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The Distribution of Top Incomes in Australia

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ABSTRACT

Using taxation statistics, we estimate the income share held by top income groups in Australia over the period 1921-2002. We find that the income share of the richest fell from the 1920s until the mid-1940s, rose briefly in the post-war decade, and then declined until the early-1980s. During the 1980s and 1990s, top income shares rose rapidly. At the start of the twenty-first century, the income share of the richest was higher than it had been at any point in the previous fifty years. Among top income groups, recent decades have also seen a rise in the share of top income accruing to the super-rich. Trends in top income shares are similar to those observed among other elite groups, such as judges, politicians, top bureaucrats and CEOs. We speculate that changes in top income shares may have been affected by top marginal tax rates, skill-biased technological change, social norms about inequality, and the internationalisation of the market for English-speaking CEOs.

Keywords: inequality, Australia
JEL Codes: D31, N37

I. Introduction

Sir Timothy Coghlan, Government Statistician of Australia, wrote in 1886 that "the contrast between rich and poor, which seems so peculiar a phase of modern civilisation, finds no parallel in these Southern lands" (quoted by Raskall, 1992, page 1). Did twentieth century Australia live up to this idealised view? How unequal were incomes at the start of the twentieth century? Has there been a long-run trend towards greater inequality? Or has Australia followed the same pattern as in other OECD countries, such as the United States and the United Kingdom, where income inequality declined over the first three-quarters of the century, and then increased in the final decades? We take such a long-run perspective of the Australian income distribution, focusing on the top incomes for whom information is available in the income tax returns.

Long-run trends are a source of fascination: "the paucity of survey evidence regarding inequality in Australia has not prevented speculation about long-run trends" (McLean and Richardson 1986, page 68). One major reason for making use of the income taxation statistics is that they do provide a quantitative basis for measuring the trends. Prior to federation in 1901, each of the six Australian colonies levied income tax, and from 1914 onwards, the federal government had its own income tax (it was not until 1941 that the state income taxes were abolished). The federal income tax returns were tabulated separately for individuals and corporations from 1921 onwards, and provide a rich source of information about individual incomes. (Since the tax year begins on July 1, any reference to a tax year should be taken to refer to the start of the tax year – for example, the 1980 tax year is the tax year starting July 1, 1980 and ending June 30, 1981.)

As Brown (1957) has noted, "The use of income tax statistics in Australia as a basis for size distribution of income has been found to raise many problems". But this is not a reason for dismissing the data. Brown himself used special data for 1942-43 that identified year of birth and category (employees, proprietors, and rentiers). These data were later re-analysed by Saunders (1993). Others have used taxation data for particular years. Lydall (1965 and 1968) used the data for tax years 1949, 1952, 1955, 1958, and 1962, to estimate the distribution of incomes among wage earners. Hancock

(1970) uses data from 1950 to 1966 (see Ingles, 1981, 17) for actual income, taxable income and after tax income. Harris (1970) used income tax data to examine the distribution for tax years 1955 and 1965; Ternowetsky (1979) used data from 1955 to 1974. As these dates illustrate, one of the attractions of income tax data is that they cover a long span of years. The long period covered has been exploited by Berry (1977), who used data for tax years 1922, 1932, 1942, 1952, 1962, and 1972, and by Smith (2001), who used data from 1916 to 1996 to measure tax progressivity. It is the long run of years covered by the income tax data that lead us to use them here. The taxation data provide estimates from 1921 to 2002 (and with some estimates for Victoria going back to 1912).

Our use of the income tax data does not mean that we are under-estimating their shortcomings. As a source of information about the distribution as a whole, taxation data suffer from the fact that the figures relate only to taxpayers; Butlin (1983) emphasises the importance of the exclusion of zero incomes. For this reason, most studies of the income distribution as a whole have employed other sources. Butlin (1983) uses variation in minimum wages across industries, and finds a fall in inequality (skilled:unskilled wage ratio) between 1901 and 1968. Jones (1975) and McLean and Richardson (1986) compare censuses conducted during World War I and the Great Depression with more recent surveys, and conclude that inequality fell from 1915-1968 and 1933-1980 respectively. In recent years, the major source has been household surveys, notably the Survey of Income and Housing (previously the Income Distribution Survey and the Survey of Income and Housing Costs): see, for example, Australian Bureau of Statistics (2005) and its predecessor reports. There have been a number of studies of trends in Australian inequality in the 1980s and 1990s including Bradbury, Doyle and Whiteford (1990), Saunders, Stott and Hobbes (1991), Saunders (1997 and 1998), Harding (1997) and Harding and Greenwell (2002). At the same time, we should also note that household surveys too have shortcomings, particularly when it comes to investigating the top of the distribution. They are affected by differential non-response and by incomplete response; the sample sizes often limit what can be said about groups such as the top 0.1%. The official results from the Survey of Income and Housing, for example, are typically presented in terms of the share of the top 20%. Moreover, surveys (and, of course, population censuses) in Australia have tended to be conducted periodically, not

annually, which means that considerable reliance may be placed on a single, not necessarily typical, year.

It is clearly important to study the relation between the evidence from different sources. Butlin (1983), for example, draws an explicit contrast between his use of the skilled/unskilled wage ratio with use of the income tax data on top incomes. Leigh (2005) attempts to deal with the exclusion of non-taxpayers by deriving a series on income distribution for males only, from 1942-2001 (a period when four-fifths of males paid tax). Comparing census data and tax data for years where both are available, he derives a distribution for non-taxpayers in terms of the average annual salary for male workers, and uses this to impute incomes to non-taxpayers in all years. Our focus here however is on the top of the income distribution. To establish estimates of the shares of top income groups, we need information on the total number of individuals and the total personal income, but we do not need to know the full shape of the distribution below the top ranges.

The methods used here are described in Section II; the findings are presented in Section III; and the conclusions are summarised in Section IV.

II. Data description

Definition of the Tax Unit and Control Total for Population

In Australia the tax unit is the individual. In what follows we take as the principal case that where the control population is that aged 15 and over, but also show the effects of taking 20+. In applying a constant age cut-off in determining the "adult" population, we follow Saez and Veall (2005) for Canada, and Piketty and Saez (2001, 2003) for the US.

The tax returns cover only part of the population and the rate of coverage has varied greatly over the century. The fraction of Australians aged 15 and over who filed a tax return was around 11-12% in 1921-22. The figure then dropped to 5-7% in 1923-38, but the general trend was upwards. By the end of World War II, one-third of the adult

population paid tax. Between 1950 and 2000, the fraction of the Australian population paying tax fluctuated between 50% and 62%.

Control Total for Income

Our aim is to provide a control total comparable with the definition of income applied in the data for top incomes, referred to here as Household Gross Returnable Income (HGRI). We are interested in the incomes of *households*, not the wider personal sector, which typically includes non-profit bodies serving persons (such as charities and trade unions) and life assurance and pension funds. We want to use income tax data that relate to persons and not to limited companies (for example in the early Australian data they cannot be separated). In this paper, we are interested in *Gross* income, in the sense of income before tax. We are interested in the total *returnable* income that would enter the tax-base if there were no exemptions (income after subtracting the exemptions is referred to as taxable income): "total income that would have been reported on tax returns, had everybody been required to file a tax return" (Saez and Veall 2005).

To estimate the control total, we start with the personal sector total income from the national accounts. We exclude non-household elements, such as charities, life assurance funds and universities. We have to exclude items not included in the tax base, such as employers' social security contributions, and non-taxable transfer payments. In Australia, transfers have been taxed to a significant degree since 1944. We therefore switch our personal income denominator to include transfers from this point onwards. The total also excludes non-household income and imputed rent. In order to give some idea of the sensitivity of the results, we also experiment with the effect of taking 90% of the constructed total. Using the calculated total income series, we find that the total recorded in the tax data is some 80% in the mid-1960s, when the number of calculated tax units was 60% of the population aged 15+ and 69% of the population aged 20+. The former figure, and our constructed total income, implies that non-taxpayers had on average an income of 40% of those filing. Again we take the constructed total as our central case, but experiment with taking 90% of the constructed total.

One reason for making a link with national accounts is that it helps ensure consistency over time. There are official series for total household income, and for transfers, for recent decades, but we have had to construct our own series for much of the period. This has involved assembling different elements from the official statistics and from academic sources, as described in Appendix B. For the years 1913-1927, we have resorted to use of GDP to extrapolate backwards. We hope our long-run personal income series will prove useful to future researchers.

Categories of Income and Deductions

We have already referred to two important differences between income tax systems - the definition of the tax unit, and the non-taxation of certain transfer payments – but there are other potential differences and these can affect the comparability of the estimates.

