4 Australian trends in perspective

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| Key points |
| * In 2008, the OECD found that measured income inequality in Australia was above the OECD average. * Measured inequality was similar to other English-speaking nations — slightly above New Zealand and Canada, but less than in the United States. * Australia has had considerably higher levels of real income growth across this distribution than that seen in other OECD countries. * Real equivalised disposable household income for the top decile grew by 4.5 per cent over the last 20 years, while the bottom decile grew by 3 per cent. * The difficulties in estimating inequality consistently within one country are amplified when making international comparisons. Concepts of income, different years of analysis and varying business cycles will all influence trends. * Despite these difficulties, international comparisons of broad trends can be insightful. In particular they can highlight where the Australian experience is a reflection of developments in other economies, and where the experience differs. * Comparisons between the trends in proximate factors identified by the OECD from the mid‑1980s to late‑2000s and those in this study over a similar time period (1988-89 to 2009-10) reveal some similarities and some differences. * For individuals, increases in full-time earnings, hourly wage dispersion, and the share of part-time work has increased measured inequality in Australia and most OECD countries * For households, although the measures used are not strictly comparable, it appears the equalising impact of rising employment has been stronger in Australia than other OECD countries. In Australia, rising employment (particularly in lower incomes deciles) has offset increases in individual labour force earnings inequality. In contrast, in most OECD countries increases in individual labour force earnings inequality have tended to be larger than offsetting employment effects, and are cited as a key driver of rising household inequality. * Further work is required to understand the factors underlying changes in relative wages and participation rates, and the impacts of government policies on changes in Australia’s distribution of income. |
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Changes in the distribution of individual and household incomes have been identified in chapters 2 and 3 of this report. In this chapter, the degree to which these changes are mirrored in other OECD countries is explored and areas for further work suggested. As the OECD conducts its analysis and country comparisons using estimated Gini coefficients, the chapter follows this approach.

The difficulties in estimating inequality consistently within one country are amplified when making international comparisons. Concepts of income, differences in the years analysed and varying business cycles will all influence trends. In addition to understanding the broader growth context, care is needed to ensure the same income measures are being compared across countries. The broad OECD comparisons are based around comparisons of equivalised disposable household income. Yet, as the analysis in chapter 3 demonstrated, in-kind benefits can make a major contribution to the final income of household members.

Another problem is accessing data for a common year. If these are not available the validity of the comparison can be limited where there have been major global events, such as the global financial crisis, that affect . The OECD attempt to overcome differences in the availability of data across countries by categorising years into groups, late-2000s and mid-2000s for example. Within each time period the actual survey year varies between countries, Australia’s late-2000s data comes from the 2007‑08 SIH and Japan’s data are from a 2006 survey, both years pre-date the global financial crisis. On the other hand New Zealand’s data are from 2008-09, a crisis year.

On a different note, the timing of the survey instrument relative to a country’s business cycle can also affect the distribution of income, so it may not be relevant to compare the same year if countries are at a very different point in the cycle.

Despite these difficulties, international comparisons of broad trends can be insightful. In particular, they can highlight where the Australian experience parallels developments in most developed economies, and where the experience differs. This comparison is most useful for examining the factors that can affect the distribution of income. The next two sections compare the broad trends in these proximate factors (that underlie broader distributional changes) for OECD countries with those found in this study for Australia. Trends observed in the HES data in this study are compared against those identified in the OECD’s 2011 *Divided We Stand* report.

## 4.1 The wider context for comparison

#### Australia’s current position

Based on OECD estimates, in 2008 Australia’s distribution of household income (based on equivalised disposable household income) was more unequal than most other OECD countries. Australia had a Gini coefficient of 0.336 compared to the OECD average of 0.315 (figure 4.1)[[1]](#footnote-1). This was not unusual for the English-speaking countries — Australia’s Gini coefficient was below that of Great Britain and the United States, and slightly above New Zealand and Canada (Ireland is the exception as it is below the OECD average).

Figure 4.1 Household Gini coefficients of selected OECD countries, late‑2000s

Gini coefficient

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*Data source*: OECD (2012a).

