Gini out of the bottle

Inequality is getting worse in Australia with the income share of the top 10% growing at the expense of everyone else

Discussion paper

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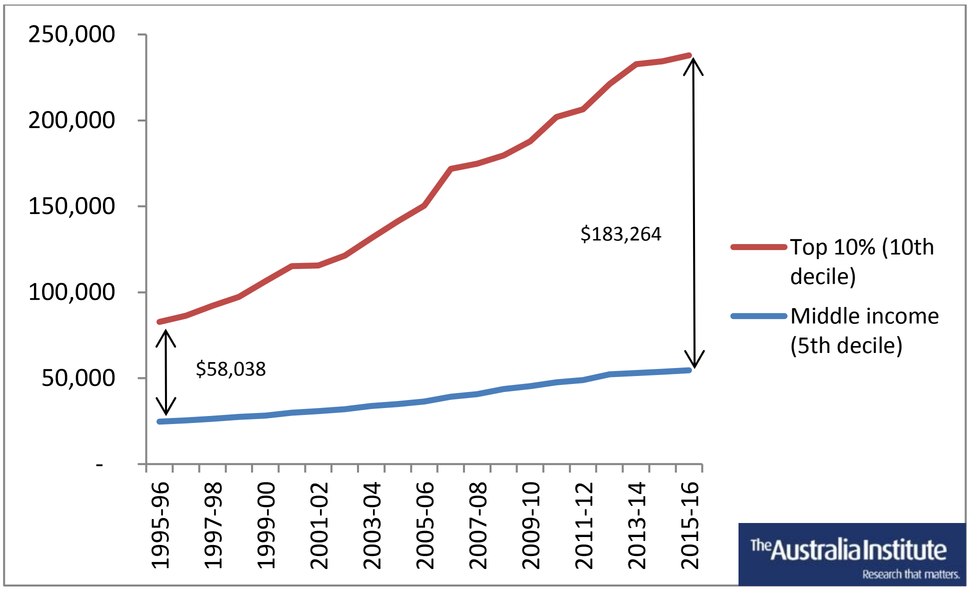
Summary

The economic data shows that inequality is getting worse in Australia. This includes data from the Australian Taxation Office, the Australian Bureau of Statistics and the OECD. The share of income going to the top is growing at the expense of low and middle income earners.

Data from 1996, when the Howard government was first elected, until 2016, the latest period for taxation statistics, show that total incomes for the top 10 per cent have grown far more than those of any other decile. They have grown so fast that the top 10 per cent is the only decile to see their share of total income increase.

Figure 1 shows the growth in total income of middle income earners (5th decile) and the top 10 per cent of income earners. It shows that the incomes of very high income earners are growing much faster than those of middle income earners.

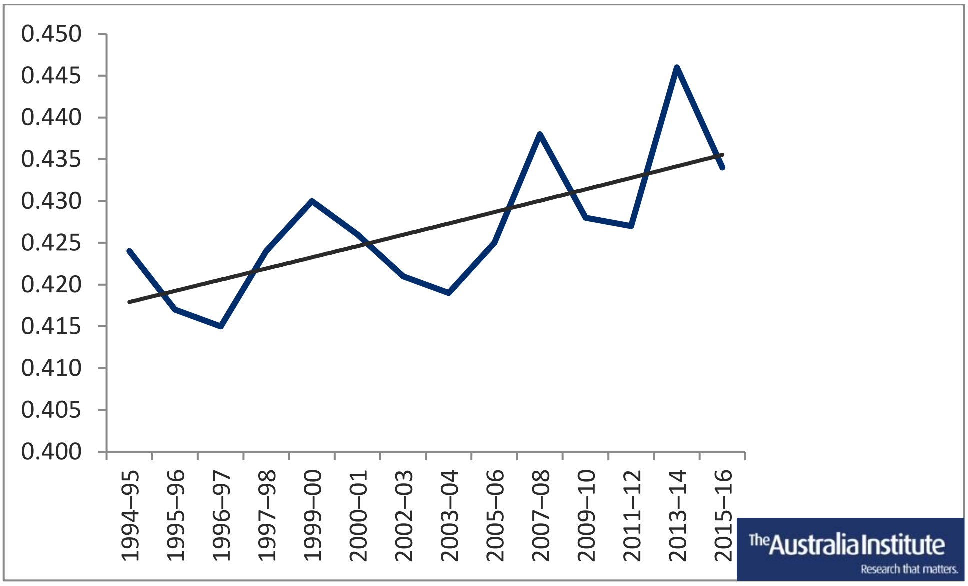
Figure 1 – Income growth of the top and 5th decile



Source: Australian Government (2018) *Taxation statistics*, ATO

Australian Bureau of Statistics data also shows that the Gini Coefficient of income, the most common measure of inequality, has worsened. Figure 2 shows income inequality for gross income as measured by the Gini Coefficient in Australia. There is some short term volatility over time but the clear long term trend has been towards worsening inequality.

Figure 2 – Income inequality for gross income as measured by the Gini Coefficient



Source: Australian Bureau of Statistics (2017) *6523.0 – Household Income and Wealth, Australia, 2015–16*

OECD data shows that Australia is more unequal than the OECD average and that over the last 10 years it has become more unequal compared to other developed countries.

Inequality is not just a political problem. Research from the International Monetary Fund, as well as other prominent economists, has shown that high rates of inequality can lead to slower economic growth. The economic data is clear: inequality is getting worse in Australia and governments and policy makers need to prioritise policies that will reduce inequality.