One potentially important difference lies in the deductions that may be made from gross income. Income tax systems differ in the extent of their provisions allowing the deduction of such items as interest paid, depreciation, pension contributions, alimony payments, and charitable contributions. (We are not referring here to personal exemptions.) Income from which these deductions have been subtracted is referred to here as “taxable income”; we refer to total income before deductions as “actual income”. As in other studies, our preferred variable is actual income, but the available published information is not always in this form. This difficulty arises both on account of the variable measured and on account of the variable according to which individuals are classified. These two are not always identical, in that we may have the distribution of variable Y_1 by ranges of variable Y_2. In Australia, the statistics from 1958 onwards are in our preferred form, relating to the distribution of actual income by ranges of actual income. From 1947 to 1957, the published figures give the distribution of taxable income by range of actual income; from 1944 to 1946, there are distributions of both actual and taxable income by range of actual income; prior to 1944 the taxation statistics related to the distribution of taxable income by range of taxable income. In order to create a continuous series, we use the ratio of the actual and taxable income top income shares in 1944 to 1946 to adjust the shares in the years

1921 to 1943 and 1947 to 1957.[1] However, it is possible that our adjustment procedure understates the effect on the top 10 percent and top 5 percent shares for the later years. Even in the adjusted series, both show a sharp jump between 1957 and 1958.

Another issue is the treatment of capital gains. The basic series presented for the US by Piketty and Saez (2001, 2003) excludes capital gains. In Australia, as with the UK, the approach has been different, with certain gains brought under the regular income tax (and therefore included in the estimates), but other gains taxed, since 1986, under a separate Capital Gains Tax.[2] Another feature is the extent to which there is an imputation system, under which part of any corporation tax paid is treated as a pre-payment of personal income tax. Payment of dividends can be made more attractive by the introduction of an imputation system, in place of a "classical" system where dividends are subject to both corporation and personal income tax. Insofar as capital gains are missing from the estimates but dividends are covered, a switch towards (away from) dividend payment will increase (reduce) the apparent shares. The effect of the introduction of imputation in Australia in 1987 is evident in the statistics.

Finally, we should note that, although there have been significant changes in the personal income tax in Australia, these have been less far-reaching than in a number of other countries (such as those that have changed the tax unit). As was summarised by Smith, "there were some significant changes to the nature of income taxation between 1942 and 1955, but between 1954-55 and 1969-70 the Australian income tax schedules and structure were substantially unchanged" (2001, page 264).

[1] The ratio of the top income shares produced using actual income to those produced using taxable income in these years is 1.016 for the 10% share, 1.020 for the 5% share, 1.033 for the 1% share, 1.042 for the 0.5% share, 1.073 for the 0.1% share, 1.091 for the 0.05% share, and 1.126 for the 0.01% share. Two things should be noted about this adjustment procedure. First, the years 1944 to 1946 are not necessarily typical. Second, the adjustment for the earlier period makes no allowance for the re-ranking necessary to give the distribution by ranges of actual income.

[2] Due to the manner in which Australian income tax statistics are tabulated, we have not attempted to estimate top income shares excluding capital gains.

III. Top Income Shares

Australian tax data are published in the annual Reports of the Commissioner of Taxation (see Appendix C). Table 1 shows the estimated shares of the top income groups for the period 1921 to 2002. As noted in the Introduction, census of population or, in Australia, household survey data, are only collected in certain years, which means that we may be placing a great deal of reliance on a single observation. McLean and Richardson, for example, not that "for the purpose of establishing trends in the income distribution over time, the fact that 1933 was a year of deep depression is a distinct drawback" (1986, page 73). It is a considerable advantage of the income tax statistics that we have observations for every year over a 80 year span.

Figure 1 shows the very top shares, about which little has previously been written. We tend conventionally to stop at the top 1%, but we need to look within this group as well. The top 0.5% may be a small number of people, but they receive a significant fraction of total income. In the 1920s their share was some 9%, and the share of the top 0.1% was around 4%, or 40 times their proportionate share. From 1920, these top shares fell significantly. The share of the top 0.1% had fallen to 1% in 1980. The share of the top 1%, which had begun at more than 10%, had fallen to under 5% by 1980. At the same time, the fall was far from steady. There were periods, such as the 1920s and 1933-1943, when the top shares were broadly constant.

The long run series allows us to see the impact on Australian top incomes of major events. McLean and Richardson use the 1933 census data to explore the impact of the Depression. They adjust for unemployment and under-employment, which has the effect of reducing the Gini coefficient substantially. At the same time, they note that the effect of declining capital income would operate in the opposite direction. From Figure 1, we can see that the top shares fell from 1928 to 1932, but then recovered about half of their loss. The Depression left only a limited permanent effect. Nor is the Second World War associated with a permanent fall in the share of the top 1%: the shares in 1947 were similar to those in 1939 (although the top 0.5% and 0.1% did show a decline). This stands in contrast to several other Anglo-Saxon nations: in Britain, Canada and the United States (though not in New Zealand) top income shares fell significantly during World War II. The immediate post Second World War period

saw the effects of the commodity price boom. There is a clear spike in 1950, mainly due to the peak wool prices which sheep farmers received in that year. Jones (1975, page 31, n26) noted this spike, comparing the figures for 1949 and 1950. This illustrates again how one could be misled by relying on a single observation. If we just compared 1921 and 1950, we might conclude that top shares had significantly increased. (The same pattern can be observed in New Zealand top incomes in these years: see Atkinson and Leigh 2005.)

Taken overall, the 60 years from 1921 were apparently a period of major decline at the top of the distribution. From 1980, however, the pattern reversed. By 1998 the top shares were back well above their 1958 levels. The share of the top 1%, which had fallen to under 5%, by the end of the 1990s was back to 8%. The share of the top 0.1%, which had been 1% at the end of the 1970s, has more than doubled. Again round this trend there is year-to-year variation. There is a distinct spike in 1988, following a large reduction in the top marginal tax rate (from 60% in 1985-86 to 49% in 1987-88) and the property price boom of the late-1980s.[3]

Is the upward trend continuing? As documented by Saunders (2003), there has been considerable debate as to whether income inequality in Australia increased in the second half of the 1990s. He studied this issue with the aid of data from the Survey of Income and Housing, concluding that the share of the top 20% increased between tax years 1995 and 2000. Our estimates provide additional evidence, which differs in that it relates to gross individual incomes, but which is complementary in that it gives detail about the very top. At the same time, the sharp fall in the top shares in 2001 warns against drawing conclusions from short-term changes about longer-term developments. But even if we discount the higher observations for 1999 and 2000, the direction of change seems clearly upwards. The share of the top 1% is about 1½ percentage points higher in 2002 than in 1996.

[3] The rise in the top 1 percent share during the late-1980s was entirely due to non-salary income (see Figure 8 below).

Supporting Evidence

What supporting evidence can we bring to bear? As a comparison, Figure 2 presents several other series. We show the salaries of members of federal parliament, top public servants, High Court judges and a typical CEO in the 50 largest companies – each presented as a ratio of the average worker's salary. Appendix D contains details on the derivation of these series. Each appears to support the general trends in our data. The relative earnings of members of parliament and top public servants declined from 1921 to the late-1980s, but rose through the 1990s. For example, the basic salary of a member of federal parliament, as a fraction of average earnings, was 5.6 in 1921, 2.3 in 1988, and 2.7 in 2002. The relative salary paid to High Court judges declined even more markedly from 1921 to 1985, and has since risen steadily. The most dramatic change is in the earnings of top CEOs. In 1992, the remuneration of a typical executive in Australia's top 50 companies was 27 times the wage of an average worker. By 2002, this had risen to 98 times the wage of an average worker (suggesting that CEO pay may be a significant factor explaining the rise in top Australian incomes during recent decades.).

Figure 2 also depicts the wealth share of the richest 200 Australians (0.001% of the 2002 population). The share of national wealth held by this group rose from 1% in 1984 to 2% in 1999, before falling slightly to 1.7 in 2002. The wealth share data also demonstrates a peak in the late-1980s, suggesting that the sharp rise in our top incomes series at this point is probably not an artefact of using taxation data. Another source of wealth data, not shown in Figure 2, is Podder and Kakwani (1976), who find that the wealth share of the top percentile group fell from 39% in 1915 to 9% in 1966, a much more dramatic decline than we observe in the incomes data.

Because our series starts only in 1921, Table 2 presents data from 1912-21 for the state of Victoria, Australia. Alone among the federal government and the other Australian states, Victorian income tax statistics in the 1910s separated individual taxpayers from corporations. Figure 3 shows the top income shares in both Victoria and Australia over the period 1912-31. Comparing the two series in overlapping years (1921-23), Victorian top income shares are very close to those in Australia as a whole. Assuming therefore that the Victorian series was representative of Australia as a

whole during the 1910s, this suggests that Australian top income shares fell, though only modestly, during World War I.

