequality Measure: -

Detailed wealth and income statistics are given, based on returns from the 1915 War Census. In addition, a cross-classification of assets according to income is provided. Wealth statistics are also calculated from probate returns for Victoria and NSW. There is no attempt to derive inequality measures although the data are in a form which makes this relatively easy.

- 4. Podder, N. and Kakwani, N.C. 'Distribution of Wealth in Australia', Review of Income and Wealth, 22 (1976) 75-92.
 - i. Wealth Unit: household (term is used interchangeably with family)
 - ii. Time Period: 1966-68
 - iii. <u>Data</u>: Edwards, H.R., Drane, N.T., and Yates, R.C., <u>The Australian</u>

 <u>Survey of Consumer Expenditures and Finances 1966-68</u>, Macquarie

 University and University of Queensland
 - iv. Inequality Measure: Lorenz curve, Gini coefficient, decile shares

This study, which is based on the Macquarie Survey, analyses the distribution of family wealth in Australia, in terms of net household debts and assets. The distribution of wealth is found to be much more unequal than the distribution of income. However, the inequality of wealth-holding in Australia is found to be significantly lower than in the USA and the UK. Some attempts have been made to investigate the causes of inequality of wealth in terms of various components of wealth.

- 5. Raskall, P. 'The Distribution of Wealth in Australia 1967-72', Planning Research Centre, University of Sydney, 1977. Mimeographed.
 - i. Wealth Unit: individual
 - ii. Time Period: 1967-72
 - iii. Data: Estate Duty statistics
 - iv. Inequality Measure: percentile shares, Gini coefficient

This report is the most extensive and systematic of the Australian studies on wealth distribution to date. Having differentiated between

wealth - as the stock of net assets which a person possesses - and income, the author goes on to discuss in detail the sources of data and methods of estimation, the problems of valuing the components of wealth (e.g. land, consumer durables), and presents his results for the distribution of wealth. Further analysis shows the stratification of wealth holders by socio-economic and demographic grouping, and draws conclusions as to the change in inequality over time. A comparison of wealth distribution between Australia, Great Britain and the USA is also provided.

6. Raskall, P. 'Who's Got What in Australia: the Distribution of Wealth', Journal of Australian Political Economy, 2 (1978) 3-16.

This article is based on the premise that wealth rather than income is the prime determinant of economic wellbeing in capitalist society, and is aimed at dispelling the myth that Australia is a classless society. Essentially it presents in summary form the findings and conclusions of the report by the same author titled 'The Distribution of Wealth in Australia 1967-1972' (see annotation above). In addition the article includes a brief discussion of the arguments for a wealth tax.

- 7. Rubinstein, W.D. 'The Distribution of Personal Wealth in Victoria 1860-1974', Australian Economic History Review 19 (1979) 26-41. (Ab. prov.)
 - i. Wealth Unit: individual
 - 11. Time Period: 1860-74
 - iii. Data: probate valuations
 - iv. Inequality Measure: Gini coefficient, mean and median of distribution

This paper discusses the historical distribution of personal wealth in Victoria between 1860 and 1974. It uses the probate valuations of property left at death to ascertain the distribution of personal wealth for deceased men and women in 1860, 1880, 1908-09, 1923-24, 1938-39, 1953-54, 1962-63, and 1973-74. (The data for the two earlier years was drawn from the probate inventories in Melbourne, while the twentieth-century figures were taken from The Victorian Year-books for each year.) The Gini coefficient, median and mean amounts left at death were found for each of these years. It was found that there has been a historical trend to greater and greater wealth

equality and to higher median and mean estate values (though the picture when inflation is taken into account is less marked) and to a narrowing of the gap between the size of men's and women's estates. The use and drawbacks of probates for research of this type is also discussed.

8. Rubinstein, W.D. 'The Top Wealth Holders of New South Wales 1817-1939', Australian Economic History Review, 20 (1980) 136-152. (Ab. prov.)

The probate valuations of wealth left at death in New South Wales were systematically investigated from 1817 - the earliest date they may be used for this purpose - until 1939, and the fifty largest estates left per five-year period (e.g., 1880-84, 1885-89, 1890-94, etc.) determined. Biographical information about these top wealth-holders was collected from a wide variety of sources. Among the major conclusions is the relative 'poverty' of N.S.W.'s top wealth-holders compared to the richest men in America and Britain, the persistence of pastoralism and commerce (mainly export merchants and retailers) in the wealth structure, and the fact that pastoralism persists as the most significant element in the wealth structure to the Second World War. This picture is comparable to the wealth structure in the other Australian states.