Despite this the government's policy priorities are taking Australia in the opposite direction. The government's proposed tax cuts in the 2018 budget are likely to make this inequality worse. If the tax cuts are implemented in full then it will reduce the tax burden on high income earners and increase the tax burden on low and middle income earners.

Introduction

Economic inequality is a growing issue across the developed world. It has been argued that inequality was partly responsible for the Brexit result in the United Kingdom[1] and the election of Trump in the United States.[2] Both of these events were partly driven by frustration at an economic system that is leaving a growing number of people behind.

As this paper will show, inequality is a growing problem in Australia but it has been largely ignored by the government. The Treasurer Scott Morrison has denied that inequality is getting worse.[3] This claim has been widely disputed, even from the likes of the governor of the Reserve Bank of Australia.[4]

This paper will look at inequality in Australia to determine how it is changing over time and how Australia compares with other developed countries. In particular, it will use the data in the taxation statistics to determine how both income growth and income shares are distributed to different groups within Australia.

The government's lack of concern about inequality is highlighted in the income tax cuts that it has proposed in its 2018 budget. These tax cuts will reduce the progressive nature of the income tax system. This will have the effect of making inequality worse.

TAX AND INEQUALITY

The progressive income tax system acts to ameliorate inequality in Australia. It takes greater proportions of income from high income earners than it does from low income earners. The tax and transfer system is one of the strongest tool for fighting inequality.

Figure 3 shows the share of income going to each quintile before taxation and equivalised after taxation income. It shows that gross income has higher rates of inequality compared with equivalised disposable income.[5] The difference is primarily the tax and transfer system redistributing income away from high income earners towards low income earners and in the process reducing inequality.

[1] Dorling et al. (2016) *Brexit, inequality and the demographic divide*

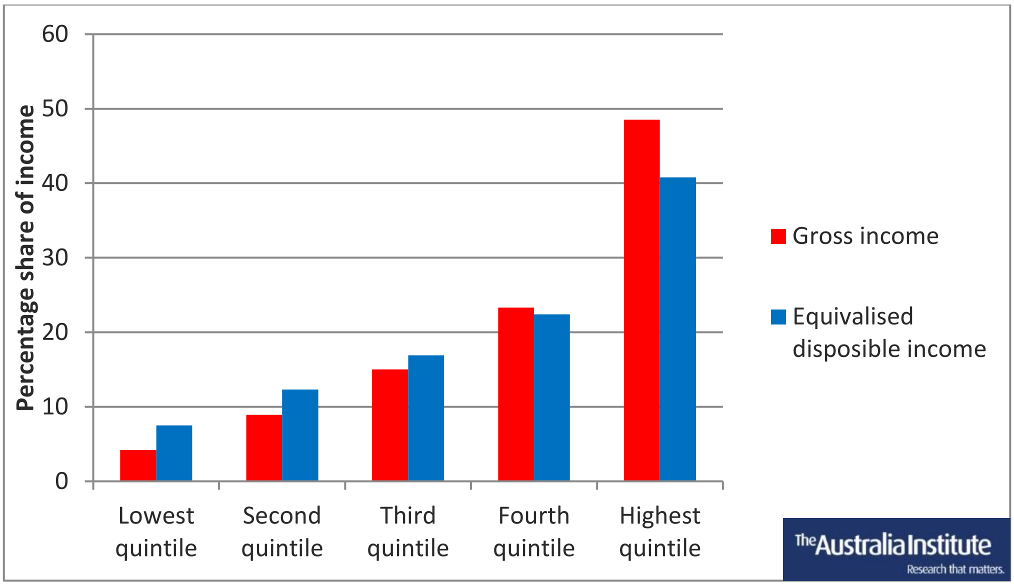
[2] Long (2016) *US election: Trump victory a working-class backlash against economic inequality*

[3] Chan (2017) *Scott Morrison claims inequality in Australia is not getting worse, but better*

[4] Clarke (2017) *RBA governor says inequality getting worse, contradicting Scott Morrison*

[5] Equivalised disposable income does not only account for taxation. It also accounts for family type. This is not strictly comparing apples with apples since gross income is not equivalised, but the difference is likely to be small.

Figure 3 – Gross income and equivalised disposable income by quintile in 2013-14



Source: Australian Bureau of Statistics (2015) *6523.0 – Household Income and Wealth, Australia, 2013–14*

At a time when inequality is rising, the government has proposed substantial income tax cuts worth $144 billion over 10 years, the majority of which will go to high income earners. The proposed tax cut will be phased in over seven years with the first stage being targeted at low and middle income earners. The majority of the tax cut in terms of value will occur in the later years and this part will mainly benefit high income earners.

Research by the Australia Institute shows that after the tax cuts are fully implemented in 2024-25, 62 per cent of the benefit of the tax cuts will go to the top 20 per cent of taxpayers.[6] The bottom 30 per cent will only get seven per cent.

The later stages that will flatten the income tax scales by removing the 37 per cent bracket will mainly benefit high income taxpayers. Looking at just the beneficiaries of removing the 37 per cent tax bracket shows that 80 per cent of the benefit will go to the top 20 per cent of taxpayers and 60 per cent of taxpayers will get no benefit.[7]

The proposed tax cuts will flatten the income tax system. In the Treasurer's budget speech, he claimed:

[6] Grudnoff (2018) *62% of tax cuts benefits go to highest income earners*

[7] Grudnoff (2018) *High income earners the big winners from scrapping 37% tax bracket*

> Under the Turnbull Government's personal tax plan most working Australians earning above $41,000 are likely to never face a higher marginal tax rate through their entire working life.[8]

This objective runs counter to the idea of a progressive tax system. Progressive taxation fights inequality by increasing the average amount people pay as their incomes rise. Those who can most afford to pay will pay more and those who can least afford to pay will pay less. The changes proposed by the government do not remove completely the progressive nature of income tax but they do reduce how progressive it is by flattening the income tax scales.