Distribution Within the Top Groups

How generalised were these changes among top income groups? The evidence of Piketty and Saez for the US (2003, Figure II) shows that the rise of the 1980s and 1990s was concentrated at the top. Whereas the share of the top 10% as a whole increased by some 10 percentage points, that of the second vintile (i.e. those in the top 10% but not the top 5%) was essentially stable. Figure 4 shows for Australia the second vintile and the shares of those in the top 5% but not the top 1% (referred to as the "next 4%"). It should be noted that the Australian tax data do not allow us to estimate the share of the top 5% between 1923 and 1938. In the graphs, where there are missing data, we interpolate the series linearly, but this is clearly unsatisfactory, as may be seen by considering what would have been missed in the case of the share of the top 1% (see Figure 1).The scale on Figure 4 is the same as that for Figure 1, making apparent that in 1945 the top 1% had approximately the same amount of income as the second vintile. There is very considerable inequality within the top 10%. Leaving aside the limited data for the 1920s and 1930s, we can see that these "next" shares were declining from 1941 to 1957. It may be observed that the Korean War wool boom (1950) and the property boom (1988) had a positive effect only at the very top. As noted above, the increase from 1957 to 1958 may be at least partly due to our adjustment ratio being too low. After 1958, the downward trend continued for the next 4% but not for the second vintile. Equally, after 1980, there is little increase for the second vintile. For the next 4%, the share rose from 10.5% in 1980 to 12.1% in 2002.

Looking at the distribution *within* the top 10% has the advantage that the estimates do not depend on the control total for income. Figure 5 shows the share of the top 1% within the top 10% and the share of the top 0.1% within the top 1%. Also shown for reference, as a solid line without markers, is the share of the top 10% in total income (which does depend on the control total). It appears that in the 1940s and again in the 1990s the distribution within the top 1% is as relatively unequal as the overall distribution: the top 10% of the top 1% have a similar share to the top 10% overall. The "within" distribution got steadily less unequal from 1921 to 1982, and then

returned: by 1998 the share of the top 0.1% within the top 1% was similar to the level at the end of the 1930s. Figure 6 shows the shares within shares in the form of Pareto-Lorenz coefficients.[4] The Pareto-Lorenz coefficient for the share of the top 0.1% within the top 1% peaks in 1974 at 3.2, before declining to 2.1 in 2002 – only marginally above its value in 1921. The coefficient for the share of the top 1% within the top 10% peaks in 1982 at 3.9, before declining to 2.2 in 2002, only slightly higher than in 1941, the first year for which it can be calculated.

How sensitive are these results to changes in the control totals? Suppose first we try to reduce the estimated shares. On average, changing the population control to those aged 20 and over (a lower bound for the population total) reduces our estimate of the share of the top percentile group by 0.5 percentage points, and the share of the top decile group by 1.9 percentage points. Going in the opposite direction, maintaining a population control total of those aged 15 and over, but reducing the personal income denominator to 90% of personal income increases our estimate of the top percentile group share by an average of 0.7 percentage points, and the share of the top decile group by 3.1 percentage points. These calculations mean that the share of the top 1% in, for example, 1960 would be 6.6% on a lower bound calculation and 7.9% on an upper bound.

What do we know about the sources of top incomes? From 1954 onwards, it is possible to separate salary and wage income from other income sources. Figure 7 charts the fraction of income that came from salary and wages earnings for three top income groups – the top 10%, 1% and 0.1%. From the mid-1950s until the end of the 1970s, the proportion of income derived from salary and wages grew for all three top income groups.[5] Over the last two decades of the twentieth century, salary and wage income fluctuated somewhat, but the proportion of salary and wage income for top income groups in 2002 was quite similar to the proportion in 1980. Figure 8 breaks down the top 1% into salary and non-salary components. The decline in top income

[4] Defined as $1/[1 + \text{Log}_{10} [S_1/S_{10}]]$ for S1 in S10.

[5] Unfortunately, during the earlier period (1929-30 to 1953-54), Australian taxation statistics were only separated into income from "personal exertion" (wages, salaries, and self-employment income) and "property". Also, because the Australian taxation statistics do not contain information on the number of taxpayers reporting wage income, it is not possible to use these data to compile a separate series on the distribution of wage income, as has been done for a number of other countries, including Canada and the U.S.

shares that occurred from the mid-1950s until the late-1970s was due entirely to a reduction in non-salary income accruing to the top 1%.[6] During the 1980s and 1990s, both salary and non-salary income have contributed approximately an equal amount towards the rising share of the top 1%, with non-salary income (not surprisingly) fluctuating more than salary income.

IV. Concluding Remarks

The share of income accruing to the very top groups is of importance both because their share of the total is significant and on account of the economic power which it conveys. They are also a "marker" of social and economic evolution. Tracing these shares over much of the twentieth century provides insights into the long-run development of societies and the impact of events such as the World Wars and the Great Depression.

The path of top income shares in Australia has much in common with four other Anglo-Saxon countries: Canada (Saez and Veall, 2005), New Zealand (Atkinson and Leigh 2005), the United Kingdom (Atkinson 2005, 2006b) and the United States (Piketty and Saez 2001, 2003). As we show in our comparison of these five Anglo-Saxon countries (Atkinson and Leigh 2004), each saw a decline in top income shares in the three decades after World War II, followed by a sharp rise from the mid-1970s onwards. At the start of the twenty-first century, the income share of the richest 1 percent of Australians was higher than it had been at any point since 1951, while the share of the richest 10 percent was higher than it had been since 1949. The rapid rise in Australian CEO salaries during the 1990s suggests that much of this recent increase may have been caused by higher executive pay, possibly driven by the internationalization of the market for CEOs. Another factor is Australia's top marginal tax rates, which have steadily fallen over the past three decades: from 69% in 1970, to 60% in 1980, and 47% in 1990. Beyond this, it is possible that skill-biased technological change, and evolving social norms about inequality, may have helped underpin the rise of the rich.

[6] Using taxation statistics, Lydall (1965) noted that the ratio of wages for those in the top percentile group to median wages grew during the 1950s. But as Figure 8 shows, this trend was swamped by the fall in non-salary income for those in the top percentile group.

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Appendix A: Sources of Population and Tax Unit Totals

Australian population data are from Australian Bureau of Statistics, Australian Historical Population Statistics, Cat No 3105.0.65.001, Table 18. Figures are provided on an annual basis for 1921 onwards, and are converted into a tax-year basis by simply averaging the figures for the two calendar years covered by a tax year. Since the tax unit in Australia is the individual, no further conversion is required.

Population data for the state of Victoria are from Australian Bureau of Statistics, Australian Historical Population Statistics, Cat No 3105.0.65.001, Table 23. Figures are available from the censuses of 1911, 1921 and 1933, and are linearly interpolated for intervening years.

Our population data are provided in Appendix Table 1.

Appendix B: Derivation of personal income series

In this paper, two personal income series are presented – one with social transfers, and another without transfers. Until tax year 1943, transfers were largely untaxed. From 1944 onwards, transfers were taxed. We therefore switch our personal income denominator to include transfers from 1944 onwards, but include both series for the entire period. Australia switched from pounds to dollars in the mid-1960s, at the ratio of £1=$2. While some of our original sources are in pounds, we present all our tables in millions of dollars.

Starting from the most recent period, for the years 1959 to 2001, we use Australian Bureau of Statistics, *National Accounts, 5204.0*, Table 46. We include compensation of employees (which does not include imputed interest on pension funds), interest, dividends, and gross mixed income, less other interest payable and consumption of fixed capital. For the series with transfers, we add workers' compensation and social assistance benefits. We are grateful to Carl Obst of the ABS for assistance in determining the correct series to use.

For the period before 1959 we have used household national accounts data supplied by the Australian Government to the United Nations. Years from 1946 to 1950 are from United Nations, 1955, *National Income Statistics*, Series H7, Table 4, p.50. For 1951 to 1952, and 1954, we use United Nations, 1958, *Yearbook of National Accounts Statistics*, Table 2, p.5. For 1953 and 1955 to 1959, we use United Nations, 1966, *Yearbook of National Accounts Statistics*, Table 3, p.10. We use the same line items from the 1955, 1958 and 1966 publications: compensation of employees (subtracting 4% to account for imputed interest from pension funds), income from unincorporated enterprises, rent and interest, and dividends. None of these publications includes social transfers, so we use figures on Commonwealth social spending, from Alan Barnard, 1986, "Some Government Financial Data", Australian National University Source Papers in Economic History, No 13, Table 5, p.25, column D. The series are linked together as follows. The Australian Bureau of Statistics data is set at a ratio of one, and linked to the United Nations (1966) data using the ratio of the two series during the overlap period. The United Nations (1958) figures are then linked to the *adjusted* 1966 series using the overlapping years between the 1958 and 1966 series.

