Income Inequality: A Review of Recent Trends and Issues
Fay Gale Lecture 2011
Denise Doiron

Unfortunately I did not get to meet Professor Gale but I have read many of her works and the view I took away was that of a person of great intellect, integrity and compassion and I am deeply honoured to give a lecture in her name. When choosing a topic, I thought of her efforts in promoting Aboriginal and women's rights and decided that looking at income inequality would be appropriate. The purpose of the lecture is to provide a brief review of recent trends and issues surrounding income inequality in Australia. The talk is designed for non-economists but I hope to provide material of interest to economists as well.

It has become out of fashion for economists to talk about equity but it is important to remind ourselves of the fundamental importance of equity and its close links to justice and ethics. Individuals care about their own level of wellbeing but they also care about the level of inequality in their society and the redistribution of income is a major function of governments. A recent survey conducted in various countries including Australia by the Harvard Business School and reported in the *Sydney Morning Herald*[1] showed that Australians generally want a greater level of equality in their society. It was also revealed that the perceived level of inequality by Australians is lower than the actual level of inequality in the Australian society.

Although a different concept, inequality is closely related to poverty and all its associated problems such as poor health, both physical and mental, high crime rates, low educational attainment, low levels of involvement in the political process and in community life, and lower productivity.

Many economists believe that there is a trade-off between equity and efficiency. This belief is grounded in the importance of incentives: rewards must be given to encourage greater risk-taking, effort-taking, skill acquisition and development of abilities. However, inequality may reflect inefficiencies such as discrimination and other market imperfections. Furthermore, high levels of inequality can cause inefficiency in the economy; the alienation of groups can bring about the breakdown of cooperative behavior and lead to inefficient equilibria. This issue has been the topic of papers on polarisation by researchers such as Professor Debraj Ray at New York University and my colleague Professor William Schworm.

Turning now to the measurement of inequality, economists have developed many different indices of inequality and equality. The most popular measure is the Gini index which averages the shares of income across the distribution with higher weights given to those at the bottom of the distribution (that is, those with lower incomes). For positive incomes, the Gini lies between 0 and 1 and a higher measure reflects a larger level of inequality. For Australia, the Gini usually lies around 0.3 to 0.4.

It is important to keep in mind that when looking at trends in the Gini, even small changes in the index imply large transfers of incomes. For example, consider an increase in the Gini of 0.035 (the choice of this number will become apparent shortly). This is equivalent to a transfer of 7 per cent of the overall average income from persons below the median to persons above the median. Since those below the median typically have incomes substantially below the average, this means a reduction

of more than 7 per cent in their incomes while for those above the median, it typically translates into an increase of less than 7 per cent.

Figure 1 shows trends in the Gini index for Australia from 1981 to 2007. (More information on the data sources will be provided below.) When I first worked on inequality, economists were analysing the U-turn which had occurred in the early 80s in several developed economies. Inequality had been found to be stable even slightly declining in the 60s and 70s but all this changed in the early 80s. As shown in the graph, inequality increased in Australia from 1981 to the early 90s. This was followed by a period of stability from 1993 to 2003; and a jump in the index from 2003 to 2007. In fact the jump in the Gini from 2003 to 2007 is equal to 0.035 and is equivalent to a large transfer (7 per cent of overall income) from the bottom half to the top half of the income distribution.

At the time this lecture was prepared, these were the most recent figures available. The ABS subsequently released an additional survey and these data show a Gini of 0.42 for the financial year 2008-09. Hence the global financial crisis (GFC) dampened the increase in inequality somewhat but the level in 2008-09 is still quite a lot larger than that in the early 2000s.