9. Rubinstein, W.D. 'Wealth Distribution, the Wealthy and the Professional Elite in Australia', Deakin University, Open Campus Program, 1981.

This is a guided essay for students with long extracts from relevant works by others, written for the Deakin University 'Open Campus' course on 'Contemporary Australia', Questions discussed include the distribution of income and wealth, both historically and at present, the changing nature of elites and the 'visibility' of wealth, the role of the higher professions, especially the law and medicine, in contemporary Australia, and the role of pluralistic and empirical — although lengthy extracts are presented from a left-wing perspective, especially Connell and Irving's recent history of class in Australia — other points of view are presented; the aim is to get the student to consider differing perspectives, while informing him.

O. Rubinstein, W.D. 'Wealth in Australia', Quadrant, May 1980, pp.36-41.

This essay summarises the main results of the author's study of the wealthy in Australia, based upon the probate records, between 1817 and 1939, although some remarks on the post-war situation are made. The main findings are the small scale of great wealth in Australia compared with other industrial societies, the persistence of an Anglican-Presbyterian pastoral-commercial wealth elite in all states down to the Second World War, the lack of extraordinary levels of social mobility, and the mundane and even mediocre nature of the Australian wealth elite, so different from that in, say, 'Gilded Age' America. These characteristics are linked with a number of persistent elements in Australia's national character, including egalitarianism and the alleged Australian 'cultural cringe', It is also suggested that the characteristics of Australia's wealthy elite may have altered significantly since 1945, becoming more world-class.

- Il. Soltow, L., 'The Census of Wealth of Men in Australia in 1915 and in the United States in 1860 and 170', <u>Australian Economic History Review</u>, 12, No. 2 (1972) 125-141.
 - i. Wealth Unit: individual
 - ii. Time Period: USA: 1850, 1860 and 1970

Aust: 1915

- iii. Data: USA: decennial censuses

 Australian War Census (1915)
- iv. Inequality Measure: Gini coefficient

The USA censuses for 1850, 1860 and 1870 and the 1915 Australian War Census are used to determine the distribution of personal wealth. The results suggest that both countries were characterized by a sizeable degree of inequality. Gini coefficients are also calculated for each Australian state. Probate statistics for NSW and Victoria are used to demonstrate the existence of a linear relation between wealth and age.

4. Guide to Statistical Sources on Income and Wealth Distribution

The above text has referred in many places to statistical information on the distribution of income and wealth in Australia. This section aims to provide a basic guide to the major sources of those statistics.

A most useful paper which lists and discusses the major statistical sources on income and wealth distribution has been prepared by D. Ingles for the Department of Social Security. The paper briefly outlines the scope of each statistical source and discusses the methodological problems involved in their collection and use. The major results of the various surveys are presented along with a brief analysis of the discrepancies between the conclusions of various authors in the field. The report is in itself a useful introductory guide to the information available on the distribution of income and wealth.

Reference has been made throughout the text to data collected by the Australian Bureau of Statistics. The following is a list of bulletins in which the results of the surveys discussed have been published. The ABS catalogue number of each bulletin is also given.

Australia, Income Distribution, 1968-69, Parts 1, 2 and 3. Australian Bureau of Statistics, Canberra (6502.0, 6503.0, and 6504.0).

Australia, <u>Income Distribution</u>, 1968-69: <u>Consolidated and Revised Edition</u>.

Australian Bureau of Statistics, Canberra (6505.0).

Australia, Income Distribution, Australia, 1973-74, Parts 1, 2 and 3.

Australian Bureau of Statistics, Canberra (6502.0, 6503.0, and 6504.0).

Australia, Household Expenditure Survey, 1974-75, Australian Bureau of Statistics, Canberra.

Bulletin No. 1, An Outline of Concepts, Methodology and Procedures 6507.0 Bulletin No. 2, Preliminary Results 6508.0 Bulletin No. 3, Standard Errors 6509.0 Bulletin No. 4, Expenditure Classified by Income of Household 6510.0 Bulletin No. 5, Quarterly Expenditure Patterns 6511.0 Bulletin No. 6, Expenditure Classified by Household Composition 6512.0 Bulletin No. 7, Income Distribution 6513.0 Bulletin No. 8, Expenditure Classified by Selected Household Characteristics 6514.0

Australia, Household Expenditure Survey, 1975-76, Australian Bureau of

^{61.} Ingles, D., 'Statistics on the Distribution of Income and Wealth in Australia'.