The tax cuts will not only increase income inequality. It will also increase gender inequality. Men are more likely to be high income earners than women and because the biggest winners from the income tax cuts will be high income earners, then men will get a larger benefit from the tax cuts than women. Men will get twice as much from the tax cut as women.[9]

INCOME SHARES AND INEQUALITY

The taxation statistics are a rich source of information and using them we can see how incomes have changed over the 20 years from 1995–96 to 2015–16 (the latest year available).[10] They show that the share of total income going to the highest income earners is increasing while the vast majority of income earners are seeing their share remain static or fall.

The taxation statistics include all people who submit a tax return. This means that a significant number of people are not included. These are primarily people at the lower end of the income distribution who are not required to submit a tax return. These include those who rely exclusively on welfare benefits such as age pensioners and those on unemployment benefits. The effect of these missing households means that the taxation statistics are likely to show inequality is less severe than it actually is. As such, the taxation statistics should be seen as a conservative measure of inequality.

Table 1 shows income shares by deciles in 1996 and in 2016. All those who submit a tax return have been broken up into 10 groups. The lowest 10 per cent of income earners have been put into the bottom decile. The next 10 per cent of income earners are in the second decile and so on until the top 10 per cent of income earners are put

[8] Morrison (2018) *Budget Speech*

[9] Grudnoff (2018) *Gender gap in 2018 Budget personal tax plan*

[10] The taxation statistics used in this paper are from the Individual tables; Percentile distribution of taxable individuals for the years 1995–96 to 2015–16.

in the 10th decile. It shows that over the 20 years all deciles have seen their share of income either fall or remain static. The only exception to this is the top 10 per cent of income earners, the 10th decile, who have seen their income share rise by five per cent.

Table 1 – Income share by decile

	Bottom 10%	20%	30%	40%	50%	60%	70%	80%	90%	Top 10%
1995–96	3%	4%	5%	7%	8%	9%	11%	12%	15%	26%
2015–16	3%	4%	5%	6%	7%	8%	10%	11%	14%	31%
Difference (% points)	0	0	0	-1	-1	-1	-1	-1	-1	5

Source: Australian Government (2018) *Taxation statistics*, ATO

Table 1 shows that the top 10 per cent's income share (the 10th decile) grew by five percentage points over the period from 1996 to 2016. Over the same time period all other deciles saw their income share either fall or remain static. Static or falling income shares do not mean that their incomes are falling in absolute terms. Incomes for all deciles rose over the 20 years but the incomes of those in the top 10 per cent grew much faster than those of the other deciles. The growth of the top decile was so large that the income share going to all other deciles was static or fell.

The growth of the top 10 per cent's income share was not even across the decile. If we break up the top 10 per cent into two groups and put the top half of the decile in one group and the bottom half of the decile in another we can have a closer look at who in the top decile most benefited. This means we have income earners whose income is in the 91st to 95th percentile and those whose income is from 96th to 100th percentile. This is shown in Table 2.

Table 2 – Top 10 per cent by income share

	91–95 percentile	96–100 percentile
1995–96	9%	17%
2015–16	10%	21%
Difference (% points)	1	4

Source: Australian Government (2018) *Taxation statistics*, ATO

The top half of the decile received most of the increase in income share: four percentage points of the five percentage point increase. The bottom half of the decile received just a one percentage point increase in income share. It should be noted that this increase in income share of just one percentage point is still greater than any other decile received.

This shows that income growth has been strongest at the top of the income distribution, and it becomes stronger the further up the income distribution we go. The top five per cent have seen the strongest growth of all. While we don't have data for each percentile for the whole 20 years, we can assume that if we were to break the top five per cent into five individual percentiles, it would be the top one per cent that has gained a significant amount of the increase in income share.

INEQUALITY AND ECONOMIC GROWTH

Inequality is not just a political issue. Higher rates of inequality stunt economic growth. The International Monetary Fund looked at income shares of different income groups and what effect, if any, they had on economic growth.[11] Their findings should be of concern to Australian policy makers.

They found that increases in income shares to low and middle income groups grew the economy while increases in income shares to high income groups impeded economic growth. An unequal distribution of the pie leads to a smaller pie. As Christine Lagarde, the head of the International Monetary Fund said;

> Our research shows that, if you lift the income share of the poor and middle class by 1 percentage point, then GDP growth increases by as much as 0.38 percentage points in a country over five years. By contrast, if you lift the income share of the rich by 1 percentage point, then GDP growth decreases by 0.08 percentage points. One possible explanation is that the rich spend a lower fraction of their incomes, which could reduce aggregate demand and undermine growth.[12]

The taxation statistics show that low and middle income groups in Australia are seeing their income shares shrink while high income earners are seeing strong growth in their income shares. This is exactly to opposite of what is needed to improve economic growth. If the government wants to improve economic growth then it should prioritise policies that will reduce inequality.