**Figure 1: Gini index, Australia, 1982-2007**
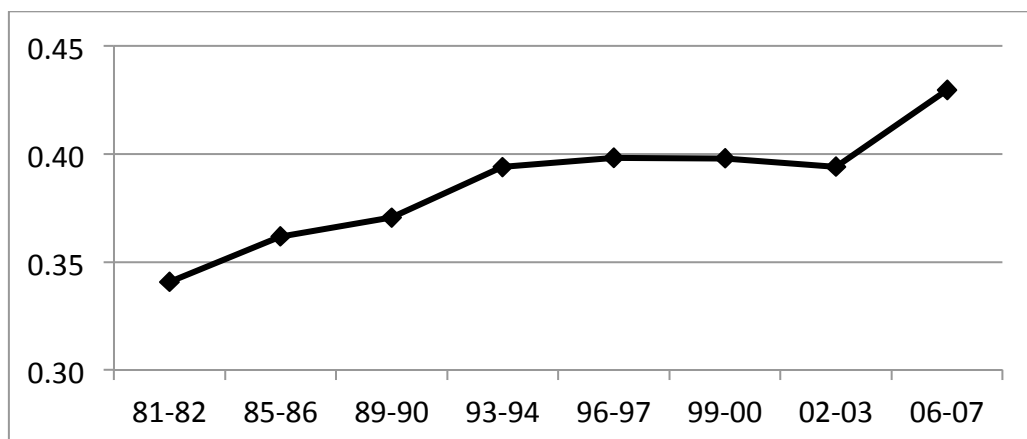
The OECD produced a large report on income inequality in OECD countries including Australia in 2008[2]. In this report, Australia was seen in a very good light; the level of inequality in Australia was lower than the OECD average in 2004 and the trend in inequality in Australia had been better than the average OECD trend for 1994-2004. Due to data problems, the period covered for Australia was 1994-2004 while for most other OECD countries, the period of analysis was 1984-2004. Hence, for Australia the time period used was characterised by stable inequality. My calculations show that the increases in inequality seen in Australia over the 80s are roughly similar to those seen in other OECD countries.

By 2007, Australia's position had deteriorated. For example, Australia's rank in terms of equality in 30 OECD countries fell from 15 to 24.

Those of you who have worked on inequality are probably wondering about several decisions made in the calculation of the measures illustrated in Figure 1. These

measures are based on pre-tax annual incomes, equalised using the square root method (for comparison with OECD figures) and weighted using individual weights. Many researchers prefer working with post-tax incomes as this takes into account the level of redistribution which is achieved through the tax system and the post-tax income reflects more closely the level of purchasing power. Figure 2 reproduces the series presented in Figure 1 along with two other series of Gini indices. The middle line represents the Gini for post-tax annual incomes. Due to data problems, this series begins only in 1993. The lower level of inequality in post-tax incomes is expected due to the redistribution in the tax system but, as seen in the graph, overall trends are similar to those discussed above. Henceforth I will use post-tax data when computing inequality measures and will restrict attention to the period beginning in 1993.

Figure 2: Different measures of incomes, same trend in Ginis
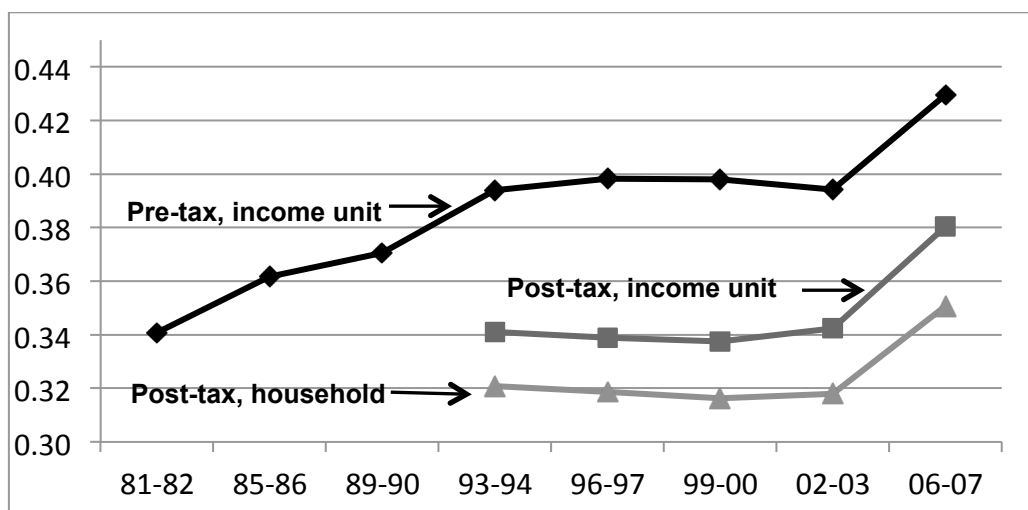
The unit of observation I am using is the income unit, which is composed of an adult plus a partner (if a partner is present) plus any dependent children (if present). Many researchers believe that the household is a more appropriate unit of measure as individuals who live in the same residence tend to share resources. Since the household includes all income units living in the same residence, households are larger than income units and hence measuring inequality at the household level produces a lower level of inequality since more sharing of resources is assumed. The bottom line in Figure 2 represents the Gini index computed using the household as the unit of analysis. Again, we see similar trends to those discussed previously. It is more convenient in some respects to focus on income units and I will do so for the rest of the talk; however, broadly speaking, results presented below will hold for both households and income units.