Australia achieves a relatively large reduction in market income inequality from direct government payments, reducing the Gini coefficient by 0.097 (about 20 per cent), compared to most other OECD countries (with the average reduction being 0.078 or 17 per cent) (OECD 2008). At the same time, it has one of the lowest levels of transfer payments as a proportion of household disposable income, 14 per cent of household disposable income compared to 21 per cent (OECD 2008). These features coincide as a result of Australia having one of the most progressively targeted cash transfer systems in the OECD (Whiteford 2010). In-kind transfers (such as government supported health and education services) reduce Australia’s Gini coefficient by a further 17 per cent (a reduction of 0.052) which is slightly less than the OECD average inequality reduction of 20 per cent (reducing the OECD Gini by 0.059) (OECD 2011)[[2]](#footnote-2).

#### Recent changes

After being relatively stable between 1988-89 and 2003-04, household income inequality in Australia has increased (to 2009-10). These changes observed in the 2000s have been substantial by international standards, with Australia’s Gini coefficient growing faster than most other OECD countries (figure 4.2). The HES data used in this study shows the same trend, albeit with a smaller change in the Gini coefficient.

Figure 4.2 Change in household Gini coefficient, OECD countries, 2000 to 2008

Gini coefficient

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*Data source*: OECD (2011).

#### The broader context of income growth

The changing shape of the distribution of income, and associated changes in measures of inequality, should be seen in the context of overall growth in real incomes. While most OECD countries experienced real income growth over the past decade, the performance of the Australian economy stands out. From 1995 to the late 2000s Australia experienced overall equivalised disposable household income growth of over 3.5 per cent compared with the OECD average (between the mid-1980s and late 2000s) of 1.7 per cent (OECD 2011).

In Australia, like most OECD countries, over the past two decades the rise in inequality is the result of households in the top deciles experiencing faster growth in income than the bottom deciles. For example, average growth in real household disposable income for the top decile earners was 1.9 per cent in OECD countries, while the bottom decile experienced lower income growth of around 1.3 per cent (OECD 2011). Again, the key difference with regard to Australia is its considerably stronger record of growth across the distribution — real equivalised disposable household income for the top decile grew by 4.5 per cent over the last 20 years, while the bottom decile grew by 3 per cent (OECD 2011).

When the different income growth rates between the top and bottom income deciles are plotted against overall income growth, Australia is also an outlier (figure 4.3). Other notable outliers are Spain and Ireland which had both high overall household income growth between the mid-1980s and 2008 but with incomes for households in the bottom decile growing faster than for those in the top. Greece and Portugal, along with Chile, also experienced income growth in the bottom decile that exceeded that of the top decile.

Figure 4.3 Overall household income growth versus growth differences between the top and bottom deciles, OECD countries, mid-1980s to late 2000s

Per cent

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*Data source*: OECD (2011).

## 4.2 Are the trends observed in Australia observed internationally?

### Individual earnings in Australia

In Australia, the largest component of individual market earnings is derived from labour force earnings — accounting for, on average, 93 per cent of market income between 1988-89 and 2009-10.

Over this period, average real labour incomes have increased significantly, from around (AUD) $800 per week in 1988-89 to $1100 per week in 2009-10 — an increase of 40 per cent in real terms. Average labour incomes have grown faster at the top of the distribution than at the bottom. This finding masks some fundamental trends in Australia’s labour income story:

* *Full-time workers*: Representing around 62 per cent of workers in 2009-10 (68 per cent in 1988-89), income growth is the result of increases in hourly wages which have also become more dispersed.
* *Part-time workers*: Representing around 30 per cent of workers in 2009-10 (19 per cent in 1988-89), income growth is the result of increases in both hours worked and hourly wages. However, measured inequality within this group has been relatively stable over time.
* *Self-employed workers*: Representing around 8 per cent of workers in 2009-10 (13 per cent in 1988-89) self-employed workers (those who own an incorporated business) have the greatest and most volatile income dispersion. This has been consistent through time despite the falling relative size of this group.