INCOME GROWTH AND INEQUALITY

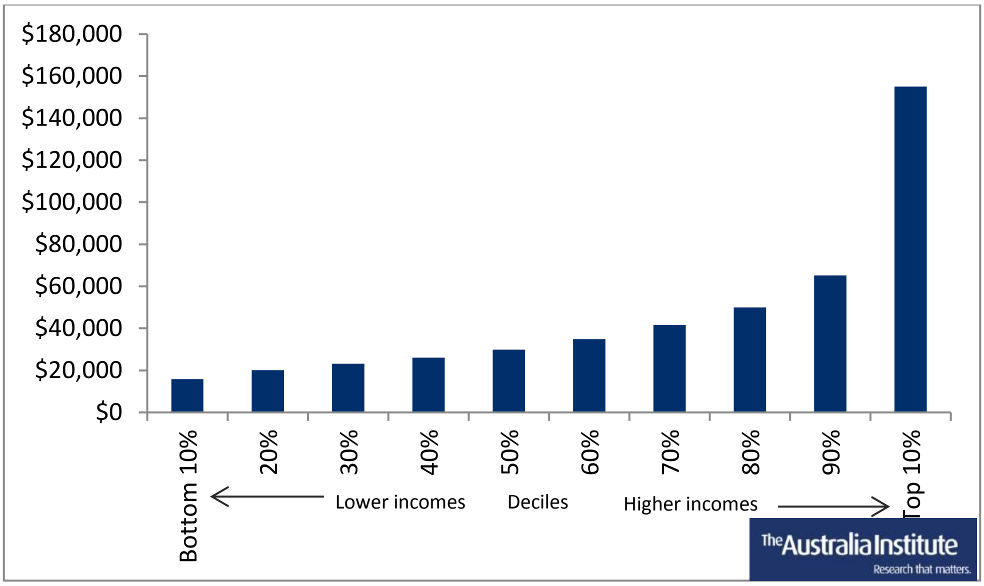
We can also track average income by decile over the 20 years of data from the taxation statistics. Over this period average incomes have grown for all deciles but the growth has not been evenly spread. Those in the bottom 10 per cent have seen their incomes

[11] Dabla-Norris et al. (2015) *Causes and Consequences of Income Inequality : A Global Perspective*

[12] Lagarde (2015) *'Lifting the small boats'*

rise by $15,899 while incomes for those in the top 10 per cent have risen by $155,108. Those in the middle (5th decile) have seen their incomes grow by $29,883. The growth in income for each decile is shown in Figure 4.

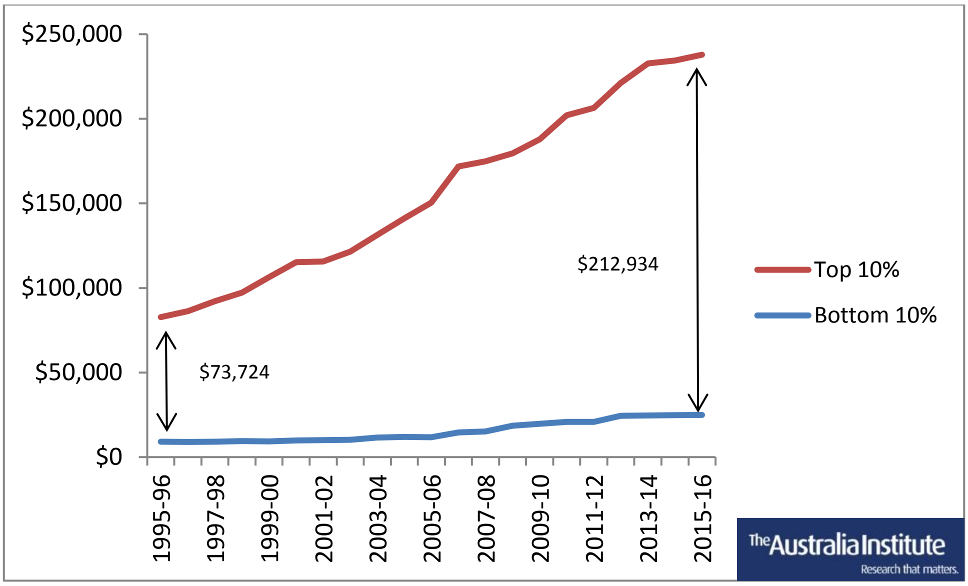
Figure 4 – Income growth by decile from 1995–96 to 2015–16



Source: Australian Government (2018) *Taxation statistics*, ATO

If we just look at the difference between the top and bottom decile we can see the difference has grown. 20 years ago someone in the top decile earned on average $73,724 more than someone in the bottom decile. By 2016 this had increased dramatically so that someone in the top decile earned on average $212,934 more than someone in the bottom decile. This is shown in Figure 5.