In Australia, virtually all studies of poverty and inequality are based on two surveys: the Household Expenditure Survey (HES) and the Survey of Income and Housing Costs (SIHC). Both are Australian Bureau of Statistics surveys and are conducted occasionally. I will be using mostly the SIHC to compute inequality levels. Over time, there have been major changes in survey design, sampling procedures and questionnaires. For these reasons and because of the lack of alternative data sets

allowing the bridging of periods with major changes, researchers studying trends in inequality in Australia tend to focus on short periods of time. For example, to compute the figures covering the decades of the 80s and 90s in Figure 1, I had to make several serious assumptions, reconstitute households and limit sources of incomes in various ways. Those of you who have worked with the 2008 SIHC (which is the basis for the most recent data point in Figures 1 and 2) will be aware that major changes were made in the definition of income in this survey. Fortunately, the ABS has provided income figures allowing comparisons with previous survey years. These are the income figures used in the lecture.

A considerable amount of work is being done by economists on broadening the measures of equality and wellbeing. One branch of research is concerned with the development of multi-dimensional indices. For example the inclusion of health or education along with income is argued as providing a more complete picture of wellbeing. Many of you will be aware of the work by Professor Amartya Sen of Harvard University on the use of 'capabilities' where certain aspects of life such as the level of freedom, safety and community-life are taken into account. Others have combined aspects of deprivation. With better and more comprehensive data, these indices will become more common.

The time period under study is also important. The use of lifetime income for example recognises that individuals smooth incomes over many periods and plan their behaviour over longer time spans than one year. Studies of intergenerational mobility look at the transfer of incomes and poverty from parents to children. A different issue relates to the applicability of income *per se* as a measure of wellbeing. Researchers who study poverty often believe that consumption is more closely related to wellbeing. They point to the fact that fluctuations in incomes at the bottom of the income distribution are larger than fluctuations in consumption expenditures. Households manage to smooth consumption over shocks to incomes even at low income levels by using broader family networks or adjusting the timing of replacement of durables. At the top of the distribution, researchers argue that wealth may be far greater than income and is hence a more appropriate measure of wellbeing. When looking at the whole distribution, income is still the most commonly used single measure of wellbeing.

A final point on the measurement of wellbeing as opposed to income inequality is the fact that indices of inequality such as the Gini look strictly at inequality or the shape of the distribution and do not take into account levels of income. For example, if you double all incomes in the society, the Gini will not change yet we would expect that individuals feel better off. Measures of inequality in wellbeing that take into account both the level of inequality and the level of income have been proposed. For example, Professor Sen has proposed a measure of wellbeing equal to the mean income in the society (denoted by μ) times the level of equality in the distribution of incomes (measured by 1-Gini). Figure 3 compares the trend in the Gini and in Sen's measure of wellbeing. In the early period (1993-2003) wellbeing increased substantially due to a rapidly rising average income level and a stable inequality level. Note that all incomes in this and future figures and tables have been inflated to 2010 dollars. What we also see is that in the latter period, the level of wellbeing kept rising despite an increase in inequality due to the continued increases in average incomes.

Figure 3: Gini and social wellbeing, growth rates, Australia, 1994-2007
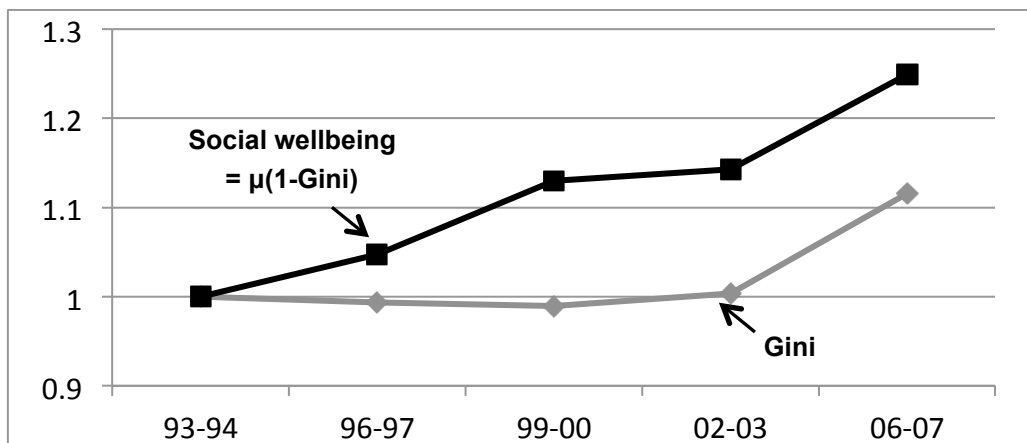
There is even less consensus in how to trade-off levels of income and inequality than in how to measure inequality itself. Most researchers present separately changes in average income levels and changes in the shape of the distribution. This is what I will do in the rest of the lecture.