Statistics, Canberra.

Bulletin No. 1, Summary of Results

6516.0

Bulletin No. 2, Expenditure Patterns for Households of

Differing Characteristics and Compositions

6517.0

Bulletin No. 3, Expenditure and Income by States and

Territories

6518.0

Bulletin No. 4, Expenditure by Income and Regions

6519.0

Australia, Income Distribution: Individuals (Preliminary), 1978-79.

Australian Bureau of Statistics, Canberra (6501.0).

Australia, Income Distribution: Families (Preliminary), 1978-79.

Australian Bureau of Statistics, Canberra (6506.0).

Australia, Income Distribution: Income Units (Preliminary), 1978-79.

Australian Bureau of Statistics, Canberra (6522.0).

Australia, 1976 Census, Population and Dwellings: Cross-Classified Tables, Australian Bureau of Statistics, Canberra (2426.0).

Australia, 1981 Census, Summary Characteristics of Persons and Dwellings, Australian Bureau of Statistics, Canberra (2443.0).

The above list of publications covers the ABS statistics which have been discussed in the major text of this paper. A useful reference source which would guide readers to all other publications of the Australian Bureau of Statistics is the ABS, Catalogue of Publications which is issued annually.

Annual Report of the Commissioner of Taxation. It is published in the Commonwealth Parliamentary Papers together with a paper titled Taxation

Statistics which is published as a statistical supplement to the Commissioner's Report. Comprehensive information on taxation revenue for all levels of government is also published annually (since 1969-70) by the Australian Bureau of Statistics in the bulletin titled Taxation Revenue (5506.0). Finally, the Budget Papers include a paper titled Income Tax

Statistics (Budget Paper No. 11) with information on both the current and immediately preceding year.

The results of the 1915 War Census are given in G.H. Knibbs, The Private Wealth of Australia and Its Growth, Commonwealth Australian Bureau of Statistics, Melbourne, 1918. Income statistics based on the 1933 Census

can be found in Volume II of R. Wilson, Census of the Commonwealth of Australia, 30 June 1933, Canberra.

The data collected in the Survey of Consumer Expenditures and Finances 1966-68 can be obtained directly from the Macquarie University Data Archives. The major findings of the survey and relevant statistics have also been published in Edwards, H.R., Drane, N.T. and Yates, R.C., The Australian Survey of Consumer Expenditures and Finances 1966-68, Macquarie University and University of Queensland.

Information collected by the Australian Bureau of Statistics in the National Survey of Income 1973 has been published with the major report of the Commission of Inquiry into Poverty. The relevant source is Commission of Inquiry into Poverty (First Main Report, Prof. R.F. Henderson, Chairman), Poverty in Australia, AGPS, Canberra, 1975. General results are presented as tabulations in Volume 2, while results relating specifically to the incidence of poverty in Australia are presented in Chapter 3 of Volume 1.

List of References on Poverty,Poverty Measurement and Income Support

- 1. Australia. Development Division, Department of Social Security, 'Poverty Measurement: A Summary of the Report of the Social Welfare Policy Secretariat', Social Security Journal, Dec. 1981, pp.45-54.
- Australia. Social Welfare Policy Secretariat. Report on Poverty Measurement (AGPS, Canberra, 1981).
- Approach', in Reports and Proceedings No. 2, Social Welfare Research Centre, University of New South Wales, 1980.
- Henderson, R.F. 'Poverty in Australia', Economy in Operation, 4 (1980)
- Policy Applications (Oxford University Press, New York, 1980).