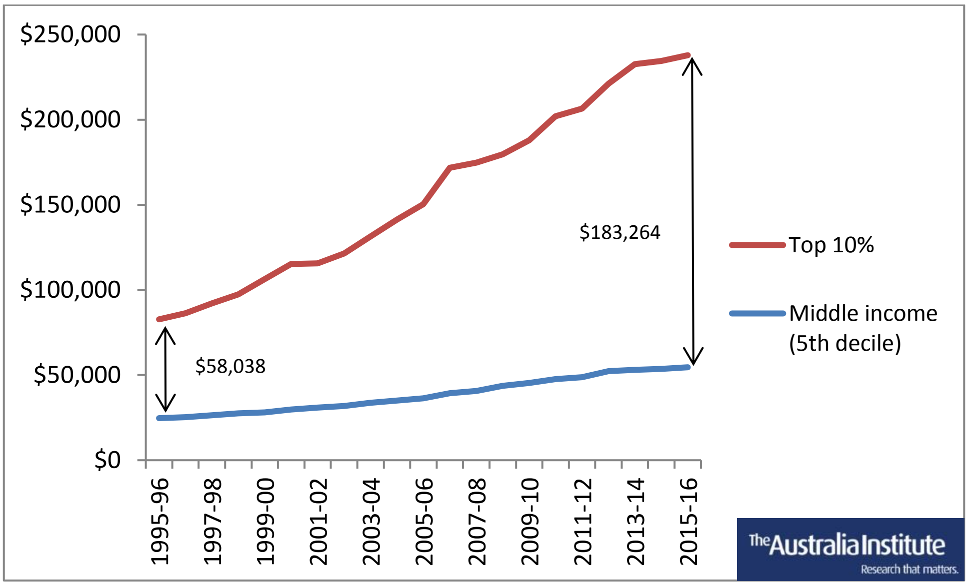
Figure 5 – Income growth of the top and bottom deciles



Source: Australian Government (2018) *Taxation statistics*, ATO

Percentage change in the income of the top 10 per cent has not only outpaced the change in the bottom 10 per cent. Middle income earners have also been left behind when compared to those at the top. Figure 6 shows average income growth of the top 10 per cent versus income growth for middle income earners (5th decile).

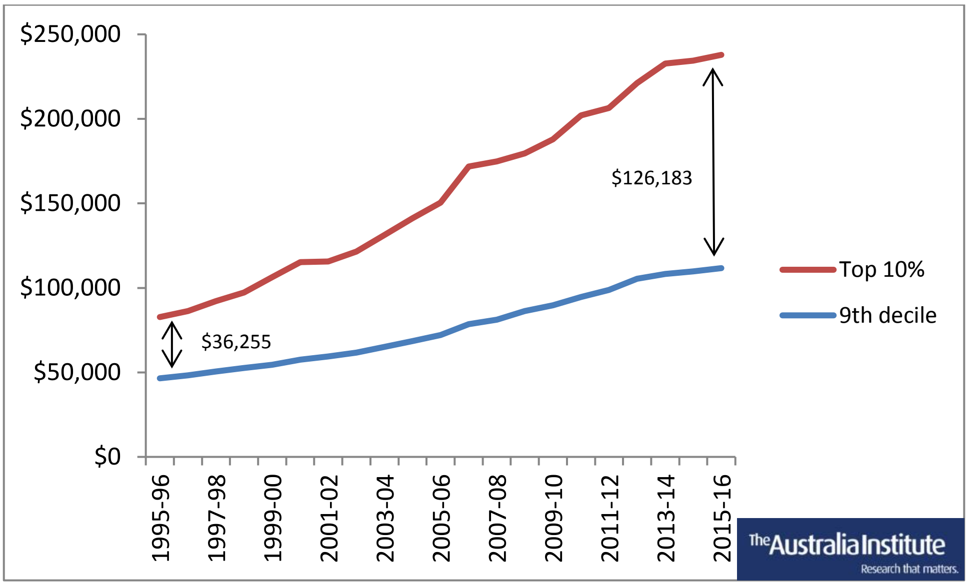
Figure 6 – Income growth of top 10 per cent and 5th decile



Source: Australian Government (2018) *Taxation statistics*, ATO

The top 10% are not just leaving low and middle income earners behind; they're also running away from other high income earners. If we compare income growth of the top 10% to those in the nearest decile, the 9th decile, we find that those at the very top are quickly outpacing even those that are close in the income scale. In 1996 the top 10% of tax payers earned on average $36,255 more than those in the 9th decile. 20 years later the gap had blown out to $126,183. This is shown in Figure 7. This is also highlighted above in Table 1 which shows that while the 9th decile sees its share of income drop by one percentage point, the top 10% sees their share of income increase by five percentage points.

Figure 7 – Income growth of top 10 per cent and 9th decile



Source: Australian Government (2018) *Taxation statistics*, ATO

The taxation statistics show that over the last few decades the top 10 per cent of income earners have been the biggest winners from income growth, seeing their share rise at the expense of all other deciles.

We will now turn our attention to other measures of inequality. The most common measure is the Gini Coefficient.

GINI COEFFICIENTS

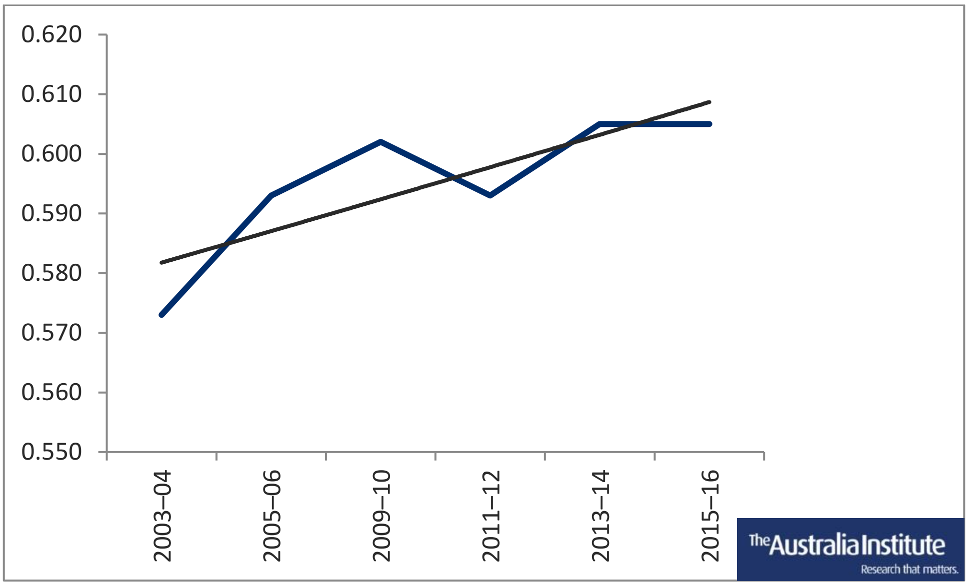
The most common measure of inequality is the Gini Coefficient which measures inequality on a scale of 0 to 1 with 0 being perfectly equal and 1 being perfectly unequal.