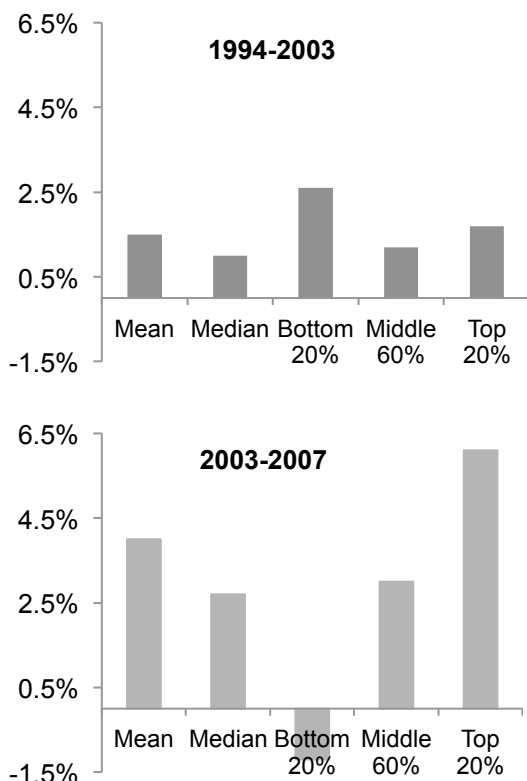**Figure 4: Annual average growth rates in post-tax income**

Figure 4 presents annual average growth rates of incomes for two periods: 1994-2003 and 2003-2007. On average, incomes in the early period were growing at 1.5 per cent per year. The increase was more rapid at the bottom and top quintiles than in the middle; this is an illustration of the so-called disappearing middle. What is also apparent is that the average income for the bottom quintile was rising at a healthy rate. This would have prevented large increases in inequality. For the latter period, the picture is dramatically different. The average income for the bottom quintile was falling over this period while that of the top quintile was rising very rapidly. Although on average income levels were rising quickly and over-all measures of wellbeing such as that shown in Figure 3 would show an increase in wellbeing, other measures with more weight placed on levels of incomes at the bottom would yield a different trend in over-all wellbeing for this period.

In comparison with other OECD countries, over the period 1994 to 2003, growth rates in incomes were similar in Australia to the OECD average; the growth rate at the bottom was faster while that at the top it was slower. Hence the trend in Australia was slightly better than in other OECD countries. In the latter period, growth rates in incomes are higher in Australia especially for the incomes at the top quintile.

When studying the drivers of inequality, researchers traditionally considered four factors: demographic changes, labour market trends, government policies, and other sources of incomes (capital). These days a fifth issue has become important, namely the attempt to understand what is happening at the top of the income or earnings distribution. I will briefly discuss each of these in turn in the Australian context.

The main demographic trends influencing income inequality are the ageing of the population and the changes in the household structure. These are caused mainly by increases in life expectancy, reductions in fertility, increases in divorce rates and the increasing age at marriage. The effect of population ageing on inequality is ambiguous in theory as a falling share of young individuals would be expected to reduce inequality while the increasing share of older individuals would be expected to increase inequality, since both these groups are associated with lower incomes. The reduction in the share of two-parent households and the increasing share of couples without children, lone parents and people living alone all lead to smaller household sizes on average and this in turn would be expected to push inequality up as there is less sharing of resources across individuals. In brief, the net effect of all these changes is an empirical matter.

Table 1 presents a few statistics on demographic changes for Australia. The top panel contains population shares for those aged 0 to 25 years and over 65 years for 1995 and 2005. The ageing of the population is evident in the fall of the share of the young of 3 percentage points (ppts) and the increase of the share of older individuals of 1 ppt. The second panel presents the change in the average number of children per woman between 1985 and 2003 in the bottom, middle three and top quintiles. The decline in fertility is evident in these numbers and we expect this to reduce household size; however this phenomenon is occurring throughout the distribution hence the effects on inequality will be dampened. An ABS study[3] suggests that for the period 1995-2003, these demographic changes reduced the Gini by less than 0.005.