- 6. Manning, I. 'The Henderson Poverty Line in Review', Social Security Journal, June 1982, pp.1-13.
- 7. Podder, N. The Economic Circumstances of the Poor, Australian Government Commission of Inquiry into Poverty (AGPS, Canberra, 1978).
- 8. Pritchard, H. and Saunders, P. 'Poverty and Income Maintenance Policy in Australia A Review Article', Economic Record, 54 (1978) 17-31.
- 9. Saunders, P. 'What's Wrong with the Poverty Line?' Australian

 Quarterly, Summer 1980, pp.63-73.
- 10. Stanton, D.I. 'The Henderson Poverty Line: A Critique', Social Security Journal, Dec. 1980, pp.14-24.
- 11. Ternowetsky, G.W. 'Poverty and Income: Different Approaches to the Meaning and Measurement of Poverty', in <u>Readings in Economics</u>, Max Grant (ed.) (Melbourne, Hagreen Press, 1981).
- 12. Tulloch, P. 'The Poverty Line: Problems in Theory and Application', in Reports and Proceedings No. 2, Social Welfare Research Centre, University of New South Wales, 1980.

6. List of References on Redistribution

- 6.1 General Articles on the Tax Transfer System
- 1. Groenewegen, P.D. 'Funding Government: the Size of the Public Sector and Taxation in Australia', Current Affairs Bulletin, Nov. 1977, pp.4-15.
- Saunders, P. 'Equity, Income Redistribution and the Australian Direct Tax Transfer System', <u>Economic Papers</u>, No. 62, Nov. 1979, pp.53-68.
- 3. Saunders, P. Equity and the Impact on Families of the Australian

 Tax-Transfer System. Melbourne, Institute of Family Studies, Monograph
 No. 2, 1982.

- 4. Podger, A., Raymond, J. and Jackson, W. 'Relationships Between Social Security and Income Tax Systems: A Practical Examination', Social Security Journal, June 1981, pp.1-17.
- 6.2 Taxation Policy
- 5. Australia. Department of Social Security, Development Division.
 'Taxation Expenditures: Submission to the House of Representatives
 Standing Committee on Expenditure', Canberra, 1982.
- 2. Bentley, P., Collins, D.J. and Drane, N.T. 'The Incidence of Australian Taxation', Economic Record 50 (1974) 489-510.
- 7. Cass, B. 'Taxation and Social Policy', Occasional Paper No. 8, Public Affairs Unit, University of New South Wales, 1983.
- 8. Collins, D.J. 'Australian Personal Income Tax Liabilities 1960-1980', Economic Papers, April 1982, pp.65-83.
- 9. Edwards, M. 'The Tax-Transfer Treatment of Married Couples', Australian Quarterly, 51 (1979) 46-53.
- 10. Groenewegen, P.D. 'Australian Taxation Policy', in <u>Surveys of</u>

 <u>Australian Economics</u>, Vol. 3, F.H. Gruen (ed.) (Sydney, George, Allen & Unwin, 1983).
- 11. Head, J.G. 'Tax Reform in Australia', Economic Papers, Oct. 1977, PP.1-14.
- Nov. 1979, pp.1-19.
- ¹³. Kakwani, N.C. 'Income Redistribution and the Australian Indirect Tax System', CAER Paper No. 28, Centre for Applied Economic Research, University of New South Wales, 1981.
- 14. Kakwani, N.C. 'Redistribution Effects of Income Tax and Cash Benefits

- in Australia', CAER Paper No. 18, Centre for Applied Economic Research, University of New South Wales, 1983.
- 15. Kakwani, N.C. 'Progressivity Index of Sales Tax on Individual Expenditure Items in Australia', Economic Record, (1983), in press.
- 16. Keens, C. and Cass, B. 'Fiscal Welfare: Some Aspects of Australian Tax Policy. Class and Gender Considerations', Reports and Proceedings No. 24, Social Welfare Research Centre, University of New South Wales, 1982.
- 17. Manning, I. and Saunders, P. 'On the Reform of Taxation and Social Security in Australia', <u>Australian Economic Review</u>, No. 1 (1978), pp.51-54.
- 18. Richardson, S. 'The Impact of the Australian Taxation System on the Distribution of Income', Economic Papers, 62 (1979) 42-52.
- 19. Saunders, P. 'An Australian Perspective on Wealth Taxation', Paper delivered to the 'Tax Reform Issues in Australia' Conference, Monash University, August 19-21, 1982.
- 20. Warren, N.A. 'Australian Tax Incidence in 1975-76: Some Preliminary Results', Australian Economic Review, No. 3 (1979), pp.19-30.
- ²¹. Warren, N.A. 'Who Bears the Australian Tax Burden?' Working Paper No. 40, Centre for Applied Economic Research, University of New South Wales, 1982.
- 6.3 Social Security Policy
- ²². Australia. Development Division, Department of Social Security. 'Developments in Social Security: A Compendium of Legislative Changes since 1908', Research Paper No. 20, Canberra, 1983.
- ²³. Cass, B. 'Unemployment and the Family: the Social Impact of Restructuring the Australian Labour Market', SWRC Reports and