The Australian Bureau of Statistics measures both income inequality and wealth inequality. Wealth distribution is more unequal than income distribution. While the Gini Coefficient of household net worth is 0.605 in 2015-16 (most recent data), it is

0.434 for gross income. Higher values in the Gini Coefficient mean higher levels of inequality.

There is more data available for income inequality because we measure income more often than we measure wealth. While we have more years of data for income inequality, both measures of inequality tell broadly the same story, which is that inequality is getting worse over time. Figure 8 shows the Gini coefficient for wealth.

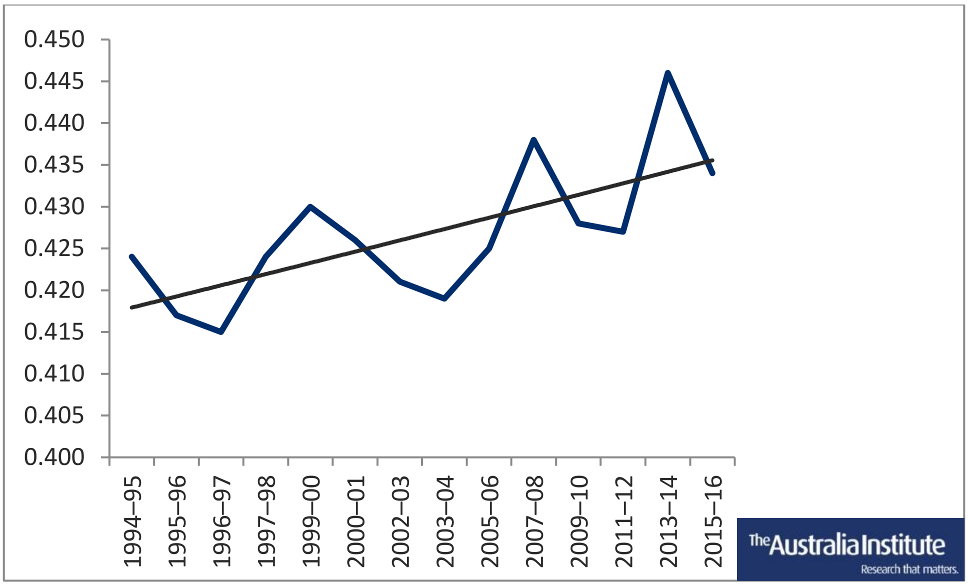
Figure 8 – Wealth inequality as measured by the Gini Coefficient



Source: Australian Bureau of Statistics (2017) *6523.0 – Household Income and Wealth, Australia, 2015–16*

While the measure of inequality using Gini coefficients has short term volatility, it is clear that the long term trend is towards worsening inequality in both wealth and income. Figure 9 shows the Gini coefficient for gross income.

Figure 9 – Gross income inequality as measured by the Gini Coefficient

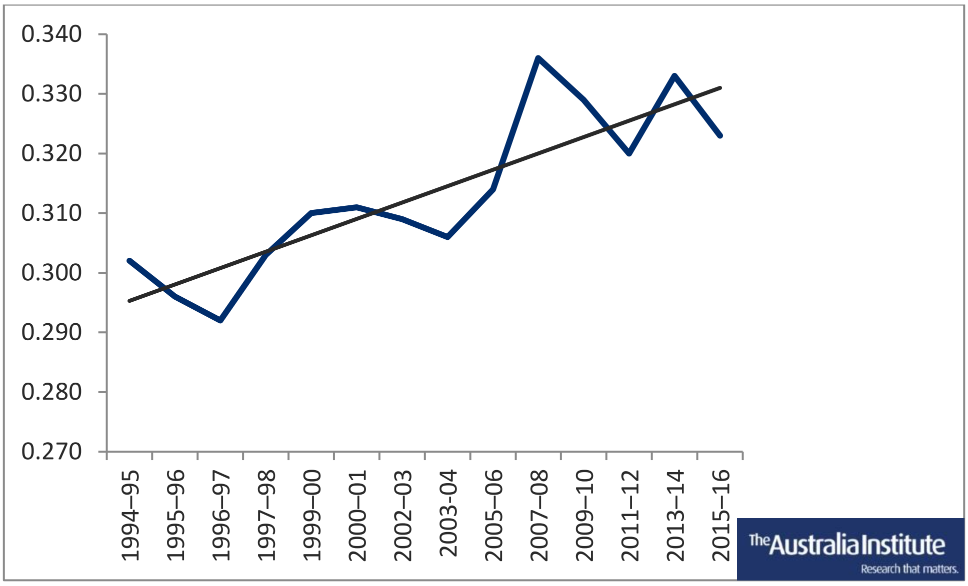


Source: Australian Bureau of Statistics (2017) *6523.0 – Household Income and Wealth, Australia, 2015–16*

Gross income measures all sources of income before taxation. The progressive nature of income taxation has the effect of reducing inequality. By looking at gross income we can see the underlying direction of inequality before the influence of the tax system.