The source for 1938 to 1946 is the United Nations (1950), *National income statistics of various countries, 1938-48*, Table 5, p.32. We use wages and salaries (subtracting 4% to account for imputed interest from pension funds), pay of forces, income from unincorporated businesses and farms, rent and interest, dividends, and deferred pay of members of forces. For the series with transfers, we include cash social service benefits. The series is linked in the way described above. Prior to World War II, data on personal income are contained in Clark and Crawford, 1938, *The National Income of Australia*, Sydney: Angus & Robertson, p.13. Clark and Crawford provide figures for 1928 to 1933, and we use rows A to I of their table. We have also used their "tentative" estimate for 1934 in Appendix A. This leaves a "gap" from 1935 to 1937. The figure for 1938 derived from UN (1950) is 29.4% higher than that for 1934 derived from Clark and Crawford. The "net national product at market prices" series from Butlin (1962), Table 1, shows a rise of 30.8%. We therefore use the Butlin series to interpolate. Finally, for the period 1913 to 1927, we extrapolate backwards using the Butlin series.

We also present a series on personal income (excluding transfers) for the state of Victoria for the years 1912 to 1921. For the years 1913-14 onwards, we use as our base the Australian personal income series without transfers, as derived above. This is compared against GDP data from Butlin (1977, p.41) to calculate a ratio of personal income to GDP (72.3%). We then use Cashin (1995, Table 1, p.26), and compare Cashin's Victorian GDP figures for 1900, 1910, and 1920 with data for total Australian GDP from Butlin (1962, pp.460-461) and Butlin (1977, p.41). Across this period, we find that Victorian GDP is a constant 33% of Australian GDP. We therefore calculate that Victorian personal income is 23.8% (0.723*0.33) of Australian GDP, and accordingly construct the Victorian personal income series from Butlin's Australian GDP figures.

Our personal income series are provided in Appendix Table 2.

Appendix C: Sources of Income Tax Data

The paper relies solely on tabulated data, which means that we have to interpolate. Typically, for each income range, there is information on the number of taxpayers and the total amount of taxable income. In order to calculate the shares of specified percentages of the population, we have used the *mean-split histogram*. Assuming, as seems reasonable in the case of top incomes, that the frequency distribution is non-decreasing, then upper and lower bounds can be calculated that are limiting forms of the split histogram, with one of the two densities tending to zero or infinity - see Atkinson (2006a, Appendix C). Guaranteed to lie between these is the histogram split at the interval mean with sections of positive density on either side. We have not interpolated shares that lie in the top open interval. In the case of Australia, Saunders (1998, 28) checked using micro data from income distribution surveys in 1989 and 1995, and concluded that use of grouped data made "very little difference". Micro data samples of taxpayers are not presently available in Australia, as they are in some other countries.

Data on individual taxpayers are available from 1921 (prior to that date, the data included companies as well as individuals). Estimates are taken from the annual *Report of the Commissioner of Taxation* (see Appendix Table 3). Tabulations have typically been published with a three-year lag from the end of the financial year. From tax year 1994-95 onwards, data is available in electronic form from the Australian Taxation Office. Until 1957, the Australian taxation statistics presented tabulations of taxable income. From 1958 onwards, this switched to actual income.

Data for the state of Victoria is derived from the state yearbook (see Appendix Table 4). From 1912 onwards, figures are tabulated for Personal Exertion, Property, Combined, and Companies. We sum the first three categories to derive a consistent series for the top incomes of individuals. In the calendar years 1912, 1913 and 1914, Victorian figures were presented on a calendar year basis, before switching to a standard Australian financial year (1 July to 30 June) from the 1914 tax year onwards.

Appendix D: Comparison groups for Australian top income shares

Average annual "money wage" series to 1982 from Withers, Endres and Perry (1985, 204-05). From 1983 onwards, we use the electronic version of Australian Bureau of Statistics, Average Weekly Earnings, Australia, 6302.0, Table 3. We use the figure for "total earnings", average across each year, and multiply this figure by 52 to arrive at an annual estimate.

Data on salaries of top public servants supplied by Lisa Cox, of the Department of Employment and Workplace Relations. We define top public servants as the highest pay band in the Senior Executive Service (Band 20 from 1926-59, Band 6 from 1963-89, and the Maximum in Band 3 from 1990-2000).

Remuneration of High Court judges from Winterton (1995, 76) and Blackshield, Coper and Williams (2001, 597). Figures are for a puisne justice of the High Court, and include allowances.

CEO salary data is the average cash remuneration of a CEO in Australia's 50 leading companies, from the John V Egan Associates Pty Ltd Data Base, cited in Shields, O'Donnell and O'Brien (2003, p.3). Note that their average pay denominator differs somewhat from ours.

Total wealth of the richest 200 people in Australia is from *BRW Magazine*'s annual survey. Total wealth in Australia is from Australian Treasury (2003, Table A1(a)). Note that our wealth denominator differs from that used by BRW (for example, compare Shann 1998).

Each of these series is presented in Appendix Table 5.

Table 1: Australia - Top income shares

	10%	5%	1%	0.5%	0.1%	0.05%	0.01%
1921		19.43	11.63	8.55	3.97	2.80	1.24
1922		17.65	10.68	7.91	3.57	2.45	
1923			11.76	9.08	3.98	2.80	
1924			11.67	8.84	4.25		
1925			11.31	8.58	3.99	2.81	
1926			11.07	8.42	3.88	2.72	
1927			11.68	8.56	3.86	2.64	
1928			11.85	8.92	4.26	3.16	
1929			10.67	7.91	3.58	2.50	
1930			9.75	7.15	3.20	2.22	
1931			9.34	6.93	3.07	2.11	0.85
1932			9.27	6.91	3.08	2.14	0.90
1933			10.32	7.73	3.53	2.46	
1934			10.36	7.79	3.49	2.44	
1935			10.54	7.77	3.49	2.42	
1936			11.28	8.25	3.71	2.56	
1937			9.83	7.17	3.19	2.20	0.89
1938			10.39	7.61	3.41	2.36	0.97
1939		20.71	10.73	7.81	3.50	2.44	1.04
1940		20.57	10.30	7.48	3.37	2.35	0.99
1941	34.61	23.67	10.78	7.68	3.34	2.32	0.94
1942	34.12	23.26	10.43	7.34	3.11	2.12	0.85
1943	34.23	23.42	10.45	7.32	3.09	2.12	0.86
1944	31.25	21.09	9.03	6.22	2.49	1.66	0.64
1945	28.75	19.56	8.44	5.79	2.31	1.55	0.62
1946	31.61	21.76	9.51	6.52	2.59	1.72	0.66
1947	33.10	23.41	10.62	7.31	2.92	1.94	0.73
1948	32.77	23.35	10.80	7.40	2.89	1.96	0.73
1949	32.82	23.66	11.26	7.89	3.31	2.23	
1950	31.53	25.56	14.13	10.22	4.47		
1951	26.65	18.87	9.08	6.23	2.53	1.67	
1952	26.31	19.51	8.99	6.11	2.44	1.57	0.55
1953	26.10	18.70	8.71	5.97	2.43	1.58	0.58
1954	25.77	18.10	8.06	5.48	2.19	1.42	0.52
1955	25.53	17.49	7.54	5.10	2.01	1.29	0.48
1956	25.69	17.84	7.91	5.42	2.16	1.39	0.51
1957	23.99	16.33	7.04	4.75	1.84	1.19	0.43
1958	29.77	19.41	7.44	4.86	1.76	1.14	0.41
1959	29.85	19.44	7.39	4.82	1.75	1.12	0.41
1960	29.60	19.14	7.09	4.58	1.62	1.04	0.37
1961	29.71	19.20	7.10	4.58	1.65	1.06	0.40
1962	30.22	19.62	7.23	4.64	1.64	1.04	0.38
1963	30.35	19.84	7.36	4.72	1.65	1.05	0.37
1964	29.45	18.95	6.84	4.37	1.52	0.96	0.34
1965	29.22	18.68	6.69	4.27	1.46	0.92	0.31
1966	28.51	18.19	6.47	4.12	1.41	0.89	0.31
1967	28.66	18.29	6.58	4.23	1.51	0.98	0.38
1968	28.36	17.99	6.38	4.06	1.40	0.89	0.32
1969	27.85	17.61	6.25	4.00	1.42	0.92	0.36
1970	27.65	17.30	5.92	3.74	1.26	0.79	0.27
1971	28.24	17.59	5.92	3.70	1.25	0.78	0.27