Analysis of HES data suggests rising inequality of individual market income has been largely due to the greater dispersion of hourly full-time wages (measured inequality has been stable among part-time workers and no clear trend is evident among the self-employed). The increasing share of part-time workers has also contributed to the rise in labour income inequality amongst workers.

Capital & other income, the other component of market income, is highly concentrated and has become more so over time. However, it is a small proportion of overall individual market income, accounting for around 6.5 per cent in 2009-10, and contributes relatively little to the overall increase in inequality.

#### Does the Australian experience reflect international developments?

According to the OECD (2011), measured labour earnings inequality has been increasing for workers in all OECD countries between mid-1980s and mid-2000s (Denmark, Hungary and Ireland were the exceptions).The increase in market income inequality observed in Australia reflects this international trend, however some of the underlying sources of change differ.

For most countries, increases in the dispersion of hourly wages for all worker sub-groups had the greatest impact on overall earnings inequality (OECD 2011). From the mid-1980s to the mid-2000s, the distribution of individual wages for all earners became more unequal — wages for the highest paid 10 per cent grew faster than for the lowest paid 10 per cent for 16 out of 23 OECD countries, five countries had no significant difference in wage growth for these groups and only France and Spain experienced a decline in wage dispersion (OECD 2011).

The evidence is less clear as to the impact of different employment categories on distributional trends. The OECD (2011) outlined some changes in the dispersion of income amongst full-time, full and part-time, and all worker sub groups in OECD countries[[3]](#footnote-3). Their analysis suggested that, for most countries, the dispersion of income for full-time workers increased between the mid-1980s to mid-2000s, however, the impact of adding in part-time workers varies considerably across countries. For example, in Germany and the Netherlands earnings inequality increased by more when part-timers were included than when full-timers were analysed alone. This is in contrast to the English-speaking countries, where increases in earnings inequality among full-timers and part-timers were lower than for full-timers alone (OECD 2011). Because the dispersion of part-time income alone is not reported, it is not possible to determine whether trends are due to changing income dispersion amongst part-timers, changing ratios of part-time to full-time workers, or a combination of both.

### Household earnings in Australia

Overall, labour income growth has been the dominant contributor to changes in Australian household incomes, accounting on average for at least 50 per cent of the *change* in household incomes between survey periods observed over the past 20 years (and 75 per cent of the change in income over the period as a whole). On the other hand, changes in household structure (type and partnering) have not contributed to the recent trends in the distribution, despite their importance in explaining the overall distribution of household incomes.

Growth in households’ labour income in Australia has mainly been the result of two broad effects.

* For low income households, increased employment by household members have increased labour earnings. The proportion of jobless households has also fallen.
* For households with high incomes, higher labour earnings appear to be driven primarily by higher wages.

Of these two effects, the impact of employment growth has dominated the impact of wage trends on household *labour* income, causing measured inequality to fall.

Despite falling levels of household labour income inequality, household *market* income inequality has recently risen. This is a result of changes in capital & other income, particularly for households in the 10th (gross) income decile. Between 2003-04 and 2009-10, average capital & other income in the 10th decile more than doubled. This shift has been responsible for much of the increase in equivalised final earnings inequality over this period.

Australian government tax and transfer policies further shape the distribution of final household income and significantly reduce measured equivalised market income inequality (figure 4.4).

* Direct government benefits have increased for recipient households, but the proportion of households receiving benefits has fallen consistent with increasing workforce employment. This has lessened the impact direct payments have on lowering measured inequality — payments lowered inequality of equivalised market income by 23 per cent in 2009-10 compared with 28 per cent in 1993-94.
* Indirect government benefits have risen in real terms and are evenly allocated across the income distribution. The payments effect on reducing market income inequality has increased over time — lowering inequality of equivalised market income by 17 per cent in 2009-10 compared with 15 per cent in 1993-94.
* The share of income paid as direct taxes have fallen over time, with the largest falls seen for those in higher income deciles while the share of indirect taxes has increased. The changes to the tax system since 1988-89 have reduced the overall progressivity of the tax take. Direct taxes lowered inequality of equivalised market income by 9 per cent in 2009-10 compared with 10 per cent in 1993-94. Indirect taxes increased the equivalised market income Gini coefficient by 3 per cent in 2009-10 compared with 2 per cent in 1988-89.