If we look at inequality after tax we see that, as is the case with gross income, inequality is broadly increasing. The tax system is having an impact with the Gini Coefficient in 2015-16 being 0.434 with gross income but falling to 0.323 with equivalised disposable income. Figure 10 shows the Gini Coefficient for equivalised disposable income.

Figure 10 – Equivalised disposable income inequality as measured by the Gini Coefficient



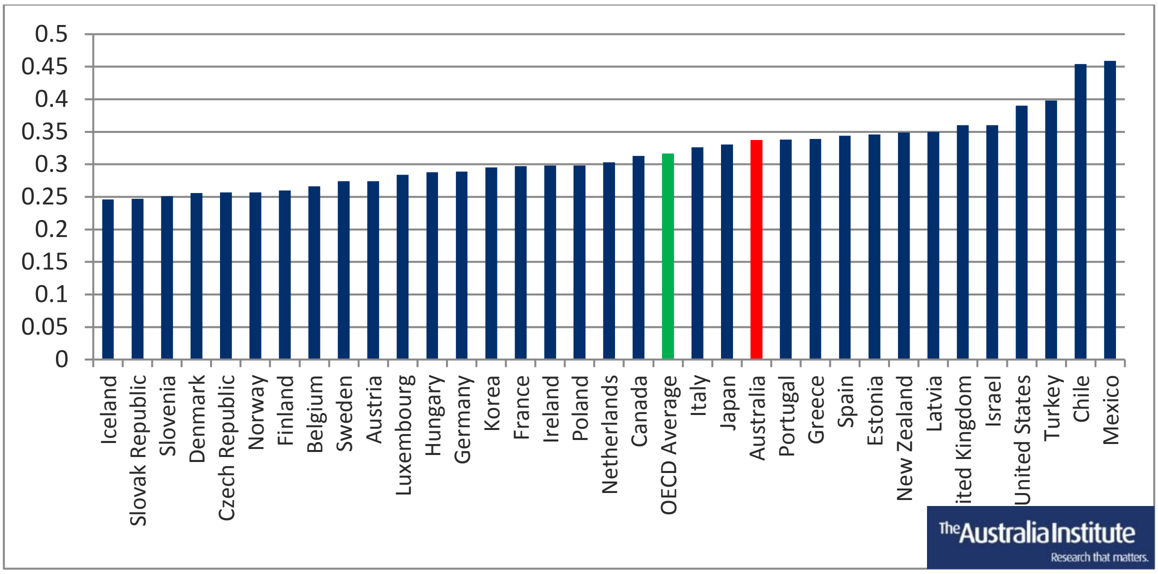
Source: Australian Bureau of Statistics (2017) *6523.0 – Household Income and Wealth, Australia, 2015–16*

While the tax system is having an impact on inequality, this has not stopped it from increasing over time.

INTERNATIONAL COMPARISON OF GINI COEFFICIENTS

Australia's income Gini Coefficient is more unequal than the average for all developed nations. Of the 34 OECD nations, when ranked from more equal to more unequal, Australia ranks 22nd, this is shown in Figure 11.

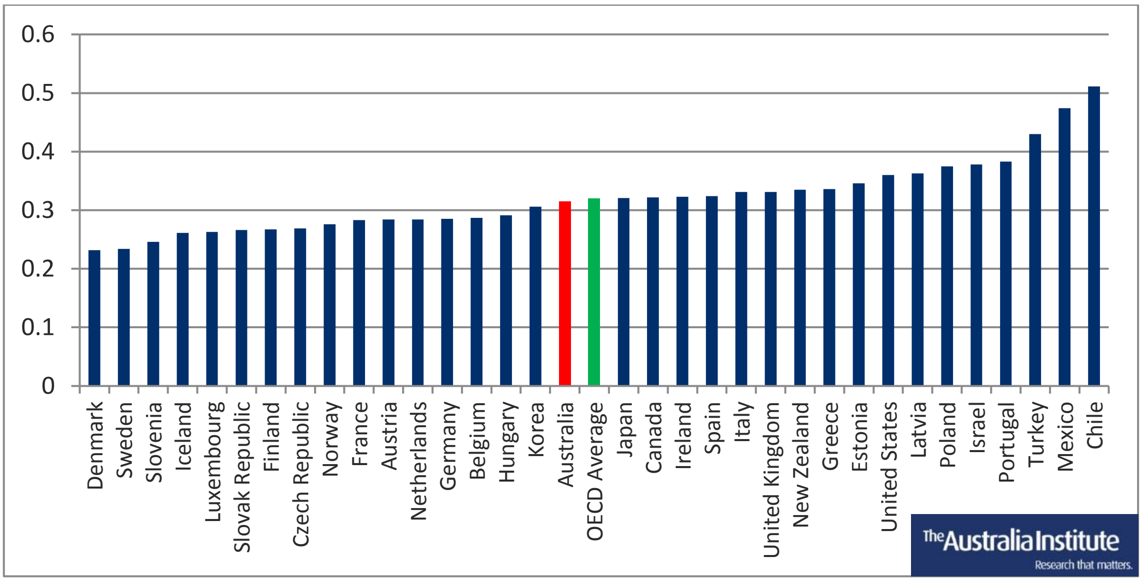
Figure 11 – Income Gini Coefficient by OECD nations; most recent data



Source: Organisation for Economic Co-operation and Development (2017) *Income Distribution and Poverty*; most recent year (dates vary between 2012 and 2014)

Looking back about 10 years we see that Australia's relative position compared to these same developed countries has shifted. In 2004 we were in the middle of the developed countries when it came to inequality, just below the OECD average. We ranked 17th out of 34 nations. This is shown in Figure 12. This shows that Australia is becoming more unequal compared to other developed nations.