Table 1: Australia - Top income shares

	10%	5%	1%	0.5%	0.1%	0.05%	0.01%
1972	27.80	17.50	6.06	3.81	1.29	0.81	0.28
1973	26.74	16.73	5.67	3.54	1.17	0.73	0.24
1974	25.87	15.87	5.22	3.24	1.06	0.65	0.21
1975	25.54	15.65	5.13	3.22	1.10	0.68	0.23
1976	25.20	15.35	4.99	3.11	1.05	0.65	0.21
1977	25.15	15.25	4.92	3.08	1.06	0.67	
1978	25.01	15.14	4.87	3.02	1.03	0.65	
1979	25.17	15.20	4.83	2.97	1.02	0.65	
1980	25.39	15.31	4.79	2.95	1.02	0.66	
1981	25.31	15.15	4.61	2.83	0.96	0.62	
1982	25.82	15.44	4.67	2.87	1.00	0.63	
1983	25.32	15.16	4.68	2.89	1.02	0.66	
1984	25.50	15.25	4.75	2.96	1.03		
1985	25.93	15.63	5.02	3.19	1.14	0.75	0.35
1986	26.61	16.17	5.39	3.48	1.29	0.85	0.36
1987	28.66	17.94	6.67	4.53	1.89	1.41	0.60
1988	30.28	19.84	8.41	6.04	2.99	2.13	0.98
1989	27.64	17.46	6.43	4.29	1.79	1.31	0.51
1990	27.66	17.37	6.34	4.24	1.79	1.33	0.55
1991	28.22	17.70	6.41	4.28	1.81	1.35	0.57
1992	28.52	17.95	6.55	4.38	1.87	1.37	0.57
1993	29.40	18.66	6.96	4.69	2.08	1.46	0.61
1994	29.42	18.87	7.13	5.10	2.56	1.65	0.71
1995	29.13	18.76	7.23	4.95	2.14	1.52	0.73
1996	29.16	18.77	7.24	4.93	2.07	1.44	0.65
1997	30.41	19.73	7.81	5.38	2.32	1.64	0.75
1998	30.11	19.63	7.84	5.43	2.37	1.67	0.76
1999	31.48	20.95	8.84	6.29	3.04	2.15	
2000	31.28	20.98	9.03	6.44	3.06	2.24	
2001	30.61	20.33	8.31	5.75	2.51	1.75	
2002	31.34	20.90	8.79	6.11	2.68	1.87	

Source: Authors' calculations.

Note: Figures are for tax years (eg. 1921 denotes the tax year 1 July 1921 to 30 June 1922).

Table 2: Top income shares – Victoria, Australia

	10%	5%	1%	0.5%	0.1%	0.05%	0.01%
1912			12.69	9.48			
1913			11.65	8.64			
1914				8.17	3.87		
1915				7.70			
1916				6.62	3.28		
1917				6.88			
1918				7.06			
1919			12.55	9.70			
1920			10.15	7.43			
1921			9.85	7.10			
1922							
1923		19.04	11.42	8.13	3.49	2.40	

Source: Authors' calculations.

Note: Figures for 1912 and 1913 are for calendar years. Figures for 1914 onwards are for tax years (eg. 1914 denotes the tax year 1 July 1914 to 30 June 1915).

Figure 1: Shares of top 1%, 0.5% and 0.1%

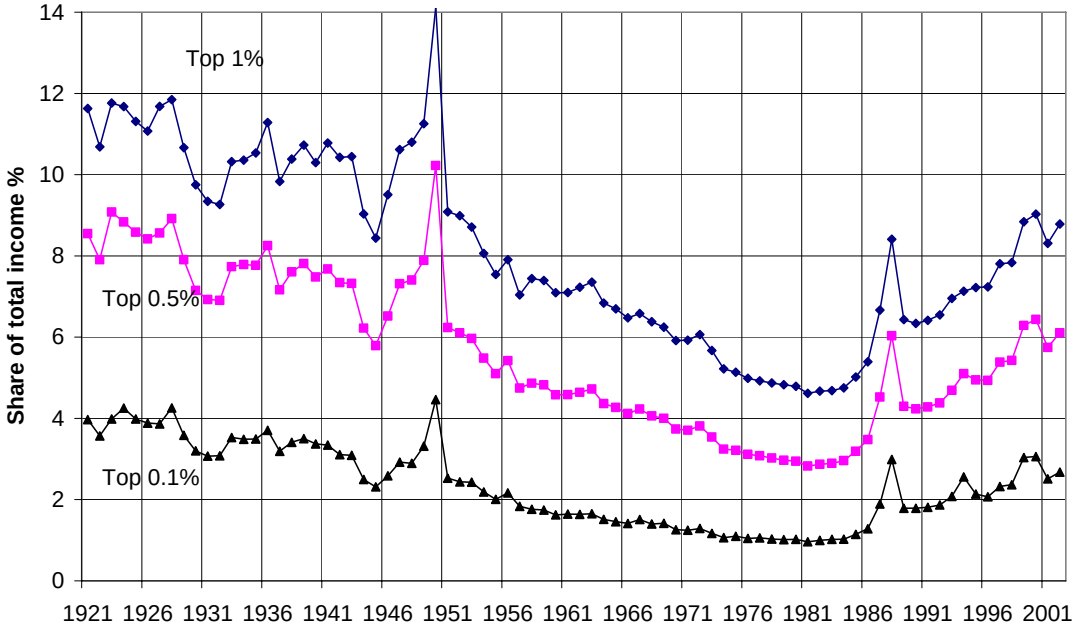


Figure 2: Australia - Comparison with income trends for top public servants, judges, top CEOs and wealth share of Richest 200