Table 1: Demographic changes, Australian evidence

Population shares		
Age group	1995	2005
0-25 years old	38%	35%
>65 years old	10%	11%

Changes in fertility - # children per woman			
Income quintile	1985	2003	Change
Bottom 20%	2.0	1.6	-0.4
Middle 60%	2.0	1.7	-0.4
Top 20%	1.7	1.2	-0.5

In brief, demographic changes will have an impact on long-run trends only and cannot explain the large fluctuations in inequality and incomes shown above. Of course this analysis does not include any effects through political economy channels. For example, a large and powerful gerontocracy may influence government policy in favour of the elderly and this may affect inequality. Little work has been done on this issue in economics.

I turn now to effects coming from changes in the size and distribution of capital income. In this context, capital is a residual income (total income minus labour earnings and government transfers) and it includes a wide set of items such as superannuation and investment income. As such, this form of income is earned by individuals throughout the distribution. When considered as a whole, this type of income is fairly stable over the period 1994-2007 in the sense that it constitutes a fairly constant proportion of total income (between 14-17 per cent) and it generates a Gini index (calculated with this type of income only) with no clear trend. A better understanding of the level of and trend in this source of income would require disaggregation by components. However, for the purposes of this lecture, it is the case that changes in the distribution of capital income cannot explain the fluctuations presented above.

Labour market forces play a more important role in explaining the changes in income inequality. On average, labour earnings represent 75 per cent of total pre-tax household income over the period. In terms of general trends over time, from 1994 to 2007, we saw a tightening of the labour market associated with the long period of expansion in most of the developed economies. For example, in Australia, unemployment rates declined from just under 10 per cent to under 5 per cent. In terms of trends in earnings inequality, most developed economies have experienced an increased dispersion in earnings for full-time workers as well as for all workers. This increased earnings inequality has been observed for both males and females although the trend has been stronger for males.

Figure 5 is based on data from the Australian Labour Force Survey and presents growth rates in the earnings deciles for full-time workers from 1993-2010. I thank Professor Jeff Borland from the University of Melbourne for sending me these numbers. The first decile corresponds to the earnings level which divides the

distribution of earnings ranked from lowest to highest into two groups corresponding to the bottom 10 per cent and the top 90 per cent of earners. Similarly, the ninth decile is the earnings level for the person that divides the earnings distribution into the top 10 per cent and the bottom 90 per cent of earners. In Figure 5, since all deciles are anchored at 100, a distribution with a constant dispersion (in terms of its deciles) would generate a graph with a single line over time reflecting the common proportional increase in earnings levels. Figure 5 shows quite a different picture; the fanning out of the earnings deciles shows that the earnings distribution has become more and more unequal over time. Furthermore, this increasing inequality has been occurring throughout the period. (The break in the series is due to the large changes in the survey methodology that occurred in the mid 1990s.)

Extending the period portrayed in Figure 5 to include the 1980s would show increasing earnings inequality over that decade as well. In fact increasing earnings inequality over the 1980s has been shown to be an important driver of the increased income inequality over this period in most developed economies. The more puzzling question is why the smoothly increasing earnings inequality over the 1990s didn't translate into steadily increasing income inequality over that decade. We will return to this question shortly. A last point regarding Figure 6 is that the use of the Labour Force Survey allows us to look at more recent numbers and the graph includes earnings data for the period after the onset of the GFC. It is perhaps not so evident in the graph but there is a dampening of earnings inequality after 2008 mainly driven by the slower growth in the top earnings deciles.