Figure 4.4 Contribution of taxes and transfers to the difference between inequality of equivalised market and final income, Australia

1988-89 to 2009-10, per cent of fall in Gini coefficient

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*Data source*: Author estimates based on ABS (Household Expenditure Survey, cat. no. 6503.0, confidentialised unit record files).

#### Does the Australian experience reflect international developments?

Between the mid-1980s to mid-2000s, the OECD (2011) found that household earnings inequality increased in most countries. Increasing labour income inequality was identified as being the dominant source of growth in household earnings inequality, with the major change being increasing dispersion in male earnings in 21 out of 23 countries studied. In ten countries, increased inequality was a result of growth in real earnings in the top decile combined with a decrease for the bottom decile (OECD 2011). This, however, was partly offset by increasing female employment levels for 20 out of 23 OECD countries. In 14 of the countries studied, female employment increased by more than ten percentage points (OECD 2011).

The OECD (2011) found that for most of the countries examined, the growing spread in male labour earnings resulted in increases in household income inequality. The Australian experience differs in this respect. While individual labour earnings have become more spread in Australia (and, as with other OECD countries, more-so for men than women), increases in employment have meant that at the household level, inequality in household labour earnings has recently fallen.

However, there is a major difference between the OECD (2011) analysis and the analysis undertaken for this report. The OECD restricted the sample of households to those with at least one earner. The OECD (2011) states that trends in earnings inequality among *all* households would depend more strongly on changes in the proportion of non-working households, compared to trends for households with at least one earner.

Although increases in inequality were predominantly driven by labour earnings in most OECD countries, the increased concentration of capital income has contributed to the trend of rising income inequality across almost all OECD countries studied (OECD 2011). Capital income share in total income was modest in most countries and similar to Australia at around 7 per cent. As a share of household disposable income, capital income increased (from a very small base) in more than two-thirds of OECD countries over the last 30 years (OECD 2011). This increase predominantly accrued to households at the top of the income distribution (countries which experienced no increase in the share of capital income also experienced increases in the concentration of capital in higher income households).

The strong redistributive effect of taxes across many OECD countries remained broadly at the same level between the mid-1980s and mid-1990s but became slightly weaker between the mid-1990s and mid-2000s (OECD 2011). Experiences varied across countries. In Australia, Finland, Israel, Sweden and the United Kingdom, the equalising effect of direct taxes weakened steadily over the past 20 years. According to the OECD (2011), the key factor behind this decline was a reduction in the share of direct taxes in total income.

The OECD (2011) also found that reductions in income inequality due to direct government payments increased between the mid-1980s and the mid-1990s for many OECD countries, but then decreased in the subsequent decade. These contrasting developments may be explained by changes such as changing unemployment and thus unemployment benefits or by discrete policy changes. As in most other OECD countries, the redistributive impact of direct government payments and taxes has fallen in Australia over the last decade. However, when indirect benefits (in-kind services) are taken into account, the impact of government redistribution on measured household income inequality has remained fairly stable. Combined, government taxes and transfers reduced market inequality in Australia by 48, 51, 52 and 51 per cent in 1988-89, 1993-94, 1998-99 and 2003-04 respectively. It was 49 per cent in 2009-10. Australia’s tax and transfer system remains one of the most progressive systems among OECD countries.

On average, for the 23 OECD countries studied, the share of workers married to a person in the same earnings decile grew from about six per cent in the mid-1980s to eight per cent in the mid-2000s. Luxembourg stood out with the largest increase: the proportion of husbands and wives in the same earnings deciles increased from 2.3 per cent in 1985 to 7.4 per cent in 2004. The Czech Republic and Finland were the only countries which did not display this trend (OECD 2011).The dominant trend with respect to household structure, observed in all OECD countries, has been the increase in single headed households, which rose by an average of five per cent from the mid-1980s to the mid-1990s (OECD 2011). The OECD found that these demographic factors, in particular assortative mating, contributed positively to increased household earnings inequality in most countries, but had much more modest impact compared to the labour market. In Australia, these compositional shifts do not appear to have contributed to the recent (since 2003) increase in household income inequality.