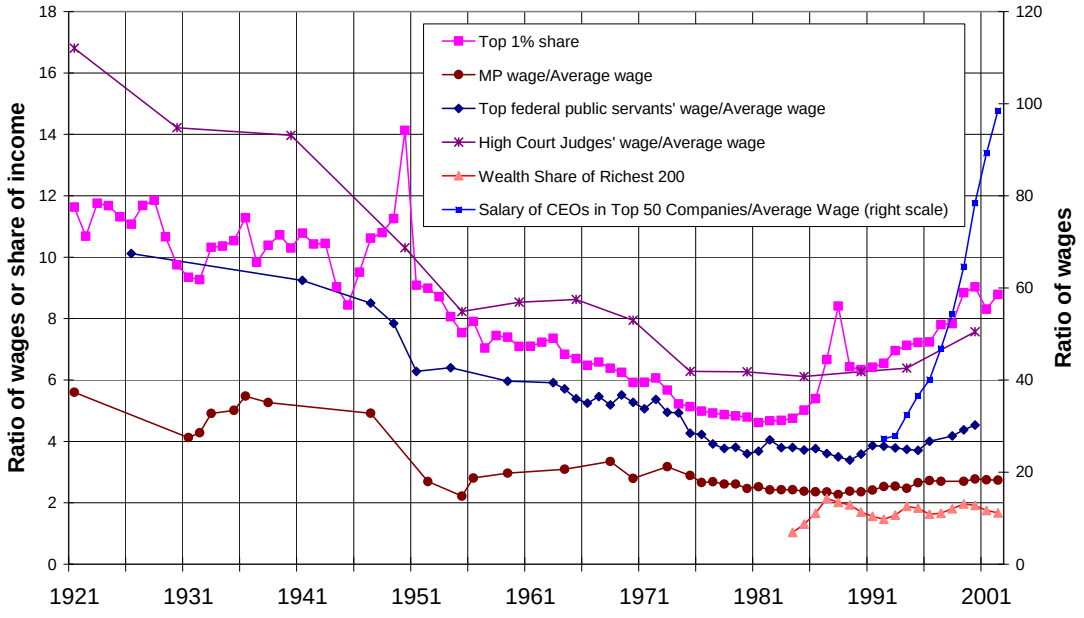


Figure 3: Comparing Victoria 1912-1923 with Australia 1921-31

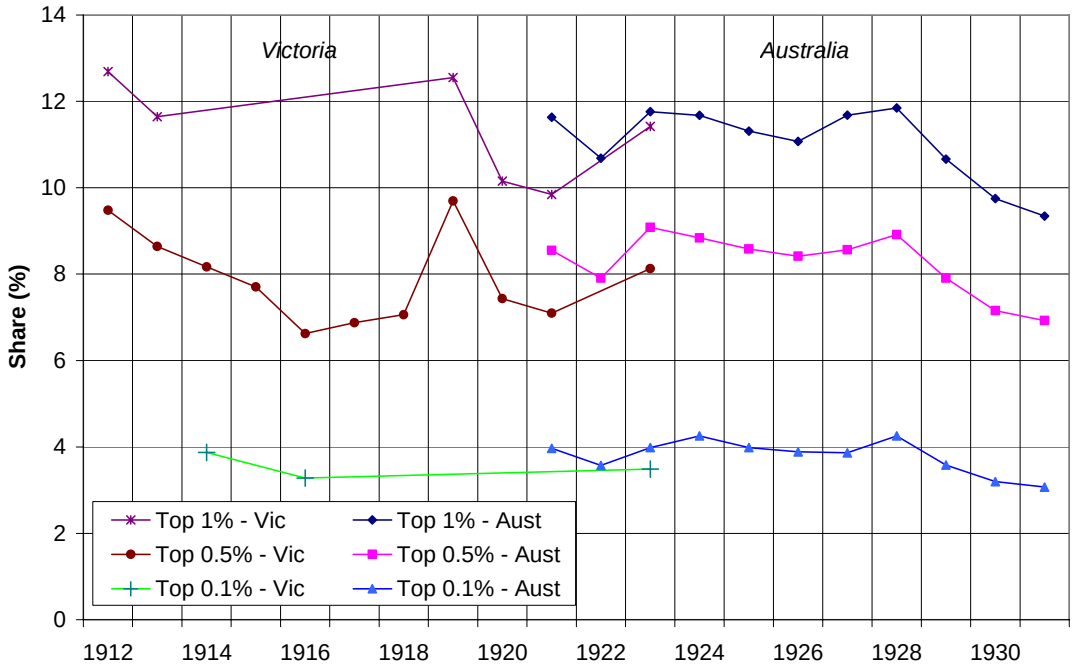


Figure 4: Share of Next 4% and Second Vintile

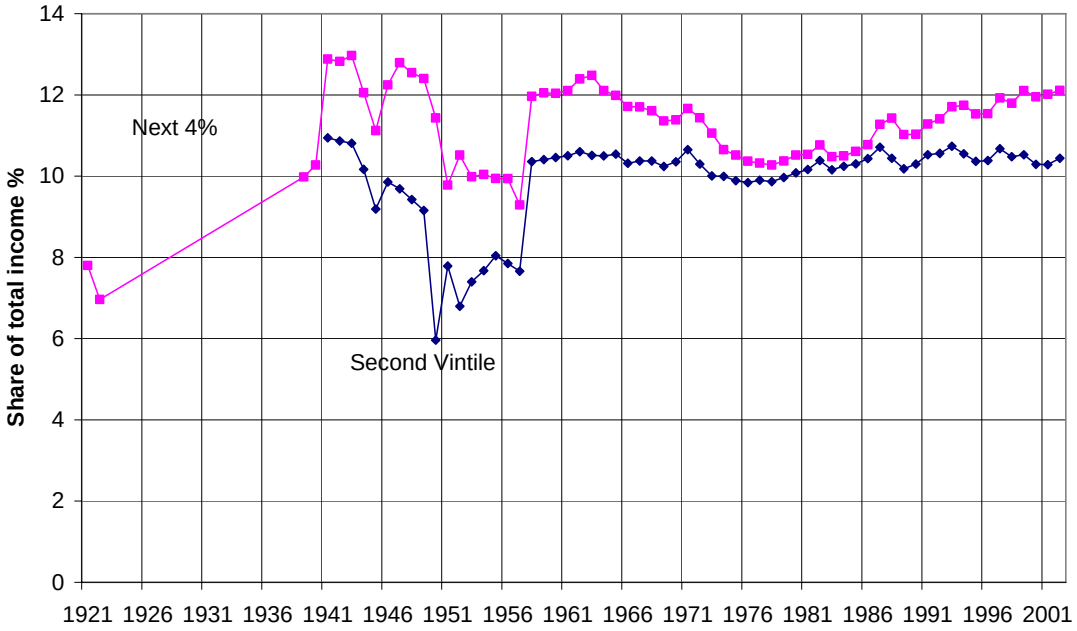


Figure 5: Shares within Shares

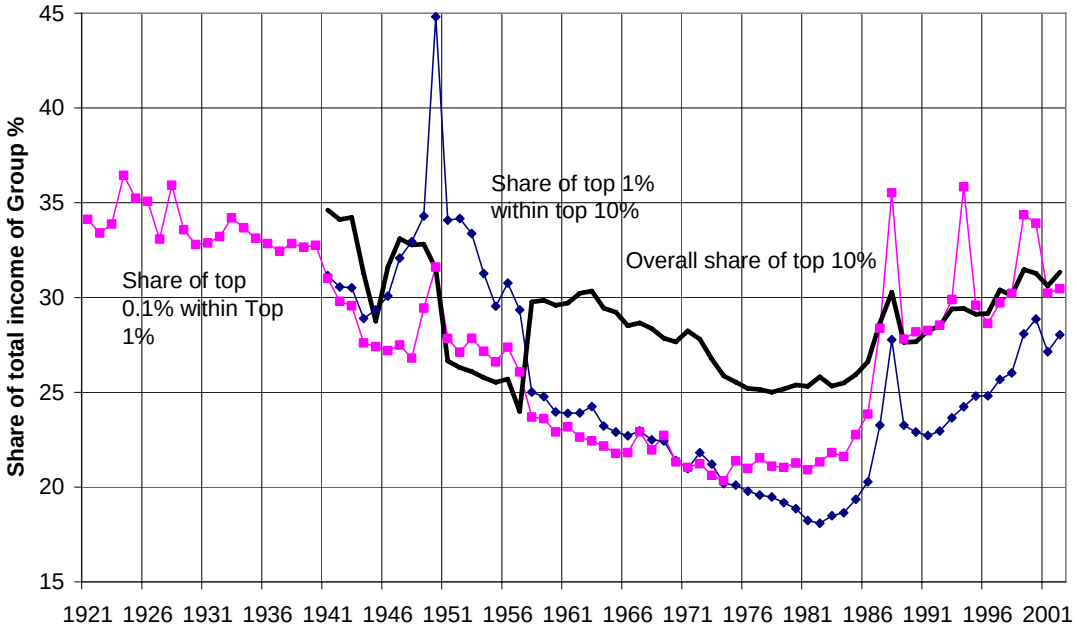


Figure 6: Pareto-Lorenz coefficients

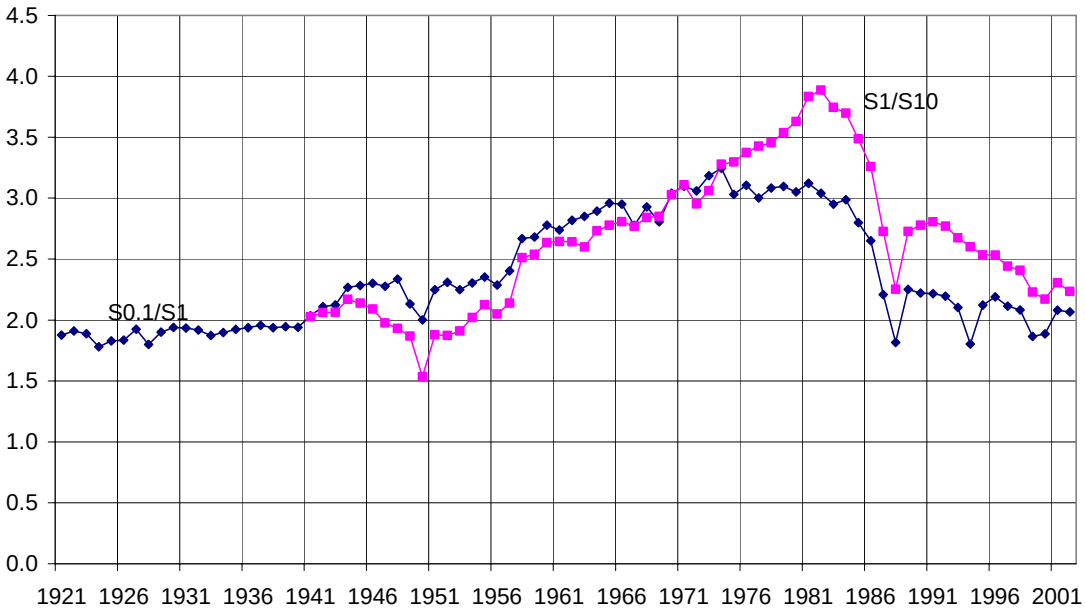


Figure 7: Fraction of Income from Salary and Wages

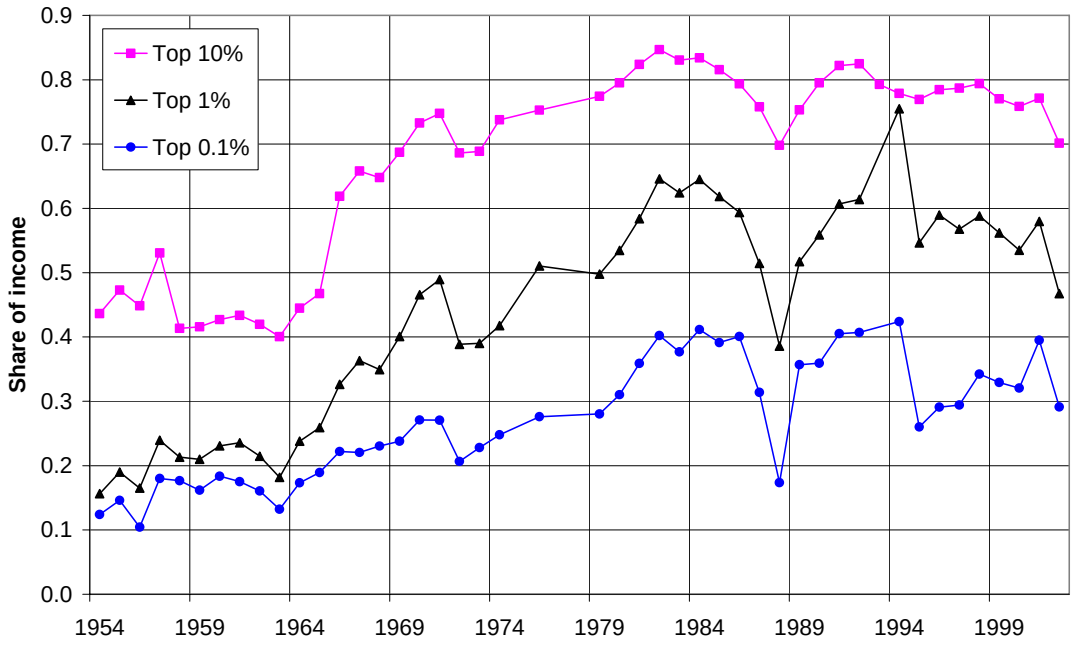
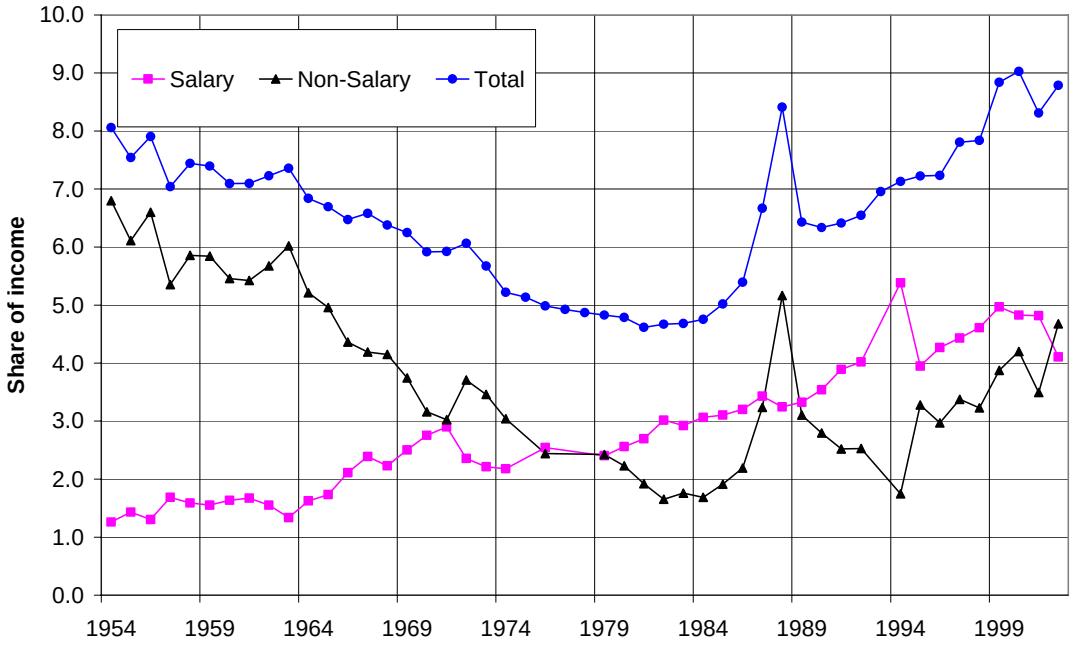


Figure 8: Contributions to Share of Top 1%



Appendix Table 1: Population Totals for Australia

Tax year starting 1 July	Australia – individuals 15 and over	Australia – individuals 20 and over	Australia – taxpayers	Victoria – individuals 15 and over	Victoria – individuals 20 and over	Victoria – taxpayers
1912	3,094,463	2,643,721		925,733	790,701	40,976
1913	3,164,345	2,711,396		942,060	807,520	44,172
1914	3,234,227	2,779,072		958,387	824,338	40,581
1915	3,304,109	2,846,747		974,714	841,157	45,084
1916	3,373,991	2,914,423		991,041	857,975	43,424
1917	3,443,873	2,982,098		1,007,368	874,793	49,889
1918	3,513,754	3,049,774		1,023,695	891,612	50,626
1919	3,583,636	3,117,449		1,040,022	908,430	73,548
1920	3,653,518	3,185,125		1,056,349	925,249	87,486
1921	3,723,400	3,252,800	457,632	1,072,676	942,067	97,470
1922	3,809,400	3,327,200	433,144	1,095,189	962,091	
1923	3,907,800	3,410,500	193,605	1,117,702	982,114	127,818
1924	4,005,000	3,492,500	215,693			
1925	4,110,100	3,580,300	225,398			
1926	4,207,200	3,661,500	245,107			
1927	4,319,300	3,755,500	257,939			
1928	4,427,600	3,847,600	260,500			
1929	4,519,700	3,921,700	322,799			
1930	4,598,000	3,986,400	296,765			
1931	4,668,600	4,052,200	230,749			
1932	4,737,400	4,119,200	221,867			
1933	4,805,200	4,191,200	220,240			
1934	4,866,900	4,263,300	248,508			
1935	4,934,100	4,336,900	245,349			
1936	5,010,700	4,403,600	290,224			
1937	5,085,300	4,470,100	332,380			
1938	5,163,100	4,536,600	346,441			
1939	5,238,900	4,602,300	623,375			
1940	5,319,800	4,677,400	785,019			
1941	5,390,000	4,753,600	1,493,053			
1942	5,446,700	4,819,400	1,962,756			
1943	5,496,600	4,874,700	2,049,694			
1944	5,544,700	4,926,900	2,038,465			
1945	5,594,100	4,985,300	2,051,248			
1946	5,638,600	5,038,900	2,438,498			
1947	5,675,200	5,090,400	2,643,440			
1948	5,734,100	5,165,800	2,833,415			
1949	5,847,000	5,290,000	3,051,476			
1950	6,002,800	5,451,100	3,263,373			
1951	6,135,600	5,587,200	3,420,265			