Figure 5: Growth rates of weekly earnings by deciles, FT adult workers 1993-2010, Australia
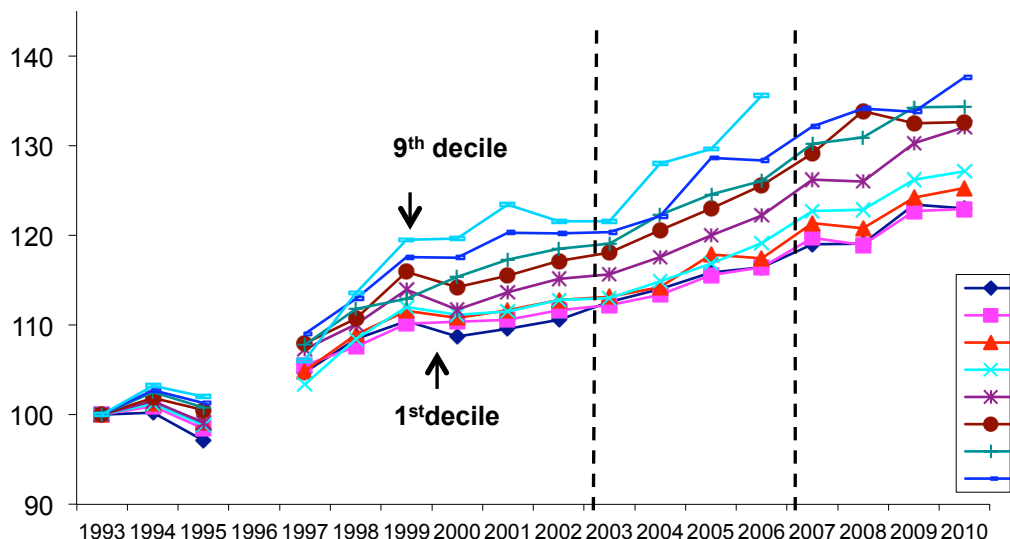
An interesting feature of the increasing earnings inequality has been its pervasiveness; no matter how you cut the data, by occupation, sex, age group, industry, education, etc, you find increasing inequality within and across groups. The large amount of

inequality occurring within groups has meant that models focused on certain economic transitions have been fairly unsuccessful at explaining the overall rising inequality. As mentioned before, in many countries, earnings inequality started to rise in the early 1980s but the trend has become stronger (that is, an acceleration of the rise in inequality) in the 1990s in certain countries (USA and UK) while in other countries, the acceleration occurred in the 2000s (Australia and Canada). Another feature of earnings inequality is that in most countries there have been faster increases in earnings levels and dispersion in the top group of earners. Finally, although most countries have experienced increased earnings inequality over the last 30 years, there have been large cross-country differences in the speed of the increase.

Explaining the rise in earnings inequality over time has been an extensive area of work in economics. For example see the surveys by Lemieux[4] and Atkinson[5]. The dominant explanation is that of increasing demand for high-skilled, high ability workers. This is driven by skill-biased technological change (SBTC) such as computerisation of the workplace. Although most economists believe this to be the prime driver of the increased earnings inequality, it has proved difficult to quantify the effect of SBTC. For example, early attempts to calculate returns to computer use have been seen as failures when results were reproduced with the use pencils at work instead of computers. More recent models represent jobs as a series of tasks with SBTC depressing returns to the more routine tasks. Clearly, empirical work that discriminates across such models will require very detailed job information along with worker and firm characteristics.

It is also widely believed that the modeling of rising earnings inequality must incorporate the effects of increased trade and globalisation along with SBTC. Changes coming from trade and globalisation are generally seen as complementing high-skilled labour and substituting for low-skilled labour. Professor Richard Freeman of Harvard University famously asked: "Are your wages set in Beijing?"[6] Again traditional models have been partially successful only in generating changes in distributions of earnings that fit the data. In particular the fact that most inequality in earnings has grown within industries rather than across industries does not agree with most trade models. More flexible and hence more complex models will be needed to explain all the features of the data. Finally, institutional factors are also seen as important in determining the trends in earnings inequality. In particular factors such as de-unionisation, changes in bargaining powers and forms of negotiation, trends in minimum wages and social norms are seen as very important especially in explaining differences across countries. For example, over this period inequality in earnings in Nordic countries, with more centralised bargaining, more powerful unions, larger roles for social policies, and social norms that discourage the payment of enormous salary packages, have been growing at slower rates. We have yet to agree on the relative importance of these factors.

Understanding the relationship between trends in individual earnings inequality and household income inequality is complex as many factors are involved; for example, the employment profile within the household, the relationship between the partners' earnings (assortative matching) and the relationship between the presence and number of children and the earnings of the parents. Tools have been developed to decompose distributions and changes in distributions into contributing factors but here I will focus on a few salient facts.

Why did household income inequality remain stable in the face of rapidly increasing individual earnings inequality? The answer does not lie in changes in assortative

matching; correlations across spouses' earnings declined over time but only very slightly. The answer also does not lie in the male-female wage gap since this gap remained fairly stable in Australia over the period. A large part of the story lies in the changes in female employment. Table 2 presents rates of female and male employment calculated as the percentage of income units with a head aged between 25 and 60 years with an employed female/male. We can see that, while the proportion of households with an employed male remained constant, the proportion with an employed female increased by 8 per cent from 1994 to 2003. The increased female employment came mostly from two-adult households with dependents. More complex decompositions show that keeping female employment rates at their 1994 levels across household types would have increased inequality in household earnings and incomes substantially. Since women's earnings are located mostly in the bottom to the middle of the distribution, the increased female employment mitigated the increases at the top end of the earnings distribution. Hence the growth in female employment was a major factor in the stability of income inequality in the face of rising earnings inequality over the period 1994-2003.