## 4.3 Areas for further work

This paper has described the proximate factors that have led to changes in the distribution of income in Australia. What it does not attempt to do is to identify the underlying factors that have caused the changes in relative wages, participation rates, and government transfers (work has been done by the OECD, see box 4.1).

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| Box 4.1 OECD analysis of underlying factors explaining inequality |
| The OECD (2011) explored some of the underlying causal factors at play. It analysed the extent to which the following economic changes explained the growth in income inequality in member nations to draw the following conclusions:   * Increased globalisation, measured as increased trade integration (through trade flows) and financial openness did not have a significant effect of either wage inequality or employment trends in OECD countries. * Increased financial flows and technological change did have significant effects on wage dispersion. Greater foreign direct investment was associated with greater wage dispersion in the upper half of the distribution, while technical change increased overall dispersion. These findings suggest that skill biased technical change is an important determinant of growing wage inequality. * Regulatory reforms were found to play a role in increasing employment levels and increasing wage dispersion. Reforms which strengthen competition in goods and services markets were found to increase employment levels. Lower unemployment benefit replacement rates also increased employment levels. Counter to these effects, the OECD found that reduced employment protection legislation decreased employment levels. However, all changes also increased wage dispersion as they encouraged lower skilled workers to join the workforce. |
| *Source*: OECD (2011) |
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Further research would help to identify the underlying causes of the observed shifts in these proximate factors for Australia.

* Analysis of the causal factors underlying changes in the dispersion of the hourly wages of full-time workers over the last 20 years in Australia. International research could usefully guide this undertaking. Whether the international influences hold in the Australian context could be explored, especially given the effects on labour and capital shares of the major terms of trade changes in recent years. The importance of regulatory, taxation and transfer policy changes could also be explored.
* More sophisticated and comprehensive decomposition analysis could provide valuable information about the origins of changes in inequality, namely whether changes are broad-based or the result of large changes in particular sub-groups. Brewer, Muriel and Wren-Lewis (2009) offer a useful model in this regard. They analysed inequality in Great Britain since 1968. Decomposition methods used include: more detailed decompositions by subgroup and income; specifying decompositions such that they also provide estimates of the impact of changing population shares; and the use of factor (regression) based decomposition. Another useful example is provided by Jenkins and Van Kerm (2004).
* The use of HES data in this study has facilitated the examination of in-kind social transfers and the impact of indirect taxes. The data are only available for five points in time and so could be sensitive to periodic policy change, making it less representative of the experience over the period. While not including in-kind benefits, validation of the broad trends using the more frequent Survey of Income and Housing data could identify the extent of important ‘within period’ developments.
* Own unincorporated businesses exhibit unique patterns in the data (high volatility, negative income and double peaked income distribution), and little research has been done on the small but significant group in the Australian context. Yet, the inclusion of this group has a considerable impact on measured inequality levels. Better understanding of the factors influencing small business behaviour is needed to interpret the effects of incorporating this group into broader income data.

1. Note that OECD figures are based on the SIH data. [↑](#footnote-ref-1)
2. The OECD (2011) uses two approaches to calculate the distribution of in‑kind transfers across households, the “actual consumption approach” which allocates the value of public services to the individuals that are actually using the service; and the “insurance value approach” which allocates an equal amount of a service to everybody sharing the same characteristics such as age and gender. Estimates for education, child care and social housing services are based on the actual consumption approach, while health and elderly care are based on the insurance value approach. [↑](#footnote-ref-2)
3. There are a number of issues related to the comparability of the OECD data: the times periods over which the changes are measured are not consistent across countries. For example, the time period 1979‑2004 was used for the United States and 1995‑2004 for Greece and roughly half of the countries have reported gross earnings and half net earnings. [↑](#footnote-ref-3)