1952	6,252,700	5,692,200	3,474,922			
1953	6,336,200	5,762,800	3,549,137			
1954	6,417,200	5,825,500	3,685,644			
1955	6,528,200	5,914,800	3,811,004			
1956	6,655,600	6,019,100	3,901,094			
1957	6,782,800	6,118,700	3,921,292			
1958	6,891,000	6,206,100	4,037,862			
1959	7,027,200	6,303,200	4,199,374			
1960	7,171,400	6,402,400	4,357,805			
1961	7,323,200	6,512,900	4,406,628			
1962	7,485,100	6,605,900	4,555,447			
1963	7,643,900	6,706,300	4,460,472			
1964	7,805,400	6,832,000	4,632,025			
1965	7,980,900	6,967,900	4,771,504			
1966	8,179,788	7,124,349	4,927,072			

Appendix Table 1: Population Totals for Australia

Tax year starting 1 July	Australia – individuals 15 and over	Australia – individuals 20 and over	Australia – taxpayers	Victoria – individuals 15 and over	Victoria – individuals 20 and over	Victoria – taxpayers
1967	8,343,833	7,294,605	5,001,174			
1968	8,522,217	7,456,171	5,204,042			
1969	8,716,454	7,629,999	5,372,500			
1970	8,901,723	7,799,368	5,570,720			
1971	9,319,988	8,183,692	5,691,431			
1972	9,510,934	8,347,141	5,076,252			
1973	9,691,778	8,507,292	5,420,004			
1974	9,898,311	8,685,640	5,551,322			
1975	10,073,371	8,839,661	5,179,359			
1976	10,245,988	8,985,211	5,527,309			
1977	10,428,589	9,139,068	5,568,298			
1978	10,616,188	9,310,408	5,538,132			
1979	10,797,294	9,483,735	5,662,971			
1980	10,984,362	9,676,805	5,973,373			
1981	11,197,720	9,900,675	6,199,831			
1982	11,439,261	10,150,267	6,104,878			
1983	11,642,452	10,361,571	6,306,340			
1984	11,843,586	10,556,177	6,546,544			
1985	12,062,771	10,758,065	6,966,074			
1986	12,318,832	10,971,610	7,181,864			
1987	12,576,530	11,190,263	7,629,453			
1988	12,833,133	11,425,459	7,906,142			
1989	13,089,498	11,676,326	8,033,918			
1990	13,310,134	11,907,731	7,800,273			
1991	13,498,506	12,134,432	7,422,503			
1992	13,678,327	12,355,556	7,661,794			
1993	13,829,567	12,535,922	7,609,311			
1994	13,994,701	12,718,015	7,861,134			
1995	14,183,640	12,914,400	8,165,642			
1996	14,399,399	13,120,280	8,239,600			
1997	14,604,610	13,310,687	8,251,106			
1998	14,810,586	13,496,995	8,019,205			
1999	15,016,967	13,685,995	8,592,521			
2000	15,234,957	13,886,215	8,473,317			
2001	15,463,445	14,101,339	8,534,329			
2002	15,656,801	14,296,696	8,665,443			

Note: The estimates presented in this paper use the population denominator of individuals aged 15 and over. Estimates using a population denominator of individuals aged 20 and over are presented only as a robustness check.