Table 2: Percentage of households with employed male/female

	1994	**2003**	**% change**
Female	52.8	57.1	8
Male	67.4	67.5	0

While male labour supply in Australia is similar to that in other OECD countries, female labour supply in Australia is lower in terms of both participation rates and hours of work. The difference is found mainly for women with young children and the difference persists even after the youngest child reaches school age. Various hypotheses have been proposed to explain this gap. For example, Professor Alison Preston of Curtin University and co-authors argue that the poorly developed childcare services and parental leave provisions are important in explaining differences in female labour supply between Australia and Canada. Professor Patricia Apps of the University of Sydney argues that effective marginal tax rates (EMTR) are higher for two-adult households with children compared to European countries[7]. Furthermore, these rates are highest where the labour supply is most responsive. Finally, Professor Mike Keane of the University of New South Wales, in his recent survey of labour supply[8], argues that the effects of EMTR have been underestimated generally by economists. Keane's argument is that individuals make decisions regarding skilling and investments in education with a long-term view. Once these decisions are incorporated in the labour supply problem, EMTR are shown to have larger effects than short-term incentives. This argument holds for both males and females but the point is that the effects of higher EMTRs are likely to be larger than previously believed. In short, although increases in female labour supply were important in keeping income inequality stable at the household level over the 90s and early 2000s, there is potential for even greater increases in female labour supply in the future.

In the period 2003-2007, we saw increases in both individual earnings inequality and household income inequality. Although employment was still growing overall during this period, we see a drop in the proportion of households with employed males and females and a slight increase in jobless households. During this period, labour supply

no longer counteracted the increases in earnings inequality driven by increases in top earnings. Furthermore, the increases in top earners accelerated.

I will now turn to trends in government redistributive policies. For large transfer programs, most changes were gradual since the mid 90s. The share of government transfer income to total income at the household level varied between 10 and 11 per cent from 1994-2003. The proportion dropped to under 10 per cent by 2007. Again, these smooth trends are unlikely to explain the fluctuations in income inequality over time, seen above.

It is interesting to look at the redistributive power of the tax system and its trend over time. A simple measure of the redistribution of income is the ratio of the Gini in pre-tax incomes to the Gini in post-tax incomes. Table 3 presents statistics on these ratios for the period under study. Based on 1993-94 incomes, the pre-tax Gini was 16 per cent larger than the post-tax Gini. One can view this as a rough measure of the amount of progressivity in the tax system. By 2006-07, this measure had fallen to 13 per cent. Thus, the amount of redistribution achieved by taxation had fallen by around 19 per cent. A combination of factors is responsible for this change: top marginal tax rates were reduced following the 2000 tax reform, thresholds have been going up, and increases in earnings are now occurring in regions where no further increases in marginal tax rates occur. Although these changes are gradual, and cannot explain sharp jumps in inequality measures, they are large and will affect the trend in inequality over the medium to long term.

Table 3: Ratio of Gini in pre-tax incomes to Gini in post-tax incomes

	1993-4	1996-7	1999-00	2002-3	2006-7
Ratios	1.16	1.17	1.18	1.15	1.13

The final factor we consider is that of the rapidly increasing earnings at the top of the distribution. Table 4 presents figures on this issue and is taken from Atkinson and Leigh[9]. To study top income earners, representative household surveys such as the SIHC are not appropriate due to under-reporting. Atkinson and Leigh use data published in reports of the commissioner of taxation in Australia to look at the trends in shares of incomes by groups of individuals focusing on top income earners. Table 4 shows the income shares for the top 10 per cent, 1 per cent, and 0.1 per cent of income earners. I have grouped and averaged these shares by year intervals to match roughly the periods discussed earlier. We see that the share of total income earned by the top 10 per cent of income earners was 26.4 per cent in the mid 80s and had risen to 31 per cent by the end of the millennium.