Figure 12 – Income Gini Coefficient by OECD nations; 2004



Source: Organisation for Economic Co-operation and Development (2017) *Income Distribution and Poverty*; All data is closest date to 2004 (between 2003 and 2007)

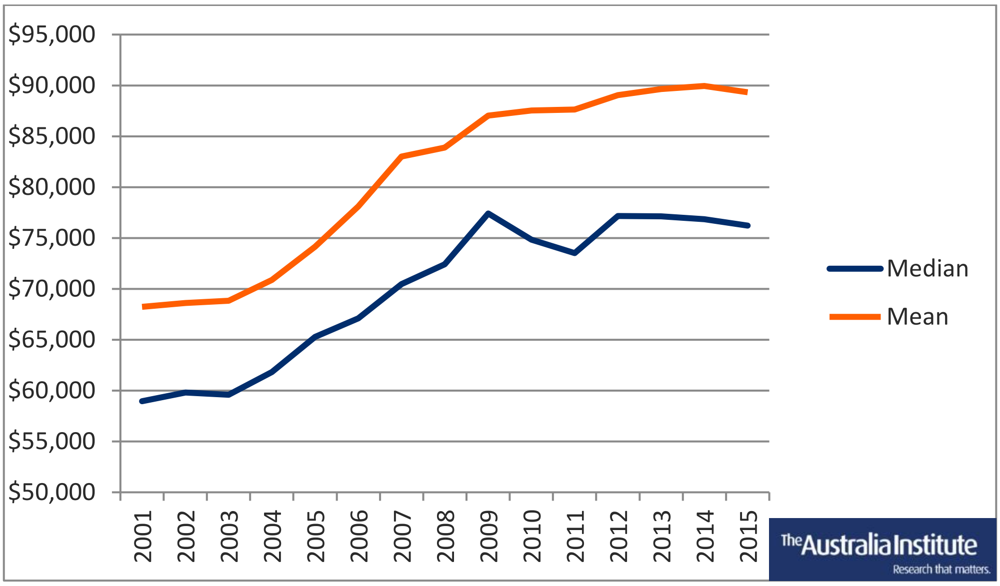
GROWING CONCERN ABOUT INEQUALITY

The question as to why the issue of inequality is growing in importance in recent years is an interesting one. Inequality worsened during the mining boom and improved for a few years during the GFC. From 2013, it has steadily worsened.

Given the recent uptick in inequality, it might not be surprising that the issue is being debated. But inequality also grew quickly during the mining boom and at that time it was not considered a national priority.

Changes in median incomes may explain the current interest in inequality. Recent data from the Household Income and Labour Dynamics in Australia (HILDA) survey shows that growth in real household disposable income (income after taxes and accounting for inflation) has stalled. Figure 13 shows median and mean (average) income since the HILDA survey began in 2001.

Figure 13 – Median and Mean real household disposable income



Source: Melbourne Institute (2017) *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 15*

When dealing with income data, the median often gives a better representation of what is happening since a small number of very high incomes tend to distort the average. The median increased quickly from 2004 to 2009 during the mining boom. Median incomes then fell during the GFC. They recovered in 2012 but peaked at a lower level than the previous 2009 high. Since 2012 they have drifted lower.

If we combine this with our data on Gini Coefficients we find that the growing inequality during the mining boom was also associated with rising median and average incomes. While high income earners saw their incomes growing faster than others (as shown by a rising Gini Coefficient), the rest of income earners also saw growing incomes and so were less concerned about inequality. This has not been the case since 2013.

Since 2013 inequality has continued to rise but median incomes have not changed much and the small change that has occurred has been downward. Static real incomes begin to apply pressure to household budgets and issues of inequality start to become important. Increasingly economic gains flow only to those on high incomes while an increasingly large group face static or falling real incomes. At such a time it would be prudent for any government to take the issue of inequality seriously.

Conclusion

Politics is often about trying to discuss issues that voters view your party more favourably on and to avoid discussion about issues that voters view you less favourably on. Politicians do have some control over what issues have national prominence but if an issue is of genuine concern to the public then it can be increasingly difficult and unwise for any political party to delegitimise it.

The economic data shows that the public has good reason to be concerned about inequality. Unless economic conditions change dramatically, inequality will continue to be an issue. Economic research by economists and economic organisations, including the International Monetary Fund, shows that inequality can slow economic growth.

Unless there is policy action, inequality is likely to worsen. The government and policy makers should reduce inequality. Unfortunately, the government is doing the opposite. Its proposed income tax cuts will reduce the progressive nature of the income tax system and increase inequality.

Ignoring inequality, or pursuing policies that will make it worse, will mean that a growing group within Australian society which increasingly includes middle income earners, will feel that the economic system is letting them down. This will only increase pressure for more radical solutions.

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