Appendix Table 2: Personal Income Totals for Australia

Tax year starting 1 July	Australia – Including Transfers ($M)	Australia - Excluding Transfers ($M)	Victoria, Australia – Excluding Transfers ($M)
1912			189
1913	621	601	204
1914	600	579	198
1915	682	659	229
1916	683	659	241
1917	640	616	251
1918	678	653	270
1919	1,082	1,038	296
1920	1,063	1,015	326
1921	1,037	999	325
1922	1,123	1,085	356
1923	1,210	1,165	370
1924	1,307	1,260	
1925	1,332	1,283	
1926	1,410	1,357	
1927	1,437	1,382	
1928	1,382	1,327	
1929	1,354	1,299	
1930	1,107	1,057	
1931	1,017	971	
1932	1,026	978	
1933	1,117	1,069	
1934	1,167	1,116	
1935	1,257	1,201	
1936	1,412	1,351	
1937	1,485	1,419	
1938	1,525	1,458	
1939	1,622	1,555	
1940	1,745	1,678	
1941	2,048	1,957	
1942	2,340	2,238	
1943	2,460	2,350	
1944	2,430	2,316	
1945	2,668	2,524	
1946	2,715	2,572	
1947	3,339	3,146	
1948	3,946	3,705	
1949	4,578	4,307	
1950	5,973	5,678	
1951	6,638	6,260	
1952	7,123	6,756	
1953	7,351	6,960	
1954	7,893	7,474	
1955	8,556	8,081	
1956	9,145	8,650	
1957	9,059	8,514	
1958	9,771	9,160	
1959	10,843	10,165	
1960	11,585	10,838	
1961	11,912	11,076	
1962	12,607	11,741	
1963	13,971	13,017	
1964	15,070	14,072	
1965	15,925	14,865	
1966	17,831	16,689	

Appendix Table 2: Personal Income Totals for Australia

Tax year starting 1 July	Australia – Including Transfers ($M)	Australia - Excluding Transfers ($M)	Victoria, Australia – Excluding Transfers ($M)
1967	18,766	17,580	
1968	20,929	19,648	
1969	23,109	21,672	
1970	25,641	24,105	
1971	28,637	26,832	
1972	32,866	30,548	
1973	41,074	38,159	
1974	50,902	46,760	
1975	59,135	53,659	
1976	68,113	61,109	
1977	74,498	66,315	
1978	82,990	74,200	
1979	92,124	82,555	
1980	104,630	93,467	
1981	120,459	107,675	
1982	132,515	116,700	
1983	146,104	127,738	
1984	158,817	138,596	
1985	174,633	152,589	
1986	189,421	165,583	
1987	205,912	180,550	
1988	230,688	204,394	
1989	257,389	229,361	
1990	264,479	232,624	
1991	268,041	230,657	
1992	277,365	237,676	
1993	287,510	243,463	
1994	306,060	260,743	
1995	331,797	282,558	
1996	349,967	297,854	
1997	361,404	309,423	
1998	383,311	328,799	
1999	404,179	346,018	
2000	437,877	369,629	
2001	457,891	388,724	
2002	475,331	402,570	

Note: The estimates presented in this paper use the income denominator “personal income excluding transfers” until 1943, and “personal income including transfers” from 1944 onwards (reflecting the fact that most transfers were taxed from 1944).

Appendix Table 3: Sources of Income Tax Data for Australia

Year	Source
1921-1935	Schedule 1
1936	Schedule 1B
1937	Schedule 1A
1938-1940	Schedule No 6
1941-1942	Schedule No 7
1943	Schedule No 6
1944-1947	Schedule No 11
1948-1949	Schedule No 10
1950	Schedule No 97
1951	Schedule No 98
1952	Schedule No 99
1953-1954	Schedule No 1
1955	Schedule No 1(1)
1956-1961	Schedule 1(1)
1962-1979	Schedule 1.1
1980	Schedule 1.1(e)
1981	Schedule 1.1(a)
1982-1984	Table 1.3(e)
1985	Tables 1.3(e) & 1.25
1986-1988	Tables 1.3(e) & 1.24
1989	Tables 1.3(c) & 1.24
1990-1991	Tables 1.3(f) & 1.24
1992	Tables 1.3(f) & 1.22
1993	Tables 1.6(i) & 1.13
1994	Tables P16 & C5
1995	Tables I4 & I14
1996	Tables I4 & I15
1997	Tables I2 & I14
1998	Tables I4 & I14
1999	Personal Tax Tables 6A, 6B & 9
2000-2002	Personal Tax Tables 5A, 5B & 9

Note: All references are to the annual *Report of the Commissioner of Taxation*. References to years denote tax years (eg. 1921 denotes the tax year 1 July 1921 to 30 June 1922).

Appendix Table 4: Sources of Income Tax Data for Victoria, Australia

Year	Source for Incomes data	Notes
1912	VY 1913-14, p.132	4 income bands. Calendar year basis.
1913	VY 1914-15, p.138	4 income bands. Calendar year basis.
1914	VY 1915-16, p.144	4 income bands. Calendar year basis.
1914-15	VY 1916-17, p.150	Switch to financial year (starting 1 July) from this point onwards. 5 income bands
1915-16	VY 1917-18, p.50	5 income bands
1916-17	VY 1918-19, p.50	5 income bands
1917-18	VY 1919-20, p.48	5 income bands
1918-19	VY 1920-21, p.58	5 income bands
1919-20	VY 1921-22, p.52	5 income bands
1920-21	VY 1922-23, p.44	5 income bands
1921-22	VY 1923-24, p.45	5 income bands
1922-23	-	
1923-24	VY 1925-26, p.50	16 bands

Note: VY denotes the *Victorian Yearbook*, various years. 1912-1914 are calendar years, 1914-15 to 1923-24 are tax years.

Appendix Table 5: Comparison groups for top income shares – Australia

Year	Average annual wage	Annual wage of a High Court Judge	Annual wage of a top public servant	Average cash remuneration of a CEO in the 50 largest companies	Basic salary of a federal MP	Wealth share of the richest 200
1921	357	6,000			2,000	
1922	374					
1923	375					
1924	390					
1925	396					
1926	415		4,200			
1927	417					
1928	424					
1929	421					
1930	422	6,000				
1931	388				1,600	
1932	350				1,500	
1933	336				1,650	
1934	333					
1935	339				1,700	
1936	347				1,900	
1937	358					
1938	380				2,000	
1939	393					
1940	429	6,000				
1941	457		4,224			
1942	488					
1943	540					
1944	582					
1945	570					
1946	570					
1947	610		5,188		3,000	
1948	698					
1949	791		6,204			
1950	873	9,000				
1951	1,053		6,612			
1952	1,301				3,500	
1953	1,420					
1954	1,485		9,500			
1955	1,579	13,000			3,500	
1956	1,675				4,700	
1957	1,744					
1958	1,801					
1959	1,854		11,050		5,500	
1960	1,992	17,000				
1961	2,073					
1962	2,114					
1963	2,170		12,826			
1964	2,265		12,930		7,000	
1965	2,435	21,000	13,124			
1966	2,523		13,229			
1967	2,684		14,657			
1968	2,838		14,728		9,500	

Appendix Table 5: Comparison groups for top income shares – Australia

Year	Average annual wage	Annual wage of a High Court Judge	Annual wage of a top public servant	Average cash remuneration of a CEO in the 50 largest companies	Basic salary of a federal MP	Wealth share of the richest 200
1969	3,151		17,378			
1970	3,397	27,000	17,899		9,500	
1971	3,749		18,973			
1972	4,102		22,012			
1973	4,564		22,582		14,500	
1974	5,454		26,880			
1975	6,925	43,500	29,550		20,000	
1976	7,979		33,713		21,250	
1977	9,061		35,474		24,369	
1978	9,839		37,064		25,692	
1979	10,575		40,298		27,575	
1980	11,706	73,350	42,111		28,816	
1981	13,107		48,234		33,013	
1982	14,879		60,250		36,000	
1983	16,545		62,841		40,156	
1984	17,217		65,417		41,802	1.03
1985	18,039	110,246	67,118		42,889	1.31
1986	19,304		72,695		45,543	1.66
1987	20,318		73,217		47,815	2.14
1988	21,665		75,727		49,180	2.02
1989	23,173		78,521		55,000	1.93
1990	24,703	154,991	88,533		58,300	1.70
1991	25,633		99,005		61,798	1.56
1992	26,265		100,985	715,566	66,387	1.46
1993	27,013		102,399	752,791	68,663	1.60
1994	27,814	177,604	103,935	901,114	68,663	1.88
1995	28,579		106,014	1,045,122	75,949	1.82
1996	29,428		117,855	1,180,000	80,251	1.63
1997	30,346			1,421,915	81,856	1.66
1998	31,203		130,193	1,694,479		1.81
1999	31,697		138,865	2,048,673	85,500	1.97
2000	33,173	251,200	150,221	2,600,000	92,000	1.91
2001	34,735			3,100,000	95,600	1.75
2002	36,063			3,550,000	98,800	

Sources: See Appendix D.

Note: For simplicity, all of these figures are on a calendar year basis, though the tax year in Australia runs from 1 July to 30 June.