Table 4: Income shares based on tax data

	1983-87	1988-92	1993-97	1998-2002
Top 10%	26.4%	28.5%	29.5%	31.0%
Top 1%	5.3%	6.8%	7.3%	8.6%
Top 0.1%	1.3%	2.1%	2.2%	2.7%

A different way of describing these numbers makes the figures more striking. Focusing on the right-most column, we see that on average over the years 1998 to 2002, the average income in the top 10 per cent of the population is three times the average income for the population as a whole, the corresponding figure for the top 1 per cent is nine times and for the top 0.1 per cent, 27 times the average income of the population as a whole. Note that this period, the most recent covered by Atkinson and Leigh, is at the end of the period of stability in income inequality and hence does not include the rapid increase experienced by the top earners in the mid 2000s. As a comparison, in a presentation made to the OECD in 2008, Professor Freeman[10] mentions that in the US, the average income earned by the top 0.1 per cent of the population is 123 times the overall average income.

Who are these people at the top of the income distribution? It is not easy to answer this question since getting access to individual tax data is in general difficult and in Australia is impossible. Atkinson and Leigh present some evidence on annual salaries in Australia taken from various sources for the year 2000; the average salary in that year was $33,173 for the population as a whole, $92,000 for a Federal MP, $150,221 for a top public servant, $251,200 for a high court judge and $2,600,000 for a CEO in the 50 largest companies in the country. These numbers suggest that the increases at the top have been experienced mainly by those in executive positions. A more complete picture of this issue is provided in Bakija et al for the US. The authors use individual tax data to construct a panel dataset of income earners over time along with their occupation. I quote from their paper:

> …executives, managers, supervisors, and financial professionals account for about 60% of the top 0.1% of income earners in recent years, and can account for 70% of the increase in the share of national income going to the top 0.1% of the income distribution between 1979 and 2005.[11]

Many hypotheses have been put forth to explain this phenomenon. Are executives being rewarded for the increased responsibility accompanying the increased size and complexity of firms in the global economy? Or did they take advantage of the power they hold on corporate boards to the detriment of the small shareholders? Did financial planners manage to take an inordinate share of the rents present in the expanding share markets before the collapse in 2008? To answer these questions, very specialised data sets are needed and, to date, the quantification of the importance of these various factors has not been possible.

Many economists have speculated on the effects of the Global Financial Crisis (GFC) on income inequality. One possible scenario is that the crisis will dampen increases in earnings at the top of the distribution. Other likely effects are reductions in capital incomes on assets for retirees and increased unemployment for low skilled workers with both of these effects tending to raise inequality. As mentioned above, recent data just released by the ABS suggests that in fact income inequality dropped slightly in 2009 compared to 2007. However the net effect of the GFC over the medium term is still unclear at present. Recent adjustments in the labour market include the following: a reduction in hours of work rather than in the number of workers in response to the declining demand for labour; older workers delaying retirement perhaps due to the declining value of superannuation; and some dampening in the growth of earnings especially at the top. All these developments suggest that the dampening in household income inequality will continue.

To summarise, the Australian situation is more complex than was believed following the OECD report in 2008. The early period of 1993-2003 did correspond to a period of stable inequality in household incomes. Although individual earnings at the top of the distribution were increasing rapidly, increases in employment rates of women were mitigating the effects. However the following period, 2003-2007 saw a rapid increase in inequality as top earnings increased even more rapidly and as household-level employment rates of women stabilised. Also in both periods, we find less redistribution occurring through the tax system.

In conclusion, if we are concerned with the trend in income inequality and its effects on Australian society, we need to think of ways to ease women's return to the workforce following child bearing and rearing and we need to discuss the optimal level of redistribution being effected through taxation. Finally, we need to have a better understanding of what is driving the increase in earnings at the top of the distribution if we are to have an informed and frank discussion. This in turn requires better models based on evidence and hence detailed data on the top income earners. In Australia, at present we do not have access to data allowing us to study the top earners.

Thank you for your attention and your interest in this fascinating topic.

Acknowledgements

Professor Denise Doiron has MA and PhD degrees in Economics from the University of British Columbia, Canada. She has held academic appointments at the University of Western Ontario, the University of British Columbia and the University of Sydney and visiting appointments at the University of Boston, the University of Washington and the Australian National University. Doiron has worked on a variety of topics in labour, social policy and health including: wage determination and bargaining, inequality, labour market transitions, health workforce, private health insurance, welfare policies and incentives. Her work has appeared in the leading journals in her fields. She has worked with government and other organisations to improve the collection and use of public data in relation to labour, health and social policy. She is currently co-editor of The Economic Record.

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