- Proceedings No. 7, Social Welfare Research Centre, University of New South Wales, 1981.
- 24. Cass, B., Keens, C. and Wyndham, D. 'The Costs of a Child: Poverty, the Outcome of Private Provision', Working Paper, Social Welfare Research Centre, University of New South Wales, in press.
- 25. Collins, D.J. and Drane, N.T. 'The Incidence of Commonwealth Social Welfare Payments 1975-76 to 1980-81', Working Paper 8108, Centre for Studies in Money, Banking and Finance, Macquarie University, 1981.
- 26. Cox, J. and Foster, C. 'Commonwealth Spending on Income Support: A Summary', Social Security Journal Dec. 1980, pp.10-13.
- 27. Edwards, M. 'A Guaranteed Income Scheme: Implications for Women',
 Australian Quarterly, 48 (1976) 74-80.
- 28. Edwards, M. 'Financial Support for Parenthood', Australian Journal of Early Childhood, 5 (1980) 36-38.
- 29. Head, B.W. 'The New Right and Welfare Expenditures', in Australia and the New Right, M. Sawer (ed.) (Sydney, Allen & Unwin, 1982).
- 30. Ingles, D. 'Financial Social Security: An Analysis of the Contributory 'Social Insurance' Approach', Research Paper No. 19, Development Division, Department of Social Security, Canberra, 1982.
- Jackson, W. 'Universal and Selective Income Support: Some Equity and Efficiency Considerations', Social Security Journal, June 1982, Pp.14-31.
- 32. Jamrozik, A. and Hoey, M. 'Workforce in Transition: Implications for Welfare', SWRC Reports and Proceedings No. 8, Social Welfare Research Centre, University of New South Wales, 1981.
- ³³. Jamrozik, A., Hoey, M. and Leeds, M. 'Employment Benefits: Private or Public Welfare?', SWRC Reports and Proceedings No. 15, Social Welfare Research Centre, University of New South Wales, 1981.

- 34. Jordan, A. 'Changing Family Patterns and Social Security Protection: the Australian Scene', <u>Social Security Journal</u>, Dec. 1980, pp.25-36.
- 35. McAlister, C., Ingles, D. and Tune, D. 'General Revenue Financing of Social Security: the Australian Minimum Income Support System', Social Security Journal, Dec. 1981, pp.24-38.
- 36. Manning, I. 'The 1970s: A Decade of Social Security Policy', Australian Economic Review, No. 1 (1981) pp.13-19.
- 37. Richardson, S. 'A Comparison of Public and Private Sector Employee
 Compensation', in N.W. Fisher (ed.), Change and Public Sector Industrial
 Relations, Canberra CAE and Australian Institute of Public
 Administration, Canberra, 1981.
- 6.4 Housing Policy
- 38. Small, A. 'Effects of Housing Policies on Real Income Distribution',

 <u>Australian Quarterly</u>, Winter 1979, pp.54-65.
- 39. Yates, J. 'Tenure Choice and the Distribution of Income: Implications for Housing Policy', Australian Quarterly, Autumn 1982, pp.63-75.
- 40. Yates, J. 'An Analysis of the Distributional Impact of Imputed Rent Taxation', Economic Record, 58 (1982) 177-189.
- 41. Yates, J. 'An Analysis of Asset Holdings in Australia by Income Class', Working Paper No. 53, Department of Economics, University of Sydney, 1981.

AUSTRALIAN NATIONAL UNIVERSITY

SOURCE PAPERS IN ECONOMIC HISTORY

Copies of the Source Papers can be obtained, free of charge, from SP Distributions, Department of Economic History, RSSS, Australian National University, G.P.O. Box 4, Canberra, ACT 2601.

1984

- Rodney Maddock, Nilss Olekalns, Janette Ryan and Margaret Vickers, The distribution of income and wealth in Australia, 1914-1980: An No. 1 introduction and bibliography, April 1984, 75pp.
- N.G. Butlin and W.A. Sinclair, Australian gross domestic product 1788-1860: Estimates, sources and methods, May 1984, 25pp. No. 2

